

**The El Grillo Complex of Central Jalisco:  
Teotihuacan Expansion or Epiclassic Movements from  
the Northern Frontier?**

by

Christopher S. Beekman

Paper presented at the annual meeting of the Society for American Archaeology, Minneapolis, May 4, 1995.

**Abstract-** The controversial El Grillo complex of central Jalisco has been the linchpin for attributing a number of intrusive complexes throughout western and northern Mexico to a Middle Classic, Teotihuacan-centered empire or world system. The architecture, ceramics, and burial complex are re-evaluated and found to date instead to the Epiclassic (AD 600-900). The complex is proposed to reflect population movements accompanying the general contraction of the northern Mesoamerican frontier at this time. The implications for the alternative chronology are discussed with particular reference to the collapse of the Teuchitlan Tradition of central Jalisco.

The El Grillo phase, defined by Javier Galvan of the Centro Regional INAH Jalisco, marks a major period of transition in central Jalisco. The well known tradition of shaft tombs and fine ceramics is replaced by box tombs and an accompanying ceramic complex. As described by Galvan and Schondube, the position of the body is quite specific - the individual was tightly flexed, seated, and facing north, with miniature vessels as typical offerings.

New ceramic forms include vessels with ring bases, some kinds of tripod supports, punctated or incised molcajetes (usually ring based), distinctive rim types, painted rectangular trays, and miniature ollas, often decorated with a small modeled face tab on the rim. New types of ceramic decoration include Pseudo-Cloisonne, resist, red filled engraving, and decorative smudging, while fugitive paint is used to a much greater extent than previously. Color combinations encompass and add to those of the earlier periods, while the layout and individual design elements are very different. All types, down to utilitarian ceramics, appear to have been replaced by the new complex in the Guadalajara valley where it was defined. Most of these markers have no local antecedents, although a few of the individual motifs occur earlier. Aronson's materials analysis documents a tremendous break from the previous shaft tomb ceramics in terms of types, designs, production methods, and use of the ceramics. The El Grillo ceramic complex appears in both the box tombs and in habitation sites, though the daily ceramics are less elaborately decorated and full-sized.

The new architectural forms are very distinct from the two Teuchitlan Tradition circles of the previous phase. While talud-tablero facades at Ixtepete, El Grillo, and Coyula have been the architectural markers most heavily emphasized to date, considerably more useful is the U-shaped architecture found at El Grillo, so named because it is composed of a central patio with linked structures on three of the four sides. The largest structure in the middle is a pyramid, and there is usually an altar forwardly placed between the far ends of the flanking side structures. The assumption is that this complex is a new form of public architecture (though the flanking structures may conceivably be associated with elite habitation), and nearly all are the focus of extensive settlements. Sunken patios with altars (a related form) and large rectangular platforms are among the other distinctive architectural forms that begin to appear at this time. A dubious

antecedent for just the U form exists in earlier periods, but I have rejected this on various grounds and will not go into it here.

Without radiocarbon dates, chronological estimates for the El Grillo complex have ranged from Middle Classic to Early Postclassic, though all investigators have considered it intrusive in some sense. Javier Galvan and other excavators at Ixtepete have drawn ceramic parallels to the Coralillo, Cofradia, and Nogales phases elsewhere in Jalisco, and Tepetate and Tinganio in Michoacan. Recent studies by Jimenez Betts draw parallels to materials from the Juchipila valley, La Quemada, the Bajio, and the Alta Vista phase of northern Zacatecas, and attempt to link the related materials into an "Interaction Sphere" forming the periphery of a Teotihuacan-centered world system during the Middle Classic. However, most of these comparisons draw parallels between individual elements, and some of these regions do not yet have a chronological sequence of phases. This model also draws together elements from demonstrably different phases, but time does not permit me to address its numerous culture-historical and theoretical problems here.

What I would like to do is extend this discussion to other sequences where similar materials appear as intrusive complexes. The aim is to locate the El Grillo phase in time, and secondarily to examine how similar changes take place in the nearby core of the Teuchitlan Tradition in order to suggest an interpretation. This is a distillation of a larger study of the chronology of the Teuchitlan Tradition, so forgive me if comparisons here are a little sketchy.

Weigand has already noted some of the close similarities between the public architecture of the El Grillo complex and that of Guanajuato and Queretaro, where the variations are lumped under the general rubric of the Pyramid-Sunken Patio-Altar complex. The history of this complex is not well understood, but radiocarbon dates from the Early and Middle Classic come from one of these sites in northwest Guanajuato, and such structures are found with ceramic complexes as early as Chupicuaro in the center of the state. There is a peak in occupation during the Epiclassic accompanying a shift to high ground, after which the architecture disappears as part of the general abandonment of the region by sedentary populations.

Chupicuaro ceramics of the Late Formative include many of the same designs, forms, and color combinations that first appear for us with El Grillo, but I have not yet found a continuous ceramic sequence into the Epiclassic that would provide an undisputed origin for our materials.

Ceramic sequences for the Bajío are few, and are mostly discussed in unpublished informes, theses, or delivered papers. Accessible sequences exist from Morales and Acambaro in Guanajuato, Villa de Reyes in San Luis Potosí, and the valley of Querétaro. All contrast an earlier complex (with roots in Chupicuaro and occasional similarities to Teotihuacan ceramics) with a later one associated with the population expansion, characterized by red on buff bowls with ring bases, occasionally spruced up with further resist decoration, reduce-fired engraved wares, and a new iconography made up of symbols remarkably similar to those described for the El Grillo complex. All of the new phases in question, the San Miguel, Lerma, San Luis, and Cerrito phases, are quite different from the earlier materials. Radiocarbon dates exist for three of these four sequences that date the transition consistently to the period between AD 500 and AD 600.

A probable example of the Pyramid-Sunken Patio-Altar complex appears in San Luis Potosí with the new materials, while the Querétaro examples may predate the ceramic change. Burial patterns in the Bajío are generally poorly known or published, but the excavations at Canada del Alfaró did locate both flexed and extended burials.

During its Epiclassic peak, the Bajío architectural tradition expanded further into adjacent areas, co-occurring with a recognizable ceramic complex. Sometimes, we see the ceramic changes without any reported architectural correlates, but this usually occurs in regions studied in the early days of west Mexican archaeology, when settlement patterns were frequently ignored and ceramic descriptions made up the bulk of any report.

The well dated Zacapu sequence of northwestern Michoacán is a good place to begin. The early Loma Alta phase includes ceramics with some of the later designs, but very different forms, burial patterns, and architecture. Flexed burials in stone boxes appear in the Jaracuaro phase (AD 550-600). Larger stone crypts and very El Grillo-like vessel forms, designs, and decorative methods appear in the succeeding Lupe phase beginning AD 600, and by the late subphase at AD 700 U-shaped ceremonial architecture is described for the area. The Pyramid-Sunken Patio-Altar complex at Tinganio, accompanied by very similar ceramics, is another example.

In the Lake Chapala basin, the earliest Pitallo ceramics are clearly linked to the shaft tomb assemblage, while the succeeding Chapala and Puerta Nueva phases from the south and north shores include Red on Buffs with the familiar designs, reduce-fired engraved vessels, molcajetes,

distinctive olla, cup, and rim forms, ring bases, etc., although regional differences exist between north and south shores. Flexed burials, and a U-shaped structure appear in this and the succeeding Early Postclassic phase along the south shore.

The Sayula basin in central Jalisco undergoes a transition from the shaft tombs of the Verdía phase to the flexed inhumations of the Sayula phase, with an accompanying change in ceramics. Molcajete cups/bowls with ring bases, resist decoration, dark engraved vessels, miniature ollas with appended face tabs, and steps, circles, spirals, and s designs link Sayula very clearly with the El Grillo complex. Architectural data are not yet available, but the great salt production facilities along the lake date to this phase.

The Colima and Armeria complexes of Kelly's Colima sequence include comparable gouged and incised molcajetes, with tripod and ring supports, engraved bowls of the same class as those in southern Jalisco, a change from shaft tombs to small chambered tombs, and the first appearance of rectangular structures in plaza arrangements. The few available illustrations show some of the familiar design complex. Several radiocarbon dates bracket the appearance of these materials to AD 550 or 600.

I will only mention the contemporary coastal complexes defined by Mountjoy and Grosscup, since while these do demonstrate some contact with the inland materials, there is no sharp break in the sequence until the following phase and the appearance of the Aztatlan complex. We have reached the western edge of the Epiclassic transformation.

The extensive excavations at Huejuquilla el Alto, in the mountains of northwestern Jalisco, have been only partially published. But with their Phase III, with one 7th century radiocarbon date, they have the first appearance of a sunken patio with altar and a columned structure. We know that Pseudo-Cloisonné ceramics date to this phase, but other ceramic data are lacking.

Cabrero documents yet another transformation in architecture, burial patterns, and ceramics in the Bolanos canyon of northern Jalisco. A shift takes place from the predominantly Teuchitlan Tradition circular architecture to an emphasis on rectangular forms, including what may be a U-shaped structure at San Martín. The shaft tombs of Cabrero's first phase are replaced by hillside "chamber tombs", which she likens to the Guadalajara box tombs, coincident with the architectural shift. There are certain discrepancies in the local chronology, but there are various

indications that resist wares, at least, are much earlier in this area than elsewhere. At Totoate, both early and late structures are found and the sequence could be tested, but the pertinent radiocarbon dates are unfortunately not reported with ceramic or architectural contexts.

Following Ben Nelson's paper, I will pass over La Quemada's chronology, except to note that the assemblage as a whole is quite similar to El Grillo ceramics, with Red Filled Engraved types, painted plaques, distinctive designs, rim types, and so on. Sunken Patio-Altar complexes, with or without the pyramid, are published from the Malpaso valley, and the typical burial pattern is apparently flexed or semi-flexed burials. The presence of buried construction stages at the site indicates that earlier materials exist, but how early and whether they will support local or external origins remains to be seen.

Vincent Schiavitti has already discussed Chalchihuites dates, and in some ways these materials are the most distant from the complexes I have described. I would suggest a correlation of El Grillo with the Alta Vista phase, with its Suchil Red on Brown, Pseudo-Cloisonne, Resist, and Michilia Red Filled Engraved types. However, Red on Buff and Red filled Engraved types of considerably simpler decoration exist prior to this, so the exact correlation remains vague. Sunken patios with central altars are considered the dominant form of residential and ceremonial architecture throughout the Chalchihuites sequence.

The Coyotlatelco complex of the central Mexican plateau is defined differently depending on whether it is found in the valley of Toluca, Teotihuacan, or Tula. Nevertheless, Rattray's Cerro Tenayo excavations, and Cobean's Prado and Corral phases at Tula contain complexes that they have related to the Bajio ceramics. They are primarily made up of a red on buff ware with distinctive designs of varying complexity, a combination red on buff and resist painted type, reduce-fired bowls or tripod bowls with engraved designs, and the extensive use of ring-based and tripod bowls. Coyotlatelco architecture seems only partially defined, but Rattray has excavated a Coyotlatelco columned structure on a sunken patio at Pueblo Perdido. Flexed burials have been identified for Tula's Corral and later phases. Coyotlatelco's starting dates have been pushed back with increasing research, and Cobean and Mastache estimate that it may begin as early as AD 600 in the Tula area- there have been various suggestions that it overlaps with Teotihuacan's Metepec

phase. The evening session on central basin chronology may provide further data, but considering the information summarized above, I would not be surprised by dates in the 6th or 7th centuries.

The picture is patchy but consistent. The El Grillo complex is one of numerous analogous phases that appear as intrusive complexes, not scattered elements, in San Luis Potosi, Queretaro, Guanajuato, Hidalgo, Michoacan, Jalisco, Colima and Zacatecas. Similarities decline over time as each region goes its own way, and contact may or may not have been maintained. The complexes are united by new decorative techniques, designs, forms, and the way that they disrupt the local cultural sequence. When data are available, we can document the first appearance of several distinct forms of public architecture and typically some kind of change in burial patterns. Many elements of these complexes appear as far back as the Late Formative in Guanajuato, though even in that area a continuous ceramic sequence into the Epiclassic eludes us. A source slightly south or west may be preferable.

A few traits, particularly motifs, are carried over from earlier periods, though usually swamped by the new complex. Some ceramic elements have arguably longer histories elsewhere, such as Pseudo-Cloisonne or resist types in Jalisco, but these were picked up and exploited to a much greater extent and over a wider area than before in this period. Other elements, such as the presence of molcajetes, are weighted more towards the west. Nevertheless, when radiocarbon dates are available, this series of complexes uniformly date to somewhere in the 6th century AD across the geographical span discussed here. While they seem to clearly represent some sort of transformation across northern Mexico, how may we interpret them, especially with the fragmentary settlement pattern and social data available from these areas?

In the central valley of the Teuchitlan Tradition, just west of the Guadalajara valley, the El Grillo ceramic and mortuary complex occurs during the middle of the architecturally defined Teuchitlan I phase. There are some differences from the "pure" El Grillo complex- for example, Weigand reports that two or three types continue briefly with the new assemblage, and the peak of sociopolitical developments in the Teuchitlan core seems to take place at this time. The U-shaped complexes, sunken patios, and other large rectangular platforms appear slightly behind the ceramics and box tombs, at the beginning of the Teuchitlan II phase, perhaps as much as 100 years later. This new public architecture is conspicuously absent within the old Teuchitlan

settlement core, and seems to be centered at Santa Cruz de Barcenas, just to the south. Within the old core area, the Teuchitlan Tradition's distinctive circular pyramids with subsidiary structures continue to be built and occupied, but modifications take place that include odd numbers of structures around the central mound. Those few circles that continue to be used just outside the core occasionally have sunken rectangular patios appended to them. The fortified sites that had previously overlooked the entrances to the core valley were abandoned by this time.

We also have the appearance of very simple residential structures, nicknamed "Corrales". Excavations by Javier Galvan at Bugambilias, and later my own at Tepopote, recovered a distinct Atemajac ceramic complex with only minor ties to the El Grillo ceramics, and which includes red on buff tripod molcajetes, large and distinctive red slipped ollas, comales, and flat incised and unpainted plaques whose form, but not decoration, are like those of the El Grillo complex. These corrales are located on high ground in the Guadalajara valley, the Sierra La Primavera, and the northeastern quadrant of the Teuchitlan valley, where they are sometimes superimposed on top of earlier circular platforms. Excepting these cases, the corrales do not occur with public structures, and are laid out in no particular pattern. Very similar structures are found in a number of locations in northern Jalisco and Zacatecas, from earlier and later dates.

In sum, the Teuchitlan II phase marks a period in which the former central valley of the Teuchitlan Tradition is divided, with corrales on high ground in the northeast part of the valley and in the Guadalajara valley, the circular architecture primarily in its old domain along the lake shore, and the rectangular architecture outside the core and focused in the south, with Santa Cruz de Barcenas. I interpret the Epiclassic spatial division as strongly supporting the hypothesis that the El Grillo and Atemajac complexes are at least loosely associated with different biological populations with origins to the east and north. Nothing short of non-metric or DNA data would actually convince me that such a population influx had taken place, but the material culture and contextual data from the central Jalisco case seems to allow entertainment of such an hypothesis at this point. Aronson has suggested that the different manifestations of the El Grillo complex in the Guadalajara area and the Teuchitlan core are due to the greater population and social complexity in the latter area, allowing a rapid transition in the Guadalajara valley, while more complex processes of social interaction took place to the west. A similar phenomenon could

explain the sometimes ambiguous evidence for continuity or disruption at Coyotlatelco phase Teotihuacan.

One final point. I am not speaking of random *deus ex machina* migrations. There are numerous sites with circular Teuchitlan Tradition architecture in northern Jalisco, the suggested source of the Corrales. Examples of Teuchitlan Tradition architecture also occur in the Bajio, and at El Cobre one appears in the same site with a Pyramid-Sunken Patio-Altar complex. A few Bajio sites have also been suggested as having shared unspecified links with Teotihuacan during the Xolalpan and Metepec phases. A systemic relationship seems to be at work here, linking the southward movement of Epiclassic populations to earlier lines of communication into the highlands. Substantial refinement of chronology for the regions discussed is required before cause-or-effect relationships can be postulated between the shifting populations, possible environmental change, and the decline of the economic and political networks based in the various lake systems of the highlands. Yet the archaeological evidence for significant population movements out of the northern periphery would now appear to be stronger for the Epiclassic than it is for the historically attested Postclassic Aztlan migrations.

## References

Arnauld, Charlotte, Patricia Carot, and Marie-France Fauvet Berthelot, eds.

1993 *Arqueología de las Lomas en la Cuenca de Zacapu*. CEMCA, Mexico.

Aronson, Meredith A.

1993 *Technological Change: West Mexican Mortuary Ceramics*. Ph.D. dissertation, Department of Material Science, University of Arizona.

Bond, Margaret Nell

1971 *The Archaeology of Lake Chapala, Jalisco, México*. Ph.D. Dissertation, Department of Anthropology, Tulane University.

Brambila, Rosa, and Carlos Castañeda

1991 Arqueología del Río Huimilpan, Querétaro. In *Querétaro Prehispánico*, pp.137-162. Instituto Nacional de Antropología e Historia (INAH), México, D.F.

Brambila, Rosa, and Margarita Velasco

1988 Materiales de La Negreta y la Expansion de Teotihuacan al Norte. In *Primera Reunión sobre las Sociedades Prehispánicas en el Centro Occidente de México, Memoria*, pp.287-297. Centro Regional de Querétaro, INAH, México, D.F.

Braniff, Beatriz

1972 Secuencias Arqueológicas en Guanajuato y la Cuenca de México: Intento de Correlación. In *Teotihuacan. XI Mesa Redonda*, pp.273-323. Sociedad Mexicana de Antropología, México, D.F.

1992 *Arqueología de Villa de Reyes, San Luis Potosi*. INAH, Mexico.

n.d. La Secuencia Ceramica en Morales, Guanajuato. Unpublished paper.

Cabrero García, María Teresa

1989 *Civilización en el Norte de México: Arqueología de la Cañada del Río Bolaños (Zacatecas y Jalisco)*. Universidad Nacional Autónoma de México, México, D.F.

Castañeda, Carlos, Luz María Flores, Ana María Crespo, Jose Antonio Contreras, Trinidad Durán, y Juan Carlos Saint Charles

1988 Interpretación de la Historia del Asentamiento en Guanajuato. In *Primera Reunión sobre las Sociedades Prehispánicas en el Centro Occidente de México, Memoria*, pp.321-355. Centro Regional de Querétaro, INAH, México, D.F.

Castañeda, Carlos, Beatriz Cervantes, Ana María Crespo, and Luz María Flores

1989 Poblamiento Prehispánico en el Centro-Norte de la Frontera Mesoamericana. In *Antropología* 28:34-43.

Castro Leal, Marcia and Lorenzo Ochoa

1975 El Ixtépete como un Ejemplo de Desarrollo Cultural en el Occidente de México. *Anales del Instituto Nacional de Antropología e Historia*, Epoca 7, 5:121-154.

Cobean, Robert and Alba Guadalupe Mastache

1989 The Late Classic and Early Postclassic Chronology of the Tula Region. In *Tula of the Toltecs: Excavations and Survey*, edited by Dan M. Healan, pp.33-46. University of Iowa Press, Iowa City.

Crespo, Ana María

1991 Variantes del Asentamiento en el Valle de Querétaro. Siglos I a X dC. In *Querétaro Prehispánico*, pp.99-136. INAH, México, D.F.

Fauconnier, Françoise

1992 Proje: Sierra del Nayar. Resultats des travaux menes par la mission archeologique belge au Mexique. In *Mexicon* 14:24-30.

Faugere, Brigitte

1988 Entre Nómadas y Sedentarios: La Zona Vertiente Sur del Rio Lerma. In *Primera Reunión sobre las Sociedades Prehispánicas en el Centro Occidente de México, Memoria*, pp.147-150. Centro Regional de Querétaro, INAH, México, D.F.

Faugere-Kalfon, Brigitte

1991 San Antonio Carupo (Centro-Norte de Michoacán, México): Nuevas Evidencias de Ciertas Transformaciones en el Inicio del Postclásico. In *Journal de la Societe des Americanistes* 77:45-61.

Foster, Michael

1978 *Loma San Gabriel Archaeology*. Ph.D. Dissertation, Department of Anthropology, University of Colorado.

Frierman, Jay

1969 *The Natalie Wood Collection of Ceramics from Chupicuaro*. University of California Press, Los Angeles.

Galván Villegas, Luis Javier

1975 Informe Preliminar de las Exploraciones Efectuadas en la Zona Arqueológica de 'El Ixtépete', Jalisco, Durante el Mes de Mayo de 1973. In *Balance y Perspective: XIII Mesa Redonda, vol. 1*, pp. 395-410. Sociedad Mexicana de Antropología, Xalapa, México.

1976 *Rescate Arqueológico en el Fraccionamiento Tabachines, Zapopan, Jalisco*. Cuadernos de los Centros No. 28. Instituto Nacional de Antropología e Historia, México, D.F.

1982 *Rescate en el Fraccionamiento Bugambilias, Zapopan, Jalisco: Tercera Temporada*. Archivo Técnico de la Dirección de Monumentos Prehispánicos, Instituto Nacional de Antropología e Historia, México, D.F.

1983 *Rescate en el Fraccionamiento Bugambilias, Zapopan, Jalisco: Artefactos*. Archivo Técnico de la Dirección de Monumentos Prehispánicos, Instituto Nacional de Antropología e Historia, México, D.F.

1991 *Las Tumbas de Tiro del Valle de Atemajac*. Instituto Nacional de Antropología e Historia, México, D.F.

1993 *El Clásico del Occidente de Mesoamérica, Visto Desde el Valle de Atemajac, Zapopan, Jalisco*. Ms. in possession of the author.

Gorenstein, Shirley

1985 *Acámbaro: Frontier Settlement on the Tarascan-Aztec Border*. Vanderbilt University Publications in Anthropology No. 323, Nashville.

Hers, Marie-Areti

1989 *Los Toltecas en Tierras Chichimecas*. Universidad Nacional Autónoma de México, México, D.F.

Jiménez Betts, Peter

1988a *Ciertas Inferencias de la Arqueología del sur de Zacatecas*. In *Primera Reunión sobre las Sociedades Prehispánicas en el Centro Occidente de México, Memoria*, pp.39-50. Centro Regional de Querétaro, INAH, México, D.F.

1988b *Perspectivas sobre la Arqueología de Zacatecas*. In *Arqueología* 5:7-50.

1992 Una Red de Interacción del Noroeste de Mesoamérica: Una Interpretación. In *Origen y Desarrollo de Civilización en el Occidente de México*, edited by Brigitte Boehm de Lameiras and Phil C. Weigand, pp. 177-204. Colegio de Michoacán, Zamora, México.

Kelley, J. Charles

1971 Archaeology of the Northern Frontier: Zacatecas and Durango. In *Handbook of Middle American Indians, Vol. 11*, edited by Gordon Ekholm and Ignacio Bernal, pp. 768-801. University of Texas Press, Austin.

Kelly, Isabel T.

1945 *The Archaeology of the Autlán-Tuxcacuesco Area of Jalisco, Part I*. Ibero-Americana no. 26, University of California Press, Berkeley.

1949 *The Archaeology of the Autlán-Tuxcacuesco Area of Jalisco, Part II*. Ibero-Americana no. 27, University of California Press, Berkeley.

1978 Seven Colima Tombs: An Interpretation of Ceramic Content. In *Contributions of UCARF* 36, pp. 1-36. University of California Press, Berkeley.

1980 *Ceramic Sequence in Colima: Capacha, an Early Phase*. University of Arizona Press, Tucson.

Lister, Robert

1949 *Excavations at Cojumatlán, Michoacán, Mexico*. University of New Mexico Publications in Anthropology no. 5, University of New Mexico Press, Albuquerque.

Mastache, Alba Guadalupe, and Robert Cobean

1989 The Coyotlatelco Culture and the Origins of the Toltec State. In *Mesoamerica After the Decline of Teotihuacan, A.D. 700-900*, edited by Richard A. Diehl and Janet Catherine Berlo, pp.49-67. Dumbarton Oaks, Washington, D.C.

Meighan, Clement

1976 *The Archaeology of Amapa, Nayarit*. Institute of Archaeology, University of California at Los Angeles.

Meighan, Clement, and Leonard Foote

1968 *Excavations at Tizapan el Alto, Jalisco*. University of California Press, Los Angeles.

Michelet, Dominique

1989 El Centro-Norte de Michoacán en el Clásico: Algunas Reflexiones. In *La Epoca Clásica: Nuevos Hallazgos, Nuevas Ideas*, edited by Amalia Cardos de Mendez, pp.279-291. INAH, México, D.F.

Michelet, Dominique, Marie Charlotte Arnauld, and Marie-France Fauvet-Berthelot

1989 El Proyecto del CEMCA en Michoacán. Etapa I: un balance. In *Trace* 16:70-87.

Noyola, Andres

1994 Analisis Preliminar de la Ceramica del Fraccionamiento San Juan, Atoyac, Jalisco. In *Contribuciones a la Arqueologia y Etnohistoria del Occidente de Mexico*, Eduardo Williams, ed., pp. 55-91. Colegio de Michoacan, Zamora.

Piña Chán, Román, and Kuniaki Oi

1982 *Exploraciones Arqueológicas en Tingámbato, Michoacán*. INAH, México, D.F.

Ratray, Evelyn

1966 An Archaeological and Stylistic Study of Coyotlatelco Pottery. In *Mesoamerican Notes* 7-8:87-211.

1972 El Complejo Cultural Coyotlatelco. In *XI Mesa Redonda: Teotihuacan*, Vol. II, pp. 201-210. SMA, Mexico.

1991 Fechamientos por Radiocarbono en Teotihuacan. In *Arqueología* 6:3-18.

Sanchez Correa, Sergio A. and Emma G. Marmolejo Morales

1990 Algunas Apreciaciones Sobre el Clásico en el Bajío Central, Guanajuato. In *La Epoca Clásica: Nuevos Hallazgos, Nuevas Ideas*, edited by Amalia Cardos de Mendez, pp. 267-278. Instituto Nacional de Antropología e Historia, México, D.F.

Schondube, Otto B.

1973-74 *Tamazula-Tuxpan-Zapotlan: Pueblos de la Frontera Septentrional de la Antigua Colima*. Tesis Profesional, Escuela Nacional de Antropología e Historia, México.

1983 Hallazgos en el Hospital de Belén. In *Pantoc* 5:51-68.

Schondube B., Otto and L. Javier Galván V.

1978 Salvage Archaeology at El Grillo-Tabachines, Zapopan, Jalisco, México. In *Across the Chichimec Sea: Papers in Honor of J. Charles Kelley*, edited by Carroll L. Riley and Basil C. Hedrick, pp. 144-164. Southern Illinois University Press, Carbondale.

Trombold, Charles D.

1991 Causeways in the Context of Strategic Planning in the La Quemada Region. In *Ancient Road Networks and Settlement Hierarchies in the New World*, C.D. Trombold, ed., pp. 145-168. Cambridge University Press, Cambridge.

Weigand, Phil C.

1979 The Formative-Classic and Classic-Postclassic Transitions in the Teuchitlán-Etztatlán Zone of Jalisco. In *Los Procesos de Cambio en Mesoamerica y Area Circunvecinas, XV Mesa Redonda*, 1:413-423. Sociedad Mexicana de Antropología, México, D.F.

1985 Evidence for Complex Societies during the Western Mesoamerican Classic Period. In *The Archaeology of West and Northwest Mesoamerica*, edited by Michael S. Foster and Phil C. Weigand, pp. 47-91. Westview Press, Boulder.

1987 Coyula. Report to the Centro Regional de Jalisco, Instituto Nacional de Antropología e Historia.

1990 Discontinuity: The Collapse of the Teuchitlán Tradition and the Early Postclassic Cultures of Western Mesoamerica. In *Mesoamérica y Norte de México, Siglo IX-XII*, 1:215-222. Instituto Nacional de Antropología e Historia, México, D.F.

1992a Central México's Influences in Jalisco and Nayarit during the Classic Period. In *Resources, Power and Interregional Interaction*, edited by Edward Schortman and Patricia Urban, pp.221-232. Plenum Press, New York.

1992b The Evolution and Decline of a Core of Civilization: The Teuchitlán Tradition and the Archaeology of Jalisco. Paper presented at the symposium *Cultural Dynamics in Precolumbian West and Northwest Mesoamerica*, organized by Michael S. Foster and Shirley Gorenstein, Phoenix.

n.d. La Arquitectura Prehispanica de la Cuenca de Chapala. Paper to be delivered at the 1995 Simposio sobre las Culturas del Occidente, El Colegio de Michoacan, Zamora.