

# ARCHAEOLOGICAL RESEARCH 1: TEOTIHUACAN

*URBANIZATION AT TEOTIHUACAN, MEXICO.* Volume 1, Parts 1 and 2: The Teotihuacan Map. Edited by RENÉ MILLON, R. BRUCE DREWITT, AND GEORGE L. COWGILL. (Austin: University of Texas Press, 1973.)

## *Introduction: An Historical Perspective*

In 1519, when the Spanish conquistadores first came to the Valley of Mexico, Teotihuacan was a small provincial town. Located some forty kilometers north-east of the principal Aztec capital of Tenochtitlan, Teotihuacan was one of many tertiary administrative and market centers in the Aztec state's heartland. However, Teotihuacan was in one way a unique place, for there were remains of ancient constructions, of truly monumental proportions, on the outskirts of the sixteenth-century town. Some of these were then important as religious shrines, and some were even named by their inhabitants: e.g., Temple of the Sun, Temple of the Moon, Pathway of the Dead. However, the origin of these remains had long been lost, and even the legends and traditional histories recorded by sixteenth-century Aztec and Spanish writers failed to account for their original construction.

By the late nineteenth century these monumental structures had begun to arouse the interest of the first generation of professional archaeologists (e.g., Almaraz 1865, Charney 1888, Bandelier 1881, Holmes 1895–97). From this point, with the first maps and detailed descriptions of the more impressive architectural remains, it became clear that Teotihuacan had been a ceremonial and political center of major significance in prehistoric times. Archaeological investigations accelerated throughout the first half of the twentieth century. By 1910 there were massive reconstructions of its principal building—the Sun Pyramid—to commemorate the centennial of Mexico's War of Independence. Beginning in 1917 large-scale excavations were carried out by the Mexican government along the ancient center's principal avenue (Gamio et al. 1922). After this, a number of excavation programs were carried out, largely related to matters of ceramic chronology and architectural definition (e.g., Linne 1934, 1942; Noguera 1935; Vaillant 1938; Armillas 1944, 1950; Millon, Bennyhoff, and Drewitt 1965; Sejourne 1966, 1969). However, until the early 1960s, there had never been a coordinated program of investigation aimed at understanding the development and functioning of Teotihuacan as a prehistoric community. For example, as late as 1962 it was completely impossible to say how large a surface area Teotihuacan had covered at any point in its development.

Since the site was not adequately described, inferences about its prehistoric functions were often misleading and sometimes ludicrous—e.g., for many years, well into the 1960s, it was common practice to refer to Teotihuacan as a

virtually empty ceremonial center, without permanent residential occupation, where transient pilgrims lived for short intervals during periods of ritual activity. Indeed, it is now apparent that our views of Teotihuacan were so warped for so long, that our understanding of prehistoric Mesoamerica for the period (ca. A.D. 200–700) when Teotihuacan played such a key role over so great an area had also become seriously twisted. These misconceptions continue to plague us, and I suspect that even now some professional scholars, and most of the public that reads about Mesoamerica in the popular press, regard Teotihuacan as a ceremonial capital in a vast Mesoamerican “Theocracy” where priest-kings persuaded their subjects to do their bidding on the basis of religious tenets, without forceful coercion.

This unsatisfactory state of affairs was clearly perceived by many people during the 1950s, and by the early 1960s a new era had begun in the archaeological investigations of Teotihuacan. At this time three major research projects focused on the site. One, by Mexico’s Instituto Nacional de Antropología e Historia, under the general direction of Ignacio Bernal, carried out extensive explorations and reconstructions in the principal ceremonial-civic core area. Another, directed by William T. Sanders, was concerned with the regional dimensions of Teotihuacan’s development and function through a study of settlement patterning over an area of about six hundred square kilometers in the Teotihuacan subvalley surrounding the major center. A third project, directed by René Millon, took on the formidable task of describing the entirety of the Teotihuacan center: this was the Teotihuacan Mapping Project. The work under review here is the first volume in the final report of that project. Several additional volumes are in preparation and will appear in the next few years.

### *Substantive Results*

This first volume in the Teotihuacan Mapping Project’s final report series is essentially a descriptive presentation of a remarkable site map. It comes in two parts: Part 1, written mainly by Millon, details the project’s general objectives and mapmaking methodology, and also contains some preliminary interpretations about a variety of developmental processes and functional activities. Some of the commentary in part 1 has appeared in earlier publications (e.g., Millon 1974; Cowgill 1974); some remarks are made here for the first time. Part 2 presents the map itself, in the form of 147 individual sheets, at 1:2000, each sheet covering an area of 500 by 500 meters. In addition, there are three other maps: two, at 1:10,000, showing the site as a whole, and one, at 1:2000, showing only the ceremonial-civic core where the monumental architecture is concentrated. The maps are remarkably precise and are quite suitable for accurate measurements of intracommunity distances.

This volume stands as a monumental tribute to the vision, dedication, and perseverance of the investigators, and to the ability and willingness of the U.S. National Science Foundation to support the decade of sustained research that was required for its preparation. It is one of those truly unusual publications that will permanently endure as a primary data source long after the contro-

versies surrounding its inception have vanished from the scene. I am confident that as long as people are interested in preindustrial urbanism, they will be using this volume as a basic reference work.

The data presented on this map fall into two main categories: topographical and architectural. Surface concentrations of obsidian debris are also indicated, but the distribution of other kinds of artifacts has been deferred to a subsequent volume. The 1:2000 maps have a one-meter contour interval. Elevations of less than one meter are also indicated when they appear to have architectural significance. Excavated architecture is shown, as are all the fragmentary in situ architectural details visible at the ground surface (taludes, tableros, stairways, walls, floors, foundations). The distribution of modern vegetation is shown for most of the area. Also indicated are the approximately five thousand "sites" defined by the field crews within the survey area: "The site was the basic unit of the field survey for the map. Most of the time a site was something we interpreted as the remains of a structure dating to the time of ancient Teotihuacan. In other cases, a site represented a plaza or other area where there was no visible evidence for an ancient structure, but which was spatially defined by surrounding structures or which revealed enough evidence of ancient use to warrant denoting its limits and describing it" (p. 4).

The "site" was the location where detailed descriptions were made and from which separate collections of surface artifacts were taken. Sites, which are to be individually described in a subsequent volume, are especially significant in that observations made at these places provide the basis for inferences about subsurface architecture. These inferences are shown (in red ink) on transparent overlays superimposed over each of the 1:2000 field maps (in black ink). Thus, objective data (topography, vegetation, surface drainage, modern cultural features, and excavated prehistoric architecture) are clearly separated from the authors' inferences about unexcavated subsurface features. The 1:10,000 maps have no overlays, but, once again, inferred architecture is differentiated from excavated architecture by different colored ink.

Teotihuacan lies in an area of sparse vegetation. The eroded, unprotected ground surface has been cultivated intensively for centuries. Apart from the major structures, which now appear as distinctive large mounds, architectural remains are subtle, generally occurring as low, relatively formless elevations. In some cases, erosion and plowing have virtually levelled the ground surface, and architectural inferences become correspondingly more tenuous.

While few excavations were undertaken by this mapping project, a number of small-scale tests were conducted within ancient Teotihuacan to help evaluate architectural inferences based on surface remains. A number of earlier excavations by other investigators had exposed larger areas, primarily within the north-central part of Teotihuacan, and these also aided significantly in this testing process. Although the totality of all these excavations amounts to only a tiny fraction of Teotihuacan's total surface area of over twenty square kilometers, they serve to lend considerable credence to the authors' architectural reconstructions based on surface indications alone. Subsequent excavations may require some modifications of these reconstructions, but it is quite probable that

the *general outlines* of their interpretations will largely stand the test of time. The authors stress that their map is essentially a depiction of Teotihuacan from Tlamimilolpa times onward (ca. A.D. 200–700). The architectural configuration of earlier occupations is largely obscured by massive construction projects that got underway after A.D. 200. On the present map separate constructional phases within the A.D. 200–700 period cannot be distinguished. This will be possible when chronological details appear in a subsequent volume.

It is now clear that throughout most of its occupational history, Teotihuacan's massive population (estimated at between 125,000 and 200,000) lived within walled compounds of varying size and character. More than two thousand such walled compounds have been identified within the ancient center. Large-scale excavations in several of these compounds have revealed that some are comprised of adjacent complexes of spacious rooms grouped around common open patios containing small temples, while other compounds are formed of mazes of tightly packed small rooms, lacking any obvious patios or temples. These walled compounds are closely and regularly spaced throughout the north-central sector. In other sections they are much less nucleated. Everywhere they seem to exhibit a fairly uniform orientation: approximately 15° 30' east of north, corresponding to the orientation of the site's principal central avenue. The demonstration that such a large portion of ancient Teotihuacan is covered with ordered room complexes is one of the principal contributions of this volume. As far as I know, such an architectural configuration, at this scale, is unique among major pre-Hispanic centers in Mesoamerica. Apparently, as Millon notes, only Tenochtitlan itself, the great Aztec capital that so impressed the Spanish conquistadores, was comparable to Teotihuacan in this regard.

Another striking aspect is the cruciform layout around two major axes formed by two long, broad avenues; these major avenues intersect near the geographic center of Teotihuacan. The area of intersection is marked by two great architectural complexes, each measuring close to five hundred meters on a side, situated directly opposite each other on either side of the main north-south avenue: the "Ciudadela" and the Great Compound. The Ciudadela has long been known as a locus of imposing ceremonial-civic architecture. The Great Compound, identified for the first time by the Teotihuacan Mapping Project, contains a great open area surrounded by less impressive buildings of uncertain function. Together they seem to form a distinct cultural focus, and ongoing analysis suggests that the Great Compound may have functioned as Teotihuacan's principal market place.

Of considerable interest are the long, massive walls, up to 3.5 meters wide and five meters high, that have been identified for the first time throughout the nucleated north-central and northwest sectors. These features could seldom be well defined, but they appear to have formed several large enclosures ("Great Precincts"), each measuring several hundred meters on a side, and each incorporating numerous smaller walled compounds and a variety of ceremonial-civic architecture. A particularly well-defined group of these Great Precincts west of the Moon Pyramid "may have been designated at least in part to close

off these areas from the rest of the city, to provide precincts that could be entered at only one or two entry points" (p. 39). Millon suggests that they may have had a defensive function. I am also struck by their superficial resemblance to the great walled compounds at the ancient Chimu capital of Chan Chan in Peru (Moseley and Mackey 1974; Moseley 1975). At Chan Chan, these compounds appear to have functioned as the residences, storehouses, and cemeteries for elite segments of the urban population; their role at Teotihuacan may have been comparable. Indeed, the recently published Chan Chan maps suggest certain parallels between these two major pre-Hispanic centers: e.g., character of population distribution, and arrangement within walled compounds of varying size and complexity. This, considered together with Millon's mention of some similarities in architectural configuration between Teotihuacan and the much later Aztec capital of Tenochtitlan, suggest some basic organizational regularities in the highest-level pre-Hispanic urban systems throughout nuclear America.

In Mesoamerica, the great Lowland Maya center of Tikal is one of the few other large sites mapped in a manner comparable to Teotihuacan (Carr and Hazard 1961). A comparison of the maps of these two contemporary centers clearly shows some very basic differences in population distribution and architectural configuration: Relative to Teotihuacan, Tikal lacks any apparent overall architectural ordering, it has a far lower density of buildings, and its drop off of occupational intensity is less well-defined and more gradual. These obvious differences suggest correspondingly great differences in societal organization. While these organizational differences have yet to be adequately defined and demonstrated, we are finally able, with the Teotihuacan map, to bring new perspectives to bear upon the long-standing arguments about divergent pre-Hispanic urbanization processes in Central Mexico and the Maya Lowlands. Previously we had only a limited idea of what we were actually arguing about. A comparable map of another large site—the great center of Monte Alban, Oaxaca, in southern Mexico—is now nearing completion (Blanton, personal communication). This will soon add yet another dimension to the explication of Mesoamerican urbanism in the first millennium A.D.

Teotihuacan's massive population build-up and its unprecedented distributional regularity correlate with a rather remarkable restructuring of population within the Valley of Mexico as a whole. Surveys of Sanders (1965), Parsons (1968, 1971, 1974), and Blanton (1972a, 1972b) have provided a regional perspective from which to view Teotihuacan's development. Within the Teotihuacan subvalley, significant rural population concentrations dating to the A.D. 200–700 period occur only along extensions (real and imaginary) of the main center's principal axes. To the south, along the eastern side of Lake Texcoco and across the broad Chalco-Xochimilco zone, occupations of this same period are very dominantly small, dispersed sites, only a few of which could have been inhabited by more than a few hundred people. A similar situation holds in the far northwestern Valley of Mexico, north of Lake Xaltocan-Zumpango. In all cases, these population configurations represent marked breaks with the trends and

patterns of earlier times. In most cases these breaks also include substantial population declines from the antecedent period. Everywhere within the Valley of Mexico the great impact of Teotihuacan is clearly apparent.

We are still far from understanding the character of this impact, but the new map lends an important additional dimension to our ability to formulate meaningful hypotheses about it. One conclusion seems almost inescapable: that Teotihuacan's growth spurt early in the Christian era involved a substantial influx of people from over the entire Valley of Mexico. We still have to deal with the matter of how this influx may relate to the massive constructional activity that we now know occurred within Teotihuacan at about A.D. 200. It is interesting to note that further away in Central Mexico, recent regional surveys in the Puebla-Tlaxcala area east and south of Teotihuacan (e.g., Dumond 1972) suggest that analogous demographic processes, on a smaller scale, were contemporaneously taking place there. We also know that major changes (e.g., great population increases, expansion in size of major sites, massive constructional projects) were occurring at this same time at Monte Alban, at Tikal, and elsewhere. The formation and development of the Teotihuacan urban center was certainly one of the most important and impressive events that took place in Mesoamerica early in the first millennium A.D. However, it is but one manifestation of major evolutionary processes that had broad impact from Central Mexico to Guatemala.

The map also illuminates the character of Teotihuacan in terms of its larger role in Mesoamerica as a whole. Two loci were found where surface collections showed high proportions of "foreign" pottery: one, near Teotihuacan's western edge, had Oaxacan pottery types, and a second, near the eastern border, contained Gulf Coast and Maya ceramics. Test excavations in the "Oaxaca barrio" showed indisputable evidence of close ties with contemporary Oaxaca. Artifact analyses in subsequent volumes may clarify the character and significance of these foreign influences, and may define yet other loci of such influence. At the moment, it may be of some significance that such foreign "barrios"—perhaps residences of people from several parts of Mesoamerica—appear to be restricted to outlying sections of ancient Teotihuacan where impressive architectural remains are absent.

### *The Origins of Teotihuacan*

While the map bears most significantly upon the middle range of the center's long occupational sequence, mapping work also resulted in the accumulation of data relevant to the early formation and development of nucleated occupation in the area. It was found that the area of greatest Patlachique-Tzacualli phase (ca. 200 B.C. – A.D. 150) occupation was in the northwestern quadrant of Teotihuacan, with a large extension northwestward beyond the limits of the post-Tzacualli center. The Patlachique-phase (ca. 200 B.C. – 0) occupation, extending over an area of about six square kilometers, represents the first large nucleated occupation of Teotihuacan. It also seems to be the period when ritual activity—manifested in

ancestral forms of the three-temple complexes that are so abundant in Tzacualli times (A.D. 0–150)—and obsidian working take on new dimensions of significance at Teotihuacan. Clearly it is to the Patlachique phase that our attention should turn when we consider the origins of Teotihuacan as a major center.

Part 1 of the Teotihuacan map volume includes a critique of “the ecological approach” in explaining these origins. Here Millon reacts strongly to what he feels is a serious oversimplification of the situation by those who view Teotihuacan’s rise to dominance as an outcome of the managerial requirements of canal irrigation and consequent political centralization produced by the successful implementation of an irrigation system there. Millon agrees that Teotihuacan’s irrigation system probably provided much of the food supply for a large, nucleated population. However, he feels that neither the size nor the complexity of irrigation there would have required centralized management. Rather, Millon would look to a combination of other factors as primary stimuli to development: “I suspect that the rise of Teotihuacan in the Patlachique phase was the product of the growth of obsidian working, its strategic location as a marketing center, and the probable growing ‘international’ importance of its shrines. The rapid growth of Teotihuacan during the Patlachique phase and the increasing needs arising from it might be expected to have stimulated increased production in the fields around Teotihuacan, given its ecological potential. The impetus for the greater productivity in the countryside would have come from the incipient city” (p. 52).

Here, rather than review the whole argument that Millon raises, I will only consider some relevant points that may have been lost along the way. One aspect of irrigation agriculture that seems relevant here is the *unique* feasibility that exists in the Teotihuacan subvalley for a *relatively* large-scale canal network. There are *very* few other localities in the Valley of Mexico where such a large quantity of water is available, in a concentrated source, at the head of a sizable alluvial plain amenable to irrigation. In fact, I know of only one other area comparable in this regard: the Cuautitlan area in the northwestern Valley of Mexico, some twenty-five kilometers west of Teotihuacan. Sanders’s (personal communication) recent survey around Cuautitlan shows an interesting occupational florescence there during the Tlamimilolpa phase (ca. A.D. 200–400). Rain-fall agriculture is precarious and uncertain in the relatively dry northern Valley of Mexico (including both the Teotihuacan and Cuautitlan subareas). Thus, in the Teotihuacan subvalley there exists both a strong selectivity for artificial water control, and a unique potential to realize it on a *relatively* large-scale basis. In view of the primitive quality of overland transport in pre-Hispanic Mesoamerica, I doubt that a really large, nucleated population could have existed in many other places in the northern Valley of Mexico *prior to the evolution of polities with sufficient authority to enforce tributary demands upon outlying areas*. There is little in Patlachique-phase Teotihuacan to suggest that such a polity existed there in the second century B.C.

I agree almost completely with Millon’s insistence upon the importance of obsidian working and strategic location as major factors in Teotihuacan’s early

formation. Empirically this is quite apparent. Heavy obsidian debris litters the ground surface in several areas where Patlachique-phase occupation exists alone or where it predominates. Two of Mesoamerica's largest obsidian sources are located nearby: one source some twenty kilometers east at the far southeastern corner of the subvalley; the other near Pachuca, some fifty kilometers to the northeast. The Teotihuacan subvalley is the only low pass leading eastward from the Valley of Mexico, and, as Millon points out, Teotihuacan physically occupied a great part of this pass by the first century A.D.

However, if the only considerations in Teotihuacan's location during the Patlachique phase had been access to obsidian and control of movement to and from the east, then a location some twenty-five kilometers to the east of the actual site would have been preferable: here Teotihuacan would have been just as strategically placed with respect to interregional movement, and it would have been significantly closer to both major obsidian sources. Millon also suggests that Teotihuacan benefitted strategically by its proximity to the major transportation artery of Lake Texcoco in the central Valley of Mexico. However, Teotihuacan is more than fifteen kilometers from the lakeshore, and such a distance seems somewhat too great for any substantial concern with lacustrine resources or potentials. All things considered, it seems that the unique potential for relatively large-scale canal irrigation had a great deal to do with where Teotihuacan developed in Patlachique times.

Still, a mere correlation between site location and irrigation potential says nothing about the processes involved in the evolutionary changes that took place there in the second century B.C. It may well be that the only significance of the irrigation complex was its ability to supply large quantities of food to a growing, nucleated population in an area where rainfall cultivation was inadequate to do so. As noted above, Millon argues just this, insisting that the size and simplicity of the Teotihuacan irrigation system would never, by itself, have required a new, higher level of management. Sanders and Price (1968:180–87) go through an extended counter argument that I will not reiterate here. However, I wonder if Millon has responded adequately to several important points raised by them. For example, there is the matter of scale. Certainly the Teotihuacan irrigation complex is not a large system when considered in the context of a major state-level polity after A.D. 200. However, with several thousand hectares of irrigable land, it could well have been a very sizable system for a much simpler polity to manage in 200 B.C. at a time when there was no previous experience with coordinating a water-control system on this scale. The complexities of such a system, of little or no consequence in an already evolved state polity, may well have stimulated some very significant organizational changes during Patlachique times. This would have been at the same period when the changing organization of obsidian production and exchange also would have required new levels of administrative complexity. Instead of viewing irrigation and obsidian working as opposing alternatives, it seems reasonable to regard them as complementary factors in Teotihuacan's societal evolution *during the second century B.C.*



What is still lacking here, of course, is an explanation of why such major changes in obsidian production, irrigation agriculture, and ritual activities should ever have occurred at Teotihuacan during the second century B.C. Why was there not a stabilization of polity and economy at the simple levels attained, say, by 400 B.C.? This is one of the most important questions we should now be asking about Teotihuacan's origins. It has never been properly considered, and I suspect that when it is, we shall see that much of what we have been arguing about over the past decade are complementary aspects of a general process of cultural evolution. The publication of the Teotihuacan map is a major contribution to an improved definition and resolution of this problem: We now know much better just what it is we are ultimately trying to explain.

What seems to be lacking in most hypotheses about Teotihuacan's origins and development is a consideration of process. The hydraulic argument attempts to provide this process, but, as Millon points out, it fails to consider some significant matters. In rejecting the utility of the hydraulic argument, Millon highlights some critical aspects of Teotihuacan's growth, but he does not provide an alternative model in which generalizations about specialization, exchange, and ritual are translated into specific processes that produced evolutionary change there in the second century B.C. How are we to develop such a processual model? A great deal will be done on an empirical basis as archaeological research provides more data and more analyses from many parts of Mesoamerica. On the other hand, these inductive procedures must be complemented by an improvement in our ability to deduce expectable archaeological manifestations of specific cultural processes that may have occurred in Central Mexico between 200 B.C. and A.D. 100. In this way we can best carry out adequate archaeological tests of meaningful hypotheses. In many cases, our conceptualization of such specific processes probably cannot come from the archaeological record alone, but must be developed from a more general knowledge about the relevant behavior of societies comparable to those that existed in Central Mexico late in the first millennium B.C. The question then becomes: How do we know what kinds of societies these were?

Some investigators (e.g., Sanders and Price 1968) have assumed that these societies bore significant resemblances to societal types characterized as "chiefdoms" and "states" by Service (1962). Making such assumptions, they have been able to suggest that certain kinds of processes were operative, and to carry out preliminary evaluations of archaeological data. Millon argues that Service's models are so simplistic that any attempt to utilize them in understanding Teotihuacan's development will produce serious distortions of reality. Few would argue that Service's models are perfect—indeed, Service himself (1971) has more recently modified some aspects of his own evolutionary scheme. However, if we are to reject his chiefdoms and states, it will be necessary to provide alternative development models if we are to go beyond description at Teotihuacan. These alternative models have yet to be constructed.

Personally, I have found Service's concepts useful as a framework in which to consider the prehistoric sequence in Mesoamerica. I suspect that his distinctions between "ranked societies" and States will continue to be useful to

archaeologists, including those who try to explain evolutionary change at Teotihuacan. I also believe that we need to refine Service's models so as to make a more adequate place for cultural systems, like Teotihuacan, which, as Millon argues, do not fit readily into the existing framework. Refinements in the models will come as archaeologists read more ethnography and more history and consider their data in the light of analogies drawn from these sources. Conversely, I suspect that refinements in the models will also come as more ethnologists and historians pay more attention to archaeological studies, such as the present volume on Teotihuacan, which deal with types of cultural systems that existed primarily in prehistoric time and are thus imperfectly documented or observable.

JEFFREY R. PARSONS  
*Museum of Anthropology,  
 University of Michigan*

## REFERENCES CITED

ALMARAZ, RAMÓN

1865 *Memoria de los trabajos ejecutados por la Comisión Científica de Pachuca . . .*  
 1864. México, D.F.

ARMILLAS, PEDRO

1944 Exploraciones recientes en Teotihuacan, México. *Cuadernos Americanos*,  
 16:4:121–36. México, D.F.

1950 Teotihuacan, Tula y los Toltecas. *Runa* 3:1–2:37–70. Buenos Aires.

BANDELIER, ADOLF

1881 *An Archaeological Tour in Mexico*. Archaeological Institute of America.  
 New York.

CARR, ROBERT F., AND J. E. HAZARD

1961 *Map of the Ruins of Tikal, El Petén, Guatemala*. Tikal Reports No. 11.  
 Museum Monographs, University Museum, Univ. of Pennsylvania.

BLANTON, RICHARD E.

1972a Pre-Hispanic Adaptation in the Ixtapalapa Region, Mexico. *Science*  
 175:1317–26.

1972b *Pre-Hispanic Settlement Patterns of the Ixtapalapa Peninsula Region, Mexico*.  
 Occasional Papers in Anthropology, No. 6, Dept. of Anthropology, The  
 Penna. State University, University Park.

CHARNEY, DESIRÉ

1888 *The Ancient Cities of the New World*. Translated by J. Gonino and H. Con-  
 ant. Harper and Brothers, New York.

COWGILL, GEORGE

1974 Quantitative Study of Urbanism at Teotihuacan. In N. Hammond (ed.),  
*Mesoamerican Archaeology: New Approaches*, pp. 363–96. London: G.  
 Duckworth Co., Ltd.

DUMOND, DON

1972 Demographic Aspects of the Classic Period in Puebla-Tlaxcala.  
*Southwestern Journal of Anthropology* 28:2:101–30.

GAMIO, MANUEL ET AL.

1922 *La población del Valle de Teotihuacan*. Secretaria de Agricultura y Fomento,  
 Dirección de Antropología. México, D.F. 2 vols.

- HOLMES, W. H.  
1895–1897 *Archaeological Studies among the Ancient Cities of Mexico*. Field Columbian Museum, Publications 8 and 16. Anthropological Series, vol. 1. Chicago. 2 vols.
- LINNE, S.  
1934 *Archaeological Researches at Teotihuacan, Mexico*. Ethnographic Museum of Sweden, n.s., Publication 1. Stockholm.  
1942 *Mexican Highland Cultures*. Ethnographic Museum of Sweden, n.s., Publication 7. Stockholm.
- MILLON, RENÉ  
1974 The Study of Urbanization at Teotihuacan, Mexico. In N. Hammond (ed.), *Mesoamerican Archaeology: New Approaches*, pp. 335–62. London: G. Duckworth Co., Ltd.
- MILLON, R., J. BENNYHOFF, AND B. DREWITT  
1965 *The Pyramid of the Sun at Teotihuacan: 1959 Investigations*. Transactions of the American Philosophical Society, n.s., vol. 55, pt. 6. Philadelphia.
- MOSELEY, M. E.  
1975 Chan Chan: Andean Alternative of the Preindustrial City. *Science* 187:219–25.
- MOSELEY, M. E., AND C. J. MACKAY  
1974 *Twenty-Four Architectural Plans of Chan Chan, Peru*. Peabody Museum Press, Cambridge.
- NOGUERA, E.  
1935 Antecedentes y relaciones de la cultura teotihuacana. *El México antiguo* 3, nos. 5–8, pp. 1–81. México, D.F.
- PARSONS, JEFFREY R.  
1968 Teotihuacan, Mexico, and Its Impact on Regional Demography. *Science* 162:872–77.  
1971 *Prehistoric Settlement Patterns in the Texcoco Region, Mexico*. University of Michigan Museum of Anthropology, Memoir No. 3. Ann Arbor.  
1974 The Development of a Prehistoric Complex Society: A Regional Perspective from the Valley of Mexico. *Journal of Field Archaeology* 1:81–108. Boston.
- SANDERS, WILLIAM T.  
1965 *The Cultural Ecology of the Teotihuacan Valley: A Preliminary Report of the Results of the Teotihuacan Valley Project*. Dept. of Sociology and Anthropology, Pennsylvania State University. University Park.
- SANDERS, W. T., AND B. J. PRICE  
1968 *Mesoamerica: The Evolution of a Civilization*. New York: Random House.
- SEJOURNE, LAURETTE  
1966 *Arqueología de Teotihuacan: La cerámica*. México, D.F.: Fondo de Cultural Económica.  
1969 *Teotihuacan, Metropole de l'Amérique*. Paris: François Maspero.
- SERVICE, ELMAN  
1962 *Primitive Social Organization*. New York: Random House.  
1971 *Cultural Evolutionism: Theory in Practice*. New York: Holt, Rinehart and Winston.
- VAILLANT, GEORGE  
1938 A Correlation of Archaeological and Historical Sequences in the Valley of Mexico. *American Anthropologist* 40:535–73.