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**A STYLISTIC AND CHRONOLOGICAL STUDY
OF OLMEC MONUMENTAL SCULPTURE**

Carl William Clewlow, Jr.

**UNIVERSITY OF CALIFORNIA
DEPARTMENT OF ANTHROPOLOGY
BERKELEY, CALIFORNIA**

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PREFACE

This monograph is a slightly revised version of a doctoral dissertation submitted to the Graduate Division at the University of California, Berkeley, in November 1972.

It is impossible to acknowledge all parties who helped make this monograph possible. Most would fall under the broad category of my friends, without whose encouragement and support I would have long ago ceased to care. I also thank my parents, whose patience may at long last be partially rewarded. To Leatrice Chang I owe a special thanks. I profited greatly from discussions with my colleagues, particularly Richard Ambro, Eduardo Contreras, Jr., Richard Cowan, and Patrick Hallinan, all of whom contributed many ideas to this effort. I am grateful to Michael Coe for allowing me to visit San Lorenzo during his work there, and to Ray and Paula Krotser and Francisco Beverido for the many insights and kindnesses extended on my various visits to the Gulf Coast. At various times I was aided by exposure to the knowledge of Ignacio Bernal, John Graham, George Kubler and S. F. Cook, to all of whom I owe an intellectual debt. Words cannot express my gratitude to Robert F. Heizer, who, more than anyone else, is responsible for introducing me to Olmec studies, nurturing my interests, providing me with opportunity to pursue my goals, allowing me patient and personal access to his advice and expertise over the years of this undertaking and, finally, kindly making possible its publication. Thanks to Barbara Caro for helping in the final typing and editing of the monograph.

CHAPTER I

INTRODUCTION

THE HISTORY OF OLMEC STUDIES

Olmec archaeology was technically born in 1862, when a would-be soldier of fortune named Jose Melgar stumbled upon a great stone head of blackish basalt on the Hacienda de Hueyapan, now known as Tres Zapotes, Veracruz. The birth was, in a sense, illegitimate, and the true identity of the infant was to remain unconfirmed for nearly a century, until the discovery of the radiocarbon dating technique and the firm placement of the La Venta site within the Preclassic period. With this event, to stretch our analogy a bit further, the bastard child was transformed into an awesome mother, and the question of whether or not the Olmecs indeed represent a "mother culture" in the Mesoamerican sequence is still a central debate among contemporary students of New World prehistory.

Perhaps the most interesting general characteristic of the Olmec phenomenon is the fact that it has been subjected to the most thorough historical scrutiny of any single New World archaeological problem. Each turn of events has received unusual public and scholarly attention, and, as a result, a number of valuable historical discussions of Olmec archaeology are presently on record (Jones 1962: 1-25; Wicke 1965: 1-59; Drucker, Heizer, and Squier 1959: 248-264; Stirling 1968b; Bernal 1968, 1969: 28-33; Beverido 1970a: 31-92; Coe 1965b: 739-741; 1968b: 39-73; Greengo 1952; Peterson n.d.: 2-14; Clewlow, Cowan, O'Connell, and Benemann 1967: 7-14). In fact, one might easily conclude that we know a great deal more about the history of Olmec study than we do about the prehistory of the Olmecs. Thus, there is little need to present a general history of the Olmec problem again here. An abbreviated outline of previous work, however, will help to set the present effort into a more precise perspective.

A great deal has been made of the fact that Melgar (1869; 1871) supposed the colossal head at Hueyapan to represent evidence of an ancient contact between Ethiopian negroes and early inhabitants of Veracruz. While it is true that the stone head (Tres Zapotes 1) has some physiognomic features which were associated with individuals of African descent in common racial stereotypes of Melgar's day, it is equally true that the face exhibits features which could have easily been taken from random individuals in the Veracruz native population at the time, and, for that matter, at the present time. It is tempting to speculate that it was the rich black hue of the basalt, resulting from its distinctive abundance of large olivine and augite phenocrysts (Williams and Heizer 1965), as much as any racial features, which induced Melgar to formulate his hypothesis. Whether or not this was the case, the notion nevertheless was seized upon a short time later by Alfred Chavero (1883: 62-63), and has continued to appear sporadically in both scholarly (cf. Jeffries 1953) and popular (cf. Muhammed Speaks 1962) journals until the present day.

During the 50 years which followed Melgar's publications, occasional pieces of sculpture from what was later to become known as the "Olmec heartland" made their way into print. Prominent among these were Tres Zapotes 1 (Weyerstall 1932), Tres Zapotes Monument C (Seler-Sachs 1922), and the Tuxtla Statuette (Holmes 1907), the latter of which excited a great deal of scientific curiosity. This curiosity was further aroused in 1926 when Blom and La Farge published their account of La Venta and several of the monuments there, including colossal head LV 1 (Blom and La Farge 1926: 85), and the now famous Idolo de San Martin (Ibid.: Fig. 433), which stood atop the San Martin Pajapan volcano. Shortly thereafter, the Olmec style was named by Marshall Saville (1929) in a paper on votive axes, and the style definition was strengthened and expanded three years later by George Vaillant (1932) in his study of a small Olmec jade tiger.

In 1938 the National Geographic Society, in cooperation with the Bureau of American Ethnology, initiated a long term program of exploration and excavation in the Olmec heartland. In that year Matthew W. Stirling visited Tres Zapotes and recorded TZ 1. In 1939, he returned, and, among other discoveries, located Stela C, setting off great controversy (cf. Thompson 1941; Coe 1957a), and raising the distinct archaeological possibility of an Olmec primacy in the Mesoamerican sequence (Stirling 1939). The field season of 1940, Stirling spent at La Venta, where he recorded colossal head LV 1, and discovered the remaining three colossal heads from the site, as well as a number of other monuments (Stirling 1940). He also visited Cerro de Las Mesas in 1940, and returned there again in 1941, when he also worked briefly at Izapa (Stirling 1941). In 1942, Stirling returned to La Venta (Stirling and Stirling 1942), this time accompanied by Phillip Drucker, who carried out ceramic testing and an art style analysis which, because of the intervention of World War II, were not to see the light of publication until ten years later (Drucker 1952). It was also in 1942 that the famous Mesa Redonda, or round table, conference on the Olmecs was held at Tuxtla Gutierrez. At this conference the issue of chronological placement of the Olmec culture was debated. Opinion tended to divide along national lines, with Mexican scholars like Wigberto Jimenez Moreno, Alfonso Caso, and Miguel Covarrubias arguing that the primary Olmec manifestation preceded Classic cultures like the Maya, and American scholars like J. E. S. Thompson, M. Stirling, and P. Drucker maintaining the position, later proved incorrect, that the Olmec were a Classic culture contemporary with the Maya. However unresolved the chronological question remained, the conference nevertheless was of great value in that it served as a forum for the views of historian Jimenez Moreno (cf. 1942), and Miguel Covarrubias, who presented a formal definition of the Olmec art style (cf. Covarrubias 1946, 1957) which is indispensable to this day. The year 1943 saw Stirling once again turn his efforts toward La Venta, aided by Smithsonian archaeologist W. Wedel. It was in this season that the first of two gigantic buried mosaic jaguar masks was revealed (Stirling 1943a). In 1944, Stirling conducted a reconnaissance of the border zone between the Olmec and Maya area which has never been completely published, and in 1945, conducted excavations at Izapa, and visited San Lorenzo Tenochtitlan, where he once again struck paydirt with the discovery of a number of Olmec monuments including the finest tabletop altar (Mon. 14), and the first and largest of the San Lorenzo colossal heads. The following year, 1946, Stirling, accompanied again by Drucker, made his last major

field trip to the heartland of the Olmecs, returning for a second season at San Lorenzo. The effort was rewarded with the discovery of four additional colossal heads and a number of monuments from the site of Rio Chiquito (Stirling 1947). In addition to his popular articles, which gave a sort of running account of Olmec explorations, Stirling summarized his work in a series of technical articles describing the stone monuments which he had found over the years (Stirling 1943b; 1955; 1957).

Stirling's work was primarily exploratory, and, in a sense, spectacular. Its historical impact was two-fold. First, it called attention to the Olmec cultural manifestation in general. Secondly, it served to focus this attention on the unique art style which was expressed in the large stone monuments. With the advantage of a small amount of historical distance on our side, it is easy to see why this should have become the case. The explanation lies not only in Stirling's research methodology, but in the facts of Olmec archaeology and ecology as well. The Olmec area is a difficult one in which to work, even for the modern fieldworker with advanced technology on his side. The area is replete with climatological (West 1964; Vivo 1964; Wagner 1964; Stevens 1964), physical (cf. Drucker and Contreras 1953), and sociological inconveniences (Heizer, Graham, and Napton 1968), as well as a number of operative factors which tend to be archaeologically frustrating. The dense tropical growth, for example, makes the site layouts and the individual architectural features which are extant very difficult to accurately discern. Certainly this was the case with the La Venta pyramid, long thought to be rectangular, but now known to be in fact a fluted cone (Heizer 1968; Heizer and Drucker 1968; Heizer, Graham, and Napton 1968). The high acidity of the soil devours ceramic remains, and even decomposes some stone pieces, with the result that the interpretation of material is often no less difficult than the task of securing it. If this be the case today, we can appreciate that it was even more so when Stirling first turned serious archaeological attention toward the Olmec heartland. Surface manifestations were, then as now, usually little more than clay or earthen mounds, disappointingly unimpressive, for the most part, after being attacked by erosion and forest for nearly 3000 years, and since subsurface testing revealed little that could rival the ceramic traditions of the other known culture centers at the time, it is entirely natural that interest should center around the objects that were best preserved and apparent, namely, the carved monuments of hard stone. Not only are the large carved stone monuments of the Olmecs impressive by comparison to other Olmec material remains, but they are unique and highly deserving pieces for study in their own right, and it is therefore not surprising that much of the first real definition of the Olmec culture was made in terms of the monumental art style (cf. Coe 1965a; 1965b; Stirling 1965).

Modern archaeological techniques entered the field of Olmec studies in 1955, when P. Drucker and R. F. Heizer undertook a project of over three months' duration at La Venta. When their work was over, nine additional stone monuments had been added to the Olmec corpus, and a huge amount of excavation data was put on record (Drucker, Heizer, and Squier 1959). For the first time, the Olmecs were an archaeological culture, rather than simply an art style. Moreover, the question of chronological placement was firmly settled with a series of nine radiocarbon dates which placed La Venta squarely in the Preclassic period (Drucker, Heizer, and Squier 1957).

Since 1955, La Venta has been revisited by Heizer on several occasions, and a great deal of new information garnered (Heizer, Drucker, and Graham 1968; Heizer, Graham, and Napton 1968; Heizer 1969). Additionally, the total number of large stone monuments known from the site has been raised to 75. One of archaeology's most modern scientific techniques, magnetometry, has been applied with interesting results at La Venta (Morrison, Benavente, Clewlow, and Heizer 1970; Morrison, Clewlow, and Heizer 1970), as well as at San Lorenzo, where a large scale project of Yale University and the Instituto Nacional de Antropología e Historia of Mexico (cf. Coe 1970; Beverido 1970a; Breiner and Coe 1972) has greatly added to our knowledge of the archaeology of this important site. The site of Laguna de los Cerros, which lies near the base of the Tuxtla Mountains in the center of the Olmec heartland, has seen some investigation in recent years, and promises to hold much important new data (Medellin 1960; Bernal 1969: 46-47). Moreover, a number of sites outside the heartland, but showing strong Olmec cultural ties in areas such as Morelos (Grove 1968a; 1968b; 1968c; 1970a), Guerrero (Grove 1969b; 1970b) and the Valley of Mexico (Tolstoy and Paradis 1970) have recently been the subject of study. As a result, our knowledge of Olmec archaeology is in a state of rapid expansion and change. In contradistinction to much of the work prior to 1955, the "new" Olmec archaeology has tended to focus its attention away from the monumental sculpture, and has concentrated on chronological problems, the accumulation of factual detail on individual sites, and the building of "models" which would explain Olmec cultural dynamics. The monumental sculpture, then, in a state of semi-neglect, is in need of up-to-date attention. It is to this need that the present dissertation modestly addresses itself.

APPROACHES TO THE STUDY OF OLMEC MONUMENTAL SCULPTURE

As noted above, Olmec studies have centered around art style from the very beginning. In a general way, it might be said that the earliest works (Saville 1900; 1929; Vaillant 1932; 1947, for example) were concerned with establishing the fact that such a thing as an Olmec style did, indeed, exist as a valid entity for further scholarly scrutiny. Once this was established, as it certainly was by the time Stirling undertook his first Olmec field trip, the problem became to define this style in the most precise and exact terms possible. Herein lies the main thrust of the work of Covarrubias (1942; 1946, 1957). Drucker's (1952) study carries the empirical definition of Olmec style even further by listing a series of diagnostic traits, and setting standards for descriptive accuracy which are difficult for even the most precise scholar to regularly maintain. Coe (1965b) admirably sums up previous efforts to define the style, lists his own series of diagnostic traits and their variations, and conclusively defines the general style in its temporal and distributional aspects.

To establish the existence of an art style, and to adequately define it in terms of readily identifiable segments or units, are empirical tasks which, when competently performed, seldom give rise to any but minor disputes among archaeologists. That is to say, that once these steps have been performed, most informed opinions will tend to concur on whether or not any given piece conforms to the established definition. More specifically, it is doubtful if any of the monuments under consideration in this dissertation would be denied the status of Olmec, given the acceptance of Coe's style

definition. (Of course, it could be argued that one or two of the pieces mentioned herein are fakes, but this is an entirely unrelated problem.) Unfortunately, the archaeological study of Olmec monumental sculpture entails more than merely deciding that various of the monuments meet the standards and requirements of the style definition. Interpretations must also be put forth, and it is in the interpretative realm that problems invariably arise. There are three broad categories of interpretive possibility in which the study of Olmec monumental sculpture, specifically, has been or could be of value in archaeological reconstruction. Stated briefly, these are:

- (1) As an aid in the identification of cultural contact.
- (2) As an aid in the isolation of specific traits in Olmec culture.
- (3) As an aid in the assessment of chronology.

In the interest of clarity, a brief explication of each category, as well as a statement of intention for this dissertation with respect to each category, will be offered.

Identification of cultural contact: When two or more different sites are in possession of large stone monuments carved in the defined Olmec style, a situation of cultural contact has been identified. This identification does not necessarily explain the nature of that contact, either temporally, or in cultural terms. Thus, for example, the low relief rock carvings at Chalcatzingo, Morelos (cf. Grove 1968b), are generally agreed to have been executed in the Olmec style, and they imply some sort of connection between the heartland Olmec sites such as La Venta or San Lorenzo, and the site of Chalcatzingo itself. This identification does not tell us what the nature of that contact was, whether civil, or military, or religious, or commercial. Nor does it inform us immediately as to the temporal position of Chalcatzingo in relation to other Olmec sites. Questions of this nature can only be answered with the aid of other facts and techniques. The similarity of sculptural manifestations tells us nothing more than that a connection exists, and offers the invitation that we further investigate the temporal and cultural nature of the connection. In this dissertation no attempt will be made to explain the nature of observed cultural connections between heartland and other Olmec sites. This cannot be done with sculpture alone, and as the present paper shall attempt to deal strictly with sculpture, such questions fall beyond its scope.

Isolation of specific traits in Olmec culture: The study of monumental sculpture can aid archaeologists in the isolation of two general types of traits in Olmec culture. One category is that of material traits, such as headdresses, ear ornaments, sandals, and loin cloths. With such traits, the assumption is made that the item portrayed in the sculpture is a representation of an actual cultural item once used by the Olmec. The sculpture, in a sense, serves as a sort of photograph from which material items can be detected. Bernal (1969) has made extensive use of this technique in his descriptions of Olmec dress and ornamentation, in particular, and of Olmec social life in general. Heizer (1967; 1969) has employed the technique successfully in his analysis of the scenes on Stela 2 and Stela 3 from La Venta. The method was also used with success in the analysis of the Olmec colossal heads (Clewlow, Cowan, O'Connell, and

Benemann 1967). Isolation of material traits in Olmec sculpture is a fairly straightforward process which demands rigorous observation and description, but which leaves little room for dispute if carried out with care. The present volume will not attempt to expand upon Bernal's treatment of material traits with respect to their actual use in Olmec society. What will be offered, however, is a standardization of descriptive terminology. That is, the entire corpus of Olmec monumental sculpture will be presented, as much as possible, in the same descriptive idiom. It is assumed that this will encourage and abet future descriptions and comparative studies. The second category of traits which the study of monumental sculpture may help to isolate is that of non-material traits, and it is in this sphere that a great deal of dispute often arises. Non-material traits actually involve inferences which attempt to penetrate the cultural gestalt of long-dead Olmecs, and usually constitute the elaboration of a suggestion which reposes, however vaguely, in the sculpture itself. The notion that the abundant deformed infantile figures in the sculptural corpus represent the result, iconographically, of a sexual union between jaguar and human is one such inference. Isolation of non-material traits, while based on suggestions which may be inherent in the sculpture, usually rely heavily on other avenues of supporting data. Thus, Peter Furst, for example, uses extensive ethnographic analogy in his effort to show that the were-jaguar complex is shamanistic in nature (Furst 1968), a procedure which has been vigorously challenged by Kubler (1970: 142-143). In the present dissertation, I shall not concern myself with the metaphysics of non-material cultural traits as they may or may not be suggested in the sculpture. That is not to say that such an undertaking is not worthwhile, for it certainly is. However, as a thorough treatment would require much more time and space than the present dissertation allows, it must be left for another time or another researcher.

Chronological assessment: The problem of chronological placement has always been prominent in Olmec studies. As noted above, early arguments about the age of Olmec culture were couched primarily in terms of individual, impressionistic evaluations of the art style as early, or late, primitive, or advanced. Until recently (cf. Coe 1970), pottery studies were of little help, as the Drucker-Weiant exchange more than adequately attests (Drucker 1943; 1947; 1952; Wauchope 1950; Weiant 1943; 1952; Coe 1965a). Only with the radiocarbon dating method was it possible to assign a positive series of dates to the Olmec cultural floruit, and it is now generally accepted that Olmec culture lived for some 700 years (roughly 1200-500 B. C.) at San Lorenzo and La Venta (cf. Coe 1968a; Berger, Graham, and Heizer 1967; Heizer 1968). It is also generally accepted that all of the monumental stone sculpture which is the topic of this dissertation was carved at some time in this 700-year period. Beyond that, little can be positively stated. Most of the stone monuments were excavated or removed without note being made as to their stratigraphic placement. Even had they been more carefully excavated, the information would be of a dubious nature. Kubler (1970: 129) has warned that:

"Megaliths are extremely restless... rarely long in one place... return to use over and over, being exhumed, transported, and buried again in deep pits many centuries old, and dug up again, smashed, mended, and reappearing where and when the need for big sculpture recurs... Dating megaliths by the surrounding strata is like dating a piece of sculpture by the architecture of the **museum** containing it today."

We are faced then with a situation in which the Olmec cultural sequence has been refined to a high degree of accuracy, but within which the stone monuments float freely, somewhat neglected chronologically. This dissertation shall address itself to a chronological evaluation of monumental Olmec sculpture. The methodology to be used is, of necessity, somewhat simple. First, the monuments shall be segregated into convenient units and described in a standardized manner. This uniformity of description will provide for comparison of the categories on the basis of key traits which will be used to isolate and identify clusters of monuments bearing more-than-coincidental trait similarities. Once these clusters are located within the corpus, they may be arranged in temporal order. At appropriate points in the analysis, non-sculptural data will be brought to bear on the temporal arrangement of the monuments, and an attempt will be made to show that such a temporal ordering of the pieces conforms to the general Olmec cultural chronology. Where admissible, inferences concerning the social processes connected with the manufacture of the monumental art will be offered. Many of the monuments discussed herein were visited personally by the author. Thus, the descriptions come primarily from field notes, although published accounts were consulted at all times. It was the personal observation, however, which made a certain uniformity of terminology possible. In cases where it was not possible to visit particular monuments, I have relied entirely upon published descriptions, adding notes of interest if illustrations warranted additional comment.

CHAPTER II

THE MONUMENTS

RANGE OF OLMEC ARTISTIC EFFORTS

Given its early chronological placement in the scheme of Mesoamerican cultural development, and the apparent lack of artistic antecedents in earlier New World traditions, Olmec art is all the more fascinating for the scope of expression and the variety of mediums which it encompasses technically. To give a technical perspective to the monumental stone sculpture, which shall be the topic of this work, a brief mention of the various high points in the Olmec artistic range may be of value. Beginning with the smallest category, Olmec jade carving immediately comes to mind. Some of the finest and most intricately executed objects of portable art in Precolumbian America were turned out by Olmec artisans working in jade and other hard stones. Stirling (1961) and Easby (1968) have discussed the technical aspects of Olmec jade work, and a myriad of workers have sung the praises of Olmec jade beauty. Nearly all major museums of the world have at least a few pieces of Olmec jade, with the Dumbarton Collection (see Dumbarton Oaks Collection Handbook, 1963) being perhaps the finest in our own nation. A brief perusal of any such collection will convince any viewer that Olmec carvers had completely mastered the difficult miniature medium, and could produce tiny works that are so detailed as to appear deceptively larger in photographs than in real stone. This incredible attention with detail is also apparent in the monumental stone sculpture with which we deal in this work. Thus it may be said of Olmec sculpture-in-the-round, that the same degree of technical mastery was available for the production of a spectrum of sculptures ranging from delicate jades a few ounces in weight and a few centimeters in height to massive basalt heads over nine feet high and weighing over twenty-five tons. This comprehensive mastery over the inherent possibilities of full round sculpture is also reflected in two dimensional efforts which range in modes from flat, geometric abstraction, such as found in the serpentine block mosaic jaguar masks at La Venta (Drucker 1952; Drucker, Heizer, and Squier 1959), to the low relief panels, such as are presented on a number of stelae and altar sides, and which, in all probability, represent Olmec "snap-shots" of important historical or ritual events (Heizer 1967; 1969). It is now also clear that the Olmecs had command of the art of cave painting (Gay 1967; Grove 1969b, 1970b), at a relatively early date. Kubler (1962: 66), has commented on the wide range of Olmec sculptural art:

"Two sharply contrasting modes of sculpture appear on the Olmec sites. One tradition, represented by the mosaic floor, approaches cipher-like abstraction. The other, exemplified by the colossal heads, is a tradition of veristic sculpture leading to the most faithful possible transposition of appearances."

In addition to the complete sculptural range which Olmec art exhibits, a high achievement may also be noted in Olmec ceramic work. Covarrubias (1957) has discussed Olmec ceramic artistry, and, at one time felt that the presence of Olmec pottery and portable stone art outside the Gulf Coast area was evidence for a highland Olmec origin. Coe (1965c) has also presented a handsome catalogue of Olmec ceramic masterpieces.

In the summer of 1967, a discovery was made which may represent evidence that the range of Olmec artistic expression and conception is even more vast than previously recognized. It was at that time that R. F. Heizer and P. Drucker first became aware that the Great Pyramid at La Venta was not a true pyramid in actuality, but a fluted cone instead. The surveyor on the 1955 La Venta expedition had failed to detect this (Heizer and Drucker 1968), but a mapping party in the winter of 1968 showed that, beyond a doubt, the structure had originally been sculpted to something approximating its present shape (Heizer, Drucker, and Graham 1968; Heizer, Graham, and Napton 1968). In 1969, a magnetometer survey of the structure revealed that, furthermore, it may have been planned as a colossal crypt or repository building holding a probable inner structure and/or large stone offering (Morrison, Clewlow, and Heizer 1970; Morrison, Benavente, Clewlow, and Heizer 1970). Heizer has speculated (1968) that the pyramid was purposely constructed to simulate the massive volcanic cinder cones that dot the Tuxtla Mountains of Veracruz, and that it represents "a surrogate volcano." If this is the case, we must grant that the Olmecs could conceive of, and execute, entire structures as sculptural projects. Hardoy (1968: 21) has suggested that the entire site of La Venta was entirely original in conception and execution, and the possibility that the site itself was a gigantic artistic-sculptural project is not unreasonable. The concept of "site as sculpture" has also been proposed for San Lorenzo, where Michael Coe realized in 1967 that a number of long narrow ridges once thought to be natural were actually formed by construction (Coe 1968a, 1968b), and were quite probably a gigantic artificial sculpture, perhaps representing an enormous "animal effigy--a huge quadruped as seen from above" (Coe 1967d). While such an hypothesis, obviously, awaits considerably more testing and exploration, it nevertheless serves to indicate the enormous artistic range within which the study of Olmec monumental stone sculpture must be placed.

It is tempting to view Olmec society, among other things, as a culture very nearly obsessed with artistic production. This is particularly the case when we consider, in addition to the wide range of mediums available to Olmec artists, the sheer numbers of Olmec monumental sculptures which are probably in existence. Until recently, most pieces of Olmec sculpture which had been discovered were found because they were either above ground, protruding from the ground and thus visible, or in the course of excavation of architectural features. During the 1966 and 1967 work at San Lorenzo, however, it was noticed by M. Coe that the monuments were buried on a San Lorenzo phase floor, beneath San Lorenzo phase fill, in rude alignments which actually allowed some predictability about where other pieces would be placed (Coe 1967b, 1968a). Coe now feels that most, if not all, of the stone monuments known from San Lorenzo date from this phase, having been ritually vandalized and buried together. Moreover, Coe feels that there are hundreds, indeed, perhaps a thousand or more, monuments still buried at San Lorenzo awaiting discovery (Ibid.: 55). At

La Venta in 1968, R. F. Heizer had workmen probe into the drift sands and upper clay fill of portions of the newly discovered Stirling group at regularly spaced intervals with five-foot long iron probes (Heizer, Graham, and Napton 1968). He found that the plazas underneath the clay fill in some areas had been almost literally paved with stone monuments, many of them broken and ritually placed (*Ibid.*; Clewlow and Corson 1968). If this situation holds true at La Venta and San Lorenzo, as well as one or two other unexcavated Olmec sites, then it is no exaggeration to say that hundreds or even thousands of new pieces will be added to the corpus of extant material. If this assumption proves correct, it will again necessitate a change in our thinking about Olmec society. That is, there are certain structural differences to be recognized between a society which produced a unique and lovely art (which is the way we view it now) and a society which was utterly obsessed with monumental art, both its making and breaking, which may be the developing picture of Olmec society. Our picture of the "ethos" of the society (cf. Bateson 1958: 114-119), and our concepts concerning its technological capacity and its sociological organization will certainly be changed to accommodate such a bulk of new data, and, as a result, our knowledge of the Olmecs will be a much fuller one.

METHOD AND TERMINOLOGY

The present study will consider a total of 211 stone monuments, all of which are assumed to be of Olmec authorship. Of these, 134 were personally examined by the author, and are described fully herein. The remaining pieces are known from published drawings, photographs, and accounts. For the purposes of this study I have placed emphasis on those monuments which I have visited personally, though I draw upon published data on other pieces whenever possible. Olmec monumental sculpture has traditionally been divided into a number of distinct categories, such as colossal heads, altars, seated figures, etc., for study, and this paper follows in that tradition. Each monument will be described and discussed under at least one category. The more complex monuments, such as those with seated and standing figures in low relief, are considered under more than one category, as judged appropriate for meaningful comparison. Table 1 lists the categories to be considered, and the monuments considered under each category. Table 2 is a cross-reference aid, listing the monuments by site in order, and the categories under which they are discussed. Those monuments visited personally by the author are duly noted. My tendency has been to "split" categories, rather than "lump" them, with the result that a relatively large number of categories are considered. This seems wise at the present time, since a strong possibility exists (see above) that as many as a thousand new pieces may be added to the corpus in the not-too-distance future. When this takes place, some of our minor categories may fill up, and become of more primary importance. It is worth noting that, if, say, a thousand more pieces do exist, our present corpus may well reflect a statistical sampling error. This makes it necessary to stress the tentative and hypothetical nature of my chronological and stylistic conclusions. If these conclusions are incorrect, they may quickly be disposed of by new excavations and discoveries. If they are correct, however, even in part, then, hopefully, they will help shed more interpretive light on prospective additions to the known corpus of sculpture.

In order to facilitate comparative discussion, a certain amount of descriptive uniformity is required. In a study of the Olmec colossal heads in which the author participated (Clewlow, Cowan, O'Connell, and Benemann 1967), a series of terminological distinctions were made which proved of great utility in comparison of the pieces. In further research on other categories of sculpture, I have found that these terms are meaningful when applied to any portrayal of a head or face in Olmec monuments, whether they be three dimensional or low relief. Thus (Ibid.: 15-17), I shall employ these terms for features of the head and face in the same way they were employed in the colossal head study:

"On the tops of the heads is what we have designated the headgear. This term is used to refer to that portion of the head covering which rests upon the dome of the cranium. In most cases the headgear is distinct and separate from the headband, which is wrapped around the lower cranial area, passes across the area of the forehead, and covers the area of the eye-brows. The term chinstrap is used to designate that portion of the head apparel which extends downward from the lower margin of the headband just in front of the ear and beneath the chin. If the chinstrap is rather short, extending downward only so far as to be roughly between the ear hole and the cheek, we have referred to it as abbreviated, or as a cheekstrap. A full chinstrap extends to the bottom of the jaw and passes beneath the chin. The chinstrap, in each case where it can be clearly seen, appears to be a part of the headgear, since it runs underneath the headband and is therefore presumably attached to the lower edge of the headgear. The combination of headgear, headband, and chin- or cheek-strap is what has been referred to by other authors as the 'helmet.'

"Ear ornaments are the decorative elements attached to the ears of the heads. They appear to cover, pierce, or dangle beneath the lobe of the ear in each case where they are represented.

"In describing facial features, we have used the anatomical terms that we feel most accurately indicate the actual physiognomic area as it has been translated into stone sculpture. Nasion refers to that area where the more fleshy skin of the forehead meets the taut epidermis of the nasal bridge, thereby creating a pinched, wrinkled, or folded effect. The terms subrhomboidal and triangular refer to the approximate shape of this folded area, as does the term double, which actually describes a double or divided rectangle. Fatty pads are those fleshy bulges which appear immediately to either side of the nasion and extend upward to disappear or diminish underneath the headband. In speculating as to the physiological interpretation of the nasion and fatty pads, we suggest the possibility that these are not normal physical characteristics but represent protruding folds of flesh caused by the downward pressure of the tightly fitting headband. Jowls are the puffy areas which hang beneath the cheeks at the lower front sides of the face, serving in most cases to emphasize the squareness of the head from a frontal view.

"The nares are found at the broadest part of the nose, and are the fleshy areas immediately above and covering the nostrils, which take the usual form--drilled and/or pecked holes separated by a septum.

"Tear duct refers to a slight though carefully executed extension of the area enclosed by the eyelids at the corner of the eye."

These terms are further explained with the aid of three schematized diagrams in Figure 1. Figure 2 shows schematized drawings of more unusual facial features. L-shaped eyes, or jaguar-god eyes, are longitudinal channels with the outer corner curved downward. Bifurcate fangs refers to the characteristic Olmec fang with split, curved terminal ends. Bow-shaped refers to the characteristic everted Olmec lip, either upper or lower, and is opposed to a straight lip. Jaguar-god mouth assembly refers to the distinctive combination of everted upper lip with toothless triangular upper gum apparent between two bifurcate fangs, and occasionally a tongue, common to a number of Olmec pieces.

Descriptive terms for the body parts, and the clothing covering the body parts, are less complex, and are subject to less ambiguity than those for the head. Cape refers to any article of clothing draping the back of a torso in any sculptured piece. Abdomen wrap designates the wide waist bands which encircle many of the pieces above the hips, in the area of the solar plexus. Cod piece or breech clout is the clothing which covers the genitals, with cod piece usually referring to the more abbreviated of the two coverings. Necklace will refer to any item which encircles the neck and/or upper shoulders. Chest plaque refers to the rectangular decorations which often appear to adorn the upper chest or pectoral region; it is also called pectoral or pectoral plaque or plate in the literature. Figure 3 schematizes the terms referring to body clothing.

Some standardization of terms referring to the intentional defacement or mutilation of the sculptures is necessary. A clean fracture is one which has not been purposely worn or ground down after breakage. Sharpening grooves refer to the longitudinal grooves, or boat-shaped channels, carved into stone as an apparent result of the grinding or sharpening of axes or celts (cf. Ibid: 70-78). Dimpled pits are ground, cup-shaped depressions with small nipple or dimple-like concavities in the bottom. Ground pits are cup-shaped depressions without concavities in the bottom.

It is important to note that the terms left or right refer to the left or right side (or whatever) of the piece under discussion itself, and not the right or left of the viewer. Thickness refers to the thickest portion of the piece aside from height or width, and is directed at assessing the original size of the stone from which the finished sculpture was formed. Measurements of height and width are maximum figures for any given piece.

One difficulty in the study of Olmec sculpture has always been that the pieces, once discovered, are constantly on the move, from site to museum, from museum to museum, or from a known location at a site to an overgrown or inaccessible one.

Thus, it is difficult for any one researcher to visit and view each piece. M. Coe (1968a) has published a list of the references and locations of the monuments of San Lorenzo, Tenochtitlan, and Potrero Nuevo. In Table 3, I have attempted to update Coe's list, and have added the whereabouts of monuments from La Venta, Laguna de Los Cerros, and other sites which I encountered in the process of researching the present project. Hopefully, it will make some aspects of research a bit easier for future workers, who might then show their gratitude by updating it on occasion. I have listed only those monuments which are in museums under some protection, and thus relatively permanent in their location.

CHAPTER III

THE SITES

Most of the known Olmec monumental sculptures come from three sites situated squarely within what Bernal (1969) has designated as the metropolitan Olmec area, a portion of southern Veracruz and northwestern Tabasco also commonly referred to as the Olmec heartland. These are the sites of La Venta, San Lorenzo and Laguna de Los Cerros. Figure 4 is a map showing the Olmec heartland and its major sites. While this is not the place to present the detailed archaeology of these sites, it will, however, be useful to discuss the general nature of each site, and to present details of the discovery of the monuments as related to the possibility of extracting chronological clues from their placement.

LA VENTA

La Venta is the largest, and probably the most important, of the Olmec sites which have received extensive archaeological treatment. Located on a salt dome which forms an island in the swamplands along the Tonalá River about 12 miles inland from the Gulf Coast, the site was visited in 1925 by Blom and La Farge, who found the first of the sites' four colossal heads. The site was visited periodically by Stirling and his co-workers (cf. Introduction, above), who, by 1955, had discovered and numbered a total of 17 altars, 5 stelae, and 18 monuments thought to be from La Venta (cf. Drucker, Heizer, and Squier 1959: 197; Appendix II). No stratigraphic information was retrieved along with any of these monuments, but the approximate horizontal placements of the colossal heads and some of the altars and stelae on the surface of the site were noted. Although the main ceremonial portion of La Venta is rigidly attentive to its alignment along the north-south centerline (which runs 8° west of true north), the stone monuments as a whole seem to show a haphazard relationship to directional alignment. Only three of the colossal heads (LV 2, 3, and 4) seem to be aligned at a right angle to the centerline, and stood in an east-west row, facing north, in an area north of Complex A now disrupted by an airstrip. (Colossal head LV 1, like a solitary sentry, was located directly south of the pyramid platform, facing south.) Altar 4 and Altar 5 may have been placed as a pair, with some regard for symmetry, as they stand at roughly the same point on either side of a long north-south mound, Altar 4 on the east, facing east, and Altar 5 on the west, facing west (Stirling 1943: 54-55). Kubler (1962: Fig. 16) has provided a sketch map of the site showing these relationships which is included here as Figure 5. One other important possible "pairing" or alignment of two pieces may be noted with Altars 2 and 3, which were found positioned side by side on the south apron of the pyramid platform, one on either side of the centerline (See Fig. 6). Altar 2, the easternmost piece, was found lying on its back, with the niche figure facing up toward the sky (Stirling 1943: 53), much like Monument 20, a large altar from San Lorenzo (Coe et al. 1966). Altar 3, to the west of the centerline, faced north when recovered.

In 1955, a total of nine monuments, some complete and others fragmentary, were encountered (Drucker, Heizer, and Squier 1959: 197-209). Some of these pieces, like Monuments 20 and 21, had been found by oil company work crews while constructing an airstrip to the north and west of Complex A. Others, like Monuments 22, 24, and 25, were found to have been placed during Phase IV times (Ibid.), thereby providing the first stratigraphic clues from the site on sculptural placement. Although the 1955 excavations have been severely criticized (Coe, W. R. and Stuckenrath 1964), Heizer (1964) and Drucker and Heizer (1965) have defended their work in a strongly worded argument which has resulted in a general acceptance of their outline of La Venta site history in four major phases. For the purposes of chronologically assessing the stone monuments, it may be said that the excavations in 1955 produced four important facts:

- (1) The mosaic jaguar mask, stylized to the point of confusion, but certainly showing a very sophisticated degree of non-naturalistic, abstract conceptualization, could be dated to Phase II.
- (2) Heavy use of stone columns in architectural planning can be firmly dated no earlier than Phase IV.
- (3) No stone monuments may be firmly dated earlier than Phase IV.
- (4) Monuments 6, 7, 22, 24, and 25 can be firmly dated as Phase IV, Monuments 26 and 27 were probably Phase IV, all others could be post-Phase IV.

Several important maps were published in the 1959 (Drucker, Heizer, and Squier) work as well. Figure 5, for example, is a detailed map of Complex A and reveals that at least seven monuments (Mons. 24, 7, 6, 13, 12, 15, and 14) were either directly on or exceedingly close to the all-important centerline of the site. Additional maps (Ibid.: Figs. 2 and 5) show rough placement of other monuments around the site.

The next group of stone monuments to be encountered at La Venta were recovered during the field season of 1968. At that time, 28 previously unknown monuments were added to the known corpus of 27 monuments from the site. In addition to these pieces, 14 un-numbered pieces which were in the collection of the Parque La Venta in Villahermosa, were numbered and included in the La Venta corpus, although some of the pieces are not certain to have come from La Venta. These pieces have been described (Clewlow and Corson 1968) and, where possible, their positions of discovery at the site were mapped in as accurately as circumstances would allow. Figure 6 is the 1968 La Venta map, with the known locations of all monuments for which we have information at discovery indicated. This was the first map to attempt such an accurate placing of all the monuments, and is important since it allows us to comment on several possible alignments which, because of their conformity to the geometry of the site, may date from its final phase. The first of these is the southernmost, and consists of Altars 2, 3, 5, and 4, which form an east-west line which appears to be nearly perpendicular

to the centerline, with the westernmost piece, Altar 2, situated virtually atop it. In this particular alignment Altars 2 and 3 are wrongly numbered (Napton, personal communication), but probably represent the location of two large stones which were mentioned by Drucker (1952: 9-10). The real Altars 2 and 3 are on the pyramid platform. We might note next, that Monuments 58 and 37 are also located on the centerline. It is also of interest to note that Monument 1, the colossal head, and Altar 7 form two ends of an east-west line equidistant from the centerline and perpendicular to it. Finally, Monuments 25, 26, and 27 form an east-west line across the base of the pyramid on its southern platform. Drucker, Heizer, and Squier have suggested (1959: 229-230) "...that the usual Olmec practice at La Venta was to raise and re-erect the stone monuments when the periodic alterations were made to the site," and that due to the "truly impressive" degree of such movement, have cautioned that "probably none but the largest pieces were in their original locations when discovered in recent years." This cautionary note is well taken; however, enough evidence is now in to suggest the possibility that some of the monuments have not been disturbed since their final placement by the Olmecs, and that some of the above-noted alignments represent the ritual relationships which the Olmecs intended between monument and monument, and between monuments and site. In addition to the detailed map, the 1968 excavations (cf. Heizer, Graham, and Napton 1968; Heizer 1968) provided several other points of interest with respect to the sculptures. First, it was determined that a great many more pieces lay buried at La Venta than had previously been anticipated, and that, seemingly, many of these pieces had been ritually defaced or mutilated by the Olmecs themselves, and then buried, sometimes in clusters or groups, in the clay fill of the Stirling Acropolis. The date of the burial of these pieces was ascertained at between 950-510 B.C., firmly in the Preclassic (cf. Clewlow 1970: 37), indicating that the newly discovered sculptures are at least as old as, and possibly somewhat older than Phase IV in the Ceremonial Court. It is unfortunate that local social conditions prevented the gathering of further data on the stratigraphic placement of the pieces (Heizer, Graham, and Napton 1968: 142-144). One additional discovery of 1968 was the system of elaborate and well-made stone drains in the Stirling Group (Ibid.). These drains were in some way ceremonially connected with the burial of some of the monuments, particularly the stone bowls, but discovery of the exact relationship must await further work. Two additional pieces of sculpture, Monuments 74 and 75, were unearthed in the Stirling Group by a road crew in the winter of 1969. They are both described for the first time under Seated Human Figures, below.

SAN LORENZO

San Lorenzo is the second large Olmec center to have been studied with modern archaeological techniques. The site is situated in the Coatzacoalcos River drainage basin in southern Veracruz (see. Fig 4), and was first discovered in 1946, when Stirling and Drucker visited the region, recovering 15 carved stone monuments in the Olmec style (Stirling 1955). In the years that followed, the site was visited sporadically by various scholars, who occasionally reported on new stone monuments which had been encountered there. Monument 16, a small round altar, was reported by Aveyra (1965). The majority of these pieces, when encountered, were situated on the sides or in the bottoms of ravines. This fact, plus the fact that many of them had

been broken or mutilated, led most scholars to believe that a foreign invasion or an internal revolt in post-Olmec times had caused the sculptures to be smashed up and rolled into the ravines from the plateaus or ridges where they had presumably once been placed. No stratigraphic information was available for any of the monuments, and they could not be fitted into the site's history in any precise way.

In 1966, Michael D. Coe initiated a three-year Yale University project at San Lorenzo which was to provide the first hard archaeological evidence from the site. Several new monuments were found and numbered during the first season (Coe, Diehl, Beverido, Krotser and Krotser 1966), and by the end of the 1967 work, the total of known monuments from the site was 48 (Coe 1967a, 1968a). Moreover, by the end of the second season, Coe was able to state that all the San Lorenzo monuments probably dated from the San Lorenzo phase (1200-900 B.C., cf. Coe, Diehl, and Stuiver 1967), and that they had probably been ceremonially mutilated and buried in lines during that phase by Olmec peoples. As centuries passed, many had eroded out of the clay fill and tumbled into ravines, where they had been found by Stirling (Coe 1968b). A water control system, consisting of small artificial lagoons and an elaborate system of deeply buried drains, was also unearthered (*Ibid.*). At the end of this season, a detailed topographical map was completed, which, among other things, indicated the location of many of the stone monuments (Coe 1968a). Although the site is large and the monuments scattered, several positive north-south lines are visible. One of these contains Monuments 23, 34, 38, 37, 40, 43, and 41 (cf. Coe 1967b, Fig. 2; Coe 1968a, Fig. 8), and is localized near the east-west line dividing the Group C Ridge and the Group D Ridge, and the other spans the entire site, consisting of, north to south, Monuments 4, 2, 53, 1, 19, 22, and 17 (Beverido 1970a: 140). This is exceptionally interesting because Monuments 4, 2, 53, 1, and 17 are complete colossal heads, while 19 is supposed to be a mutilated colossal head, and 22 is a large, plain stone, possibly a blank for a colossal head (cf. Stirling 1955, Pl. 1; Coe 1968a: 70).

In 1968, four new monuments were recovered (nos. 49-52), this time with the aid of a cesium magnetometer, a device which proved to be of great utility in pinpointing the underground locations of still-buried sculptures (cf. Beverido 1970b; Coe 1968b; *Varion Associates Magazine*, June 1968). Coe also made known a more refined ceramic sequence at the site, and was able to state that "most of the monuments were carved" in the San Lorenzo phase, between 1150-900 B.C., but that the origins of the stone carving were earlier, perhaps in the Chicharras phase, 1250-1150 B.C. (Coe 1970: 25-26). Thus, at the termination of the Yale San Lorenzo project, it was possible to make a number of useful comparisons with La Venta regarding the use of monumental sculpture at the two sites. Both sites contained monuments which had been defaced or broken and then buried ceremonially prior to their abandonment by Olmec peoples. At both sites these monuments were placed in linear arrangements at burial. Both sites had linear arrangements of colossal heads. Both sites had highly sophisticated hydraulic systems, the production of which required enormous expenditures of social time and energy, and which no doubt required that many skilled stone carvers devote great amounts of their productive time to the manufacture of precision fitted stone drains for the systems. Both sites produced many more stone monuments

than had been expected, and it is likely that hundreds, if not thousands, of pieces remain at each site. One peculiar difference between La Venta and San Lorenzo seems to be that the latter lacks the caches of serpentine and jade which occur at the former. It is difficult to speculate as to the reason for this.

In 1969, Francisco Beverido returned to San Lorenzo for one further season there, a season which was extremely useful and productive. Using the magnetometer once again, Beverido located seven more monuments, including a seventh complete colossal head from the site, bringing the total number of sculptures to 59 (Beverido 1970a). Additionally, the magnetometer located a large and intense anomaly which turned out to be an enormous amount of stone refuse (basalt, schist, and other types) whose total was calculated at over five tons. The refuse consisted of broken hunks of stone, and a number of the "tapas" or stone covers to the drain canal stones. Beverido feels that the area represents a stone "workshop," the only one of its kind at an Olmec site (Beverido 1970a: 174-176, 1970b: 36-37), although the complete absence of any stone-working or stone-dressing tools implies to me that the area may have also served as the spot where monuments were ceremonially broken or mutilated. Whatever its function, the area served a similar purpose over an extended period of time, as two distinct levels were noted in the two-meter deep pit. Sherds in association with the feature indicate it dates to the San Lorenzo phase (Beverido 1970a: 207).

LAGUNA DE LOS CERROS

Laguna de Los Cerros is a large Olmec site near Corral Nuevo at the base of the Tuxtla Mountains. It covers 94 acres, and has 95 mounds (Bernal 1969:46), including a large pyramid equivalent in size to the one at La Venta (Medellin, n. d.: 3), and is oriented along a centerline which is aligned at 8° west of true north. It may be roughly dated to at least the San Lorenzo phase on the basis of the pottery (Coe 1968a, Footnote 10). In 1960, A. Medellin Zenil made explorations at this site, recovering 27 monuments, of which nine (nos. 1, 3, 5, 8, 11, 19, 20, 26, and 27) have been published in preliminary form (Medellin 1960). Several others are on display at the Museo Veracruzano in Xalapa. Additional archaeological information has not yet been presented on this obviously important site.

OTHER SITES

Of course, not all the monuments under consideration as Olmec sculpture come from the three sites described above. Other important sites exist, but we as yet have little information about them which we can relate to the Olmec monuments. Tres Zapotes, for example, has produced a large body of sculptured pieces, but the archaeology of the site is confused, and only some of the pieces are considered to be Olmec (Coe 1965b, 1968a: 63). In the present study, only Monuments I and M, in addition to the colossal heads (one from Tres Zapotes, the other from Nestepe), and some unnumbered small pieces in the museum at Santiago Tuxtla shall be considered as Olmec in origin (cf. Drucker 1952: 205; Smith 1963: 129-130). Chalcatzingo, Morelos, is another important site from which we have a series of low relief carvings and one three-dimensional monument. Many general references to the site and its carvings

exist (Guzman 1934; Cook de Leonard 1967; Gay 1966; Grove 1968b), but thus far, no excavations have taken place there which would throw light on the stone carvings.

Many of the singly discovered pieces, like the Las Limas figure, the Minatitlan wrestler, and the pieces from Estero Rabon, Viejon, Cruz de Milagro, and Medias Aguas, were found near sites, some of which are ceremonial centers (cf. Beverido 1970a: 203-204), which are greatly in need of exploration. However, until such work is undertaken, our knowledge of these important sculptures must remain almost exclusively stylistic. For the present, our archaeological knowledge must come from San Lorenzo, La Venta and, to a small extent, Laguna de Los Cerros.

CHAPTER IV

COLOSSAL HEADS

The best known and, perhaps, the most impressive category of Olmec monumental sculpture is that of the colossal heads. These pieces are certainly the most intensively studied of the Olmec monuments, having been subjected to considerable scholarly scrutiny since the discovery of the first such head at Tres Zapotes. In 1967, the most detailed study of the heads up to that time was presented by four Berkeley graduate students, including the author (cf. Clewlow, Cowan, O'Connell, and Benemann 1967). The study gave the history of the heads, provided detailed descriptions of the 12 heads that were then known, and presented a stylistic comparison of the pieces based on a series of specific traits, such as ear ornaments, headdresses, chin straps, nasions, mouth and eye form, and head shape. Such a detailed element by element comparison proved to be a useful device for arriving at stylistic groupings of the heads, a process made possible by the fact that all the heads were complete, even though defaced in some cases, and were all executed in a consistent manner with the same general category of element appearing, albeit in varied form, on each of the heads. This is in contradistinction to other categories of Olmec monuments, in which many of the pieces are broken or are decoratively unique, allowing for no specific piece by piece comparison. Thus, the conclusions of the 1967 study bear quoting in some detail (*ibid.*: 57-58):

"It is apparent that the twelve colossal heads may be grouped into several clusters on the basis of a number of combinations of elements. In general, we might say that the TZ 1 and NS 1 heads combine to form a distinct group. The six San Lorenzo heads, while generally constituting a distinct unit, may be said to break down into two subgroups. SL 3, SL 4 and SL 6 may be grouped together on the basis of a number of shared elements, and, with some regularity, these three heads share traits with the heads of Nestepe and Tres Zapotes. SL 1, SL 2, and SL 5, while all maintaining a certain statistical distinction as San Lorenzo heads, seem to group more often, although somewhat randomly, with La Venta, and less frequently with Tres Zapotes and Nestepe, as opposed to a more constant and less random clustering of the smaller San Lorenzo pieces.

"The four La Venta heads, while easily distinguishable as a separate group, seem also be divisible into two subgroups. LV 1 and LV 4 are, in our opinion, rather different in many ways than LV 2 and LV 3. This may be due in part to the heavy erosion of LV 2 and LV 3, but as the tables above indicate, it is also due to a number of empirically valid differences.

"Thus a sort of chain may be visualized, with La Venta a distinct group but sharing a significant number of ties with San Lorenzo. San Lorenzo is distinct as a group in certain respects, but in addition to the ties with La Venta also shares a number of similarities with Nestepe and Tres Zapotes. These two latter heads form a third distinct unit, and share only the most general features with the heads from La Venta, such as similarities in mouth form.

"In terms of these groupings, it is possible for us to separate the heads into six subgroups on the basis of the above mentioned similarities between certain of the heads. These subgroups are:

Group A	Subgroup I - LV 2, LV 3
	Subgroup II - LV 1, LV 4
Group B	Subgroup III - SL 1, SL 2, SL 5
	Subgroup IV - SL 3, SL 4, SL 6
Group C	Subgroup V - TZ 1
	Subgroup VI - NS 1

"The groupings may be interpreted to mean that within the Group A heads from La Venta we find two subgroups. The first of these (subgroup I), LA 2 and LV 3, stands relatively alone and apart. The second subgroup (II), LV 1 and LV 4, shares certain similarities with the first subgroup (III) in Group B, namely SL 1, SL 2, and SL 5. The second of the San Lorenzo subgroups (IV), while primarily allied with the first (III), nonetheless is more similar to Group C's subgroups V and VI than are any of the other subgroups. The heads from subgroup I are less like those of subgroups V and VI than are any of the other groups. In other words, our groupings are intended to imply that the closer together any two subgroups are, the more similarities the heads within each subgroup share with those of the other subgroup. The farther apart the groups, the fewer the similarities. Thus, subgroup I of Group A is least like subgroup VI of Group C. We must stress that we intend these groupings to reflect only similarities of elements and their execution, and to have absolutely no temporal implications."

While the study did not commit the six subgroups to a temporal ranking, the heads as a group, however, were considered for their chronological implications. It was argued that: "Despite the differences between heads from the three sites, we feel that all show sufficient similarities, considering the present state of the Olmec archaeological record, so that it is not unreasonable to argue that all twelve heads are roughly contemporaneous. We cannot agree on a time period, but suggest a span of a century or two at most may be involved." (Ibid.: 59-60; also cf. Kubler 1962: 67).

Additional work on the same 12 heads, but from several different perspectives, has tended to confirm the conclusions of the 1967 Berkeley study. Justino Fernandez, for example, in a proportional study of the facial characteristics, showed that the heads were sculptured using clearly understood fixed points and geometric ratios for facial elements, and concluded that all the heads were made strictly according to the same canon or the same master principle (Fernandez, n.d.: 6). This, of course, suggests their manufacture within a relatively short time span. P. Tolstoy, in an independent attribute analysis (1972), has seriated the heads and found "total agreement" with the Berkeley study. T. Miyawaki, using the procedure of multidimensional scaling, confirmed the Berkeley data in its ability to neatly separate the heads from each site quantitatively (Miyawaki 1970: 5). M. Coe (1968a, 1968b) has also suggested that a short time span covers the carving of most Olmec monuments, the heads included, and G. Kubler now feels that, with respect to the heads, "...a brief development not longer than two centuries seems likely, perhaps with migrant sculptors moving from site to site." (Kubler 1971: 161).

In addition to the 12 colossal heads discussed in the 1967 work, the present study will consider two large heads from Laguna de Los Cerros, a seventh and an eighth colossal head from San Lorenzo, and a possible "blank," as well as two mutilated heads from San Lorenzo.

Monument 1, Laguna de Los Cerros (Medellin 1960: Pls. 14, 15)

Monument 1 of Laguna de Los Cerros is a stylized human head. This is the piece which was published by Medellin (1960) as Monument 1. It is 67 centimeters high, 68 centimeters wide, and 69 centimeters deep. It has a nasion, highly stylized in the double nasion form. The eyes are rounded rectangles. In the right eye, a diagonal cross element appears in low relief. The nose is wide and high, with the right side having been scaled off. The left nostril is wide and is shown by a ground bean-shaped pit. The mouth is depicted as open with the gums, tongue, and fangs showing (see Fig. 7). The lips are shown as one continuous raised band circling entirely around the mouth. The triangular tongue is almost identical to the tongue on the large jaguar from Las Choapas. Both fangs are long, curved, and bifurcate at the tips. The top and right of the lip are damaged. Fleshy cheeks, particularly the left cheek, and chin are very well modeled on this particular sculpture. The hair consists of 83 ground pits. There is a hole in the top of the head of this piece, 23 centimeters wide, and 14 centimeters deep. No ears are present because, as with the similar monument (Mon. 1a) from Laguna de Los Cerros, the stylized hair covers everything except the facial portion. As with Monument 1a as well, Monument 1 shows no symmetry in the placing of the hair pits.

This piece is much better modeled than the other curly-haired head from the same site. It is interesting to note that in this piece, the exaggerated stylization of the double nasion, the cross in the eye, and the mouth arrangement are all emphatic representations of typically Olmec elements.

Monument 1a, Laguna de Los Cerros (Plate 1)

Monument 1a of Laguna de Los Cerros is a large head, with what appears to be kinky hair covering its top. Although this particular piece is labeled Monument 1 of Laguna de Los Cerros in the Museum of Xalapa, so is another sculpture at the Museum. It is the second piece (see above) and not this one which Medellín (1960) has published as Monument 1. For convenience, I have called the present piece Monument 1a. Both pieces are similar, having stylized kinky hair. Monument 1a is 77 centimeters high, 62 centimeters wide, and 69 centimeters thick. It does not have a nasion, the bulging rectangular eyes being raised to the position where the nasion would normally be. The eyes, as noted above, are bulging rectangles, within a raised outline, and possibly containing diamond-shaped elements in the center. The nose is broad and flat, with drilled holes for nostrils. The mouth is a rectangular opening which is enclosed by the raised upper lip. Two long projecting fangs are present, and four other teeth are visible. The right fang is bifurcate at the bottom. The hair consists of 73 irregularly placed pits ground all over the top of the head. Only the upper lip is present, and extends over the upper gum and teeth. The lip itself is in the style of the stylized jaguar-mouth lip. Fleshy cheeks are apparent between the upper eye and the lip.

The piece is atypical in that it uses deeply ground angular incisions for relief, and relies very little on sculpted modeling. However, a number of typical Olmec elements are present, such as the split fang, and the diamond eye which recalls the ear ornament of colossal head LV 1. No ears are present on this piece, as the "hair" covers the entire remainder of the head. Figure 8 shows the diamond element which is faintly visible in the right eye. The lower part of the mouth and eyes are fractured and worn on this particular piece. No attempt at symmetry, it might be added, was made in the arrangement of the pits which are considered to portray the hair.

There is a hole in the top of the head, ground out 22 centimeters wide and 12 centimeters deep.

Monument 53, San Lorenzo (Beverido 1970a: Fotos 88, 89; Brüggemann and Hérs 1970: Fig. 29)

Monument 53, San Lorenzo, is the seventh complete large head from the site. It was discovered in 1969 as a result of the magnetometer investigations which yielded a number of new stone monuments. The piece is 2.10 meters in height, and is definitely carved in the San Lorenzo site style. Beverido (1970a: 170) feels it most closely resembles SL 2. The face is shown with mouth open and three teeth visible. The headdress looks like two paws, with the fingers pointed toward the back of the head, rather than toward the front, as in SL 2. The nasion appears to be sub-rhomboidal. Eyes are large, and seem to have received considerable

sculptural attention, as did the puffy jowls. Monument 53 is the most badly defaced and eroded of the San Lorenzo heads, and in this respect recalls the La Venta pieces. Due to this defacement, and since it has not been completely published, no more specific description may be given at this time. Beverido (1970a: Foto 89; 1970b: Foto 3) has published preliminary photos which show some features of the piece. Perhaps the most important thing about this head is that, unlike the others from San Lorenzo, it was found in stratigraphic association with San Lorenzo Phase ceramics, and can thus be firmly tied to this period of the site's history (cf. Beverido 1970a: 171-172). It is referred to as SL 7 in Table 4.

Monument 61, San Lorenzo (Brüggemann and Hèrs 1970: Figs. 23-26; Breiner and Coe 1972: Fig. 6)

Monument 61, San Lorenzo, is the eighth complete large head from that site. It was discovered during the 1970 season with the aid of a magnetometer. It is 2.20 meters high, 1.65 meters wide, and 1.60 meters long, and appears to definitely be in the San Lorenzo style. However, when published, it was lying on its side in a deep pit, and no further details are available which would permit a more complete comparison with the other heads (Brüggemann and Hèrs 1970: 18-20). It appears, however, that Monument 61 is totally un mutilated, the best preserved of all the San Lorenzo monuments, and that it is "without doubt one of the finest masterpieces of pre-Columbia art" (Breiner and Coe 1972: 574).

Monument 19, San Lorenzo (Coe et al. 1966: Foto 25)

Monument 19, San Lorenzo, is a totally mutilated colossal head 1.13 meters in height. It may have part of an open mouth remaining (Coe, Diehl, Beverido, and Krotser 1966), but is otherwise simply a large pocked and defaced boulder.

Monument 22, San Lorenzo (Stirling 1955: Plate 1)

This monument, called the "Ojochi" monument by Stirling (Ibid.) is simply a large plain stone which is assumed to be a possible "blank" for a colossal head.

Monument 50, San Lorenzo (Varion Associates Magazine: 8)

Monument 50 of San Lorenzo is a probable fragment of a broken colossal head (Beverido 1970a: Appendix 1). It cannot be discussed stylistically.

DISCUSSION

In Table 4, I have recapitulated the stylistic groupings into which the first 12 Olmec colossal heads were segregated and have added the six additional pieces described above. As may be seen, I have followed Beverido's suggestion and tentatively

placed Monument 53 of San Lorenzo (referred to hereafter as SL 7) in Group B, Subgroup III, along with SL 2. Monuments 19 and 22 are too destroyed to place in any group, and are so designated. Monument 61 has not been placed in any group due to lack of detail. The two heads from Laguna de Los Cerros are placed in a separate group, Group D, and are divided into Subgroup VII, containing Monument 1 (referred to as LC 1) and Subgroup VIII, containing Monument 1a (referred to as LC 1a). This implies that the two Laguna de Los Cerros heads are totally different than the heads from San Lorenzo, La Venta, Nestepe or Tres Zapotes, but that LC 1 is somewhat closer to the NE 1 head (and all the heads of Groups A-C) than is LC 1a, the head sharing the fewest stylistic similarities with the others. Although it is obvious in the photographs, it should nonetheless be stressed here that the Group D heads (LC 1, LC 1a) are much more different from the heads of Groups A-C than any of those are from each other. Thus, while it is conceivable that the same master sculptor may have made his presence felt in the execution of all the heads from La Venta, San Lorenzo, Tres Zapotes and Nestepe, a radically different stylistic school produced the two Laguna de Los Cerros pieces.

A stylistic seriation, such as I have presented in Table 4, is but a first step in the larger problem of chronology. It is one thing to correctly seriate styles. It is another to attach the proper significance to the different stylistic groupings. Kubler has asked the questions: "What is the meaning of these distinct styles? Do they reflect period or workshop?" (1971: 161). While the precise answer will probably never be known, there is, however, a growing body of evidence which allows our guesses to become more nearly certain. It has been shown in the past five years by M. Coe that most of the stone sculpture from San Lorenzo was last placed in the site during the San Lorenzo Phase, which dates from 1150-900 B.C. (Coe 1970). Thus, all the San Lorenzo heads must have been carved by 900 B.C. It is generally assumed that the heads from La Venta, Tres Zapotes, and Nestepe were carved within two centuries of the San Lorenzo pieces, although my own feeling is that the heads from these four sites are so similar as to demand no more than 50 years or two generations of carvers for their creation. It is the two heads from Laguna de Los Cerros which are radically different in style (they are considered by some, in fact, to be a separate category of sculpture) and, therefore, difficult to place chronologically. This difficulty is compounded by the fact that very little of that site's archaeology has been published, forcing us to rely more on the educated guess than we should like.

Proceeding logically, we have three general choices for temporal placement of the Laguna de Los Cerros heads. We may place them earlier than the 13 other heads; we may place them later than the 13 other heads; or we may place them as contemporaneous with the 13 other heads, and argue that the difference, in Kubler's terms, is one of workshop rather than period. My own strong inclination is to take the first alternative, and place them first in the sequence. Before explaining why I support an early placement for the pieces, a brief argument against the other two alternatives will be presented.

It is agreed that all the San Lorenzo heads were carved prior to 900 B.C. Even if 200 years is allowed for the development and completion of the La Venta heads, they

would have been carved by 700 B.C. Their lineal placement in the La Venta site, however, suggested that they were in active use as late as Phase IV (600 B.C.) or even later. If large heads were being produced at any Olmec site after 700 B.C., it stands to reason that one of them would have found its way to La Venta, which was the last known major Olmec site to be occupied, and which seems to have been a sculptural "storehouse" for pieces from earlier in the Olmec sequence (the San Lorenzo Phase in particular) as well as the latest Olmec works (see, for example, Low Relief Panels, below). The fact that no pieces exist at La Venta which are stylistically comparable to LC 1 and LC 1a would seem to mitigate strongly against such a style being placed late in the temporal sequence.

A similar argument also suggests that the Laguna de Los Cerros pieces are not contemporaneous with the 13 other colossal heads. We have strong evidence, for example, that there was a Laguna de Los Cerros sculptural "workshop" which was technically as advanced, if not more so, than any at San Lorenzo and La Venta, and that this workshop turned out seated and standing figures in the style of the San Lorenzo Phase monuments (cf. Coe 1968a: 62; also Seated Figures, below). It is difficult to imagine that a workshop capable of finely executed seated figures could not carve an equally skilled large head. The technical clumsiness of LC 1 and LC 1a strongly invites the suggestion that they are not contemporary with the other 13 heads or with the majority of "classic" Olmec monuments.

Technical factors do, however, suggest that the two Laguna de Los Cerros pieces may be early in a temporal sequence. As is noted in the description of the pieces, the carving of facial features is done in an angular, abrupt fashion. Plane surfaces do not fade into one another, but seem to be a series of awkwardly joined elements. This is particularly noticeable in the rectangular eyes and stylized double nasion of Monument 1 and in the entire mouth assembly of Monument 1a. Only the cheeks show any real modeling. It has long been assumed by Olmec scholars that the carving of wood probable preceded and anticipated the carving of large stone blocks, and LC 1 and LC 1a give the impression that their craftsmen were unfamiliar with their tools and their medium, as if, having long experience in wood carving, they were applying their skills to stone for the first time. This impression is heightened by the technique used to create the "kinky hair" effect, namely the repeated drilling of single holes over more than half the surface of each piece, obviating the necessity to sculpture ears, headdress or other non-stylized elements. It is probable that the tool and technique used to make the holes or pits was developed accidentally over the years in the course of food preparation, or perhaps, ritual activities, and that it was applied to carving as nothing more than an extension of the observation that it could alter stone surface. At a loss at how to handle the non-stylized, non-facial portions of the heads, the artisans simply applied the same process again and again, until the sheer numbers of holes produced an overall effect of hair. Although there is a certain technical awkwardness about the two Laguna de Los Cerros heads, they are by no means to be considered crude. They are best described as "experimental," and are quite possibly the oldest complete Olmec stone sculptures known. It should be stressed, however, that regardless of their temporal placement, the two heads are completely Olmec in content, as may be shown by such elements as the diagonal cross, double nasion, bifurcate fangs, everted lips, and general mouth

assembly. If my assessment is accurate, these pieces reflect the earliest traces of stone monument carving by Olmec artisans who, having mastered the iconography within the idiom of wood carving, were cautiously feeling their way into the medium of stone.

If the heads from Laguna de Los Cerros are to be placed earlier than the other large heads on a relative time scale, the question will inevitably arise as to how much earlier they are, and how does the whole stylistic sequence of the heads fit into the absolute Olmec chronology. Unfortunately, little is known archaeologically of Laguna de Los Cerros, and even if it were, the placement of large sculptures within the sequence would be difficult. However, if for no other reason than to stimulate discussion, I shall offer a tentative and speculative absolute sequence for the large heads. Coe (1970) has provided the most detailed sequence from the Olmec heartland thus far, and his phase names and dates will be used with reference to absolute time. He has also stated that the first archaeological evidence for stone monument carving dates from the Chicharras Phase (1250-1150 B.C.), and that this evidence includes "a basalt fragment which must have been broken from a monument, depicting a portion of a rope-like ornament exactly like those which appear on the helmets of San Lorenzo Monuments 3 and 4, both Colossal Heads" (ibid.: 26). If, as I hazard to guess, the Laguna de Los Cerros heads (Mons. 1 and 1a) are among the earliest Olmec monuments, then they must surely date as early as Chicharras. And if, as I also hazard to guess, the 13 other colossal heads were carved within 50 or so years, they probably followed closely, and thus may well date from San Lorenzo Phase A (1150-1000 B.C.). Kubler (1971: 162) has characterized the colossal heads as experimental in the sense that their enormous size was a necessary by-product of the attempt to carve stone to high detail with the limited technical means available at that time.

"Indeed the effort to shape stone with stone tools inevitably led to the realization that an enlargement of the work to colossal proportions was the only way to achieve finely detailed control over sculpture. Stone hand tools have their characteristic weights and shapes: a stone blade-edge will cut finer detail when the size of the work itself is enlarged, but below large work sizes, stone tools cannot shape lines or modelling finer than their own edges... Thus the Olmec sculptors, envisioning and wanting finely modelled anatomical detail, discovered that they could achieve it in stone only by working at the largest available scale.... Where we experiment by drawing our idea, the Olmec sculptors felt their way into the unknown or uncharted domains of exactly representative art by sculpture with stone celts and mauls and picks, which they wielded as sensitively as a draughtsman handles his pencils and brushes."

These large heads, then, served as sketches, and the experimentalism of Chicharras times, made awkward by the transition from wood to stone, was continued in San Lorenzo Phase A as Olmec masters perfected their skills by turning the gigantic boulders into human portraits. Once the difficulties of working in stone were mastered, the scale could be reduced, and finely detailed figures in life size could be produced. It appears, however, that the large heads, whether it be for their size, their experimental grandeur, or their antiquity, were always afforded a special place in the layouts

of large sites. This no doubt explains the fact that three of the La Venta heads were discovered in an east-west line north of the pyramid, having no doubt been raised and re-erected at several critical points in the site's history (cf. Drucker, Heizer, and Squier 1959: 229-230). At San Lorenzo as well, seven complete heads, mutilated as they were, in addition to one blank and a totally defaced head, were found in a meandering north-south line which Beverido has suggested was probably straight at the time the giants were finally ceremonially laid to rest (Beverido 1970a: 140). Tolstoy (1972: 459) has hinted at the intriguing possibility that the placement of the San Lorenzo heads may be chronologically ordered. My temporal sequencing of the Olmec heads is summarized in Table 5.

CHAPTER V

SEATED FIGURES

The majority of Olmec monumental three dimensional sculptures fall into the broad category of seated figures. Thus, of the 211 individual pieces of sculpture considered in this study, 31 are actually seated figures, while another 17 have at least one seated figure in either high or low relief depicted on, or incorporated within them. The category of seated figures is quite broadly defined, and actually includes all figures which are seated cross-legged, with legs dangling, kneeling, squatting, crouching, or any combination of these. They may be human, quasi-human, or half-human and half-feline, a situation which is often difficult to determine due to mutilation or erosion.

Three dimensional seated figures will be described first, site by site, and then discussed. Description and discussion of high relief pieces and low relief figures will follow.

SEATED FIGURES FROM LA VENTA

Seventeen of the numbered monuments from La Venta have been considered in the category of seated figures. Most of these pieces are relatively recognizable as such, and only two are so fragmentary that their placement in this category might be questioned (Mons. 38 and 48). Reasons for their inclusion are covered in their descriptions.

Monument 5, La Venta (Stirling 1943b: Pl. 45)

Monument 5 is a kneeling figure holding a stone bowl between its hands. First described by Stirling (1943b: 58), it is 125 centimeters high, 80 centimeters wide, and 90 centimeters thick. The bowl is 33 by 21 centimeters, 12 centimeters thick, with a 2-centimeter deep, 13 by 11 centimeter depression in the center. The piece is not well modeled. The arms are blocky and angular, while the hands are crudely incised. Legs are minimally detailed. The head has a median crest 45 by 20 centimeters, raised 10 centimeters from the crown of the head. The nasion is double. The nose is broad with small pecked nostril holes. The upper lip is bow-shaped, but is badly damaged now. The mouth is open with teeth showing. In fact, it might be said that the face presents a rather buck-toothed appearance. Eyes are gently hollowed depressions. Ears were represented, but all detail has been eroded away. A slightly raised element hangs from the median crest on either side of the head, disappearing after flowing onto the shoulder (Figure 11). A broad rectangular element raised about 2 centimeters covers the back. It is not a cape, it is not visibly attached to any other portion of the sculpture, and it cannot be stated what it is intended to represent. No other clothing or ornamentation of any sort is portrayed on the piece. The right cheek is shown as slightly puffy by modeling. The maximum relief of the piece is 37 centimeters from the edge of the stone

to the crook of the arm. Stirling (*Ibid.*) feels that the piece represents a kneeling baby-faced figure, and states that it is probably "the most typically Olmec of any carving from La Venta" (*Ibid.*). The piece has commonly been designated the "Little Grandmother." Delgado (1965: 57) disagrees with this naming and states that the figure is "actually a seated child holding a small box in his hands in the manner of an offering."

Monument 8, La Venta (Drucker 1952: Pl. 59)

Monument 8 of La Venta is now situated in the center of a fountain at the University of Tabasco in Villahermosa, Tabasco. Thus, no measurements are available for this piece. It is a large statue representing a seated human figure, seated cross-legged. The arms hang downward with the hands presumably grasping the crossed legs. The right hand is present and is shown by incising, while the left one appears to be broken off just below the wrist. The figure is completely naked except for a headgear, which Drucker (1952: 178) feels may be related to that of the principal figure of Altar 5, La Venta. The whole piece is badly eroded. The ears are shown as slightly raised and projecting outward. Eyes are represented by a stylized version of the L-shaped or jaguar-god eye (Figure 12). The nasion is covered by what is either a portion of the heavy forehead band or very thick brow ridges. Lips are depicted as swollen and thick, but not parted. Some modeling is present on the cheeks but not on the chin. The piece is crudely done, but is impressive for its size and simplicity. The neck is massive. The sculpture is Olmec-like in that its posture, eyes, lips (which are ever so slightly bow-shaped), ears, etc., are in the Olmec canon.

Monument 9, La Venta (Drucker 1952: Pl. 60)

Monument 9, La Venta, is a cross-legged human seated figure, with the face and head of a stylized jaguar. It is 114 centimeters high, 89 centimeters wide and 62 centimeters in thickness. The figure is large and is seated cross-legged with its arm projecting out from the body and going straight down to the sides of the legs. The face is of the jaguar god, and recalls the Estero Rabon head, as well as Monument 10 from San Lorenzo.

The headgear is simple, consisting of a 10 centimeter wide headband over an apparently smooth top covering. Straps of some sort hang down 19 centimeters from this band, covering the area of the ears. Erosion makes it impossible to ascertain more details. In back, a portion of the headdress hangs down in a flowing piece to cover the back and sides of the neck.

The nasion is of the double type, somewhat stylized. Eyes are of the jaguar-god shape, with downward oriented outward corners. There is no

corner overlap and no depiction of irises. The nose is damaged badly. Lips are both bow-shaped and form a continuous band 22 centimeters wide with no corner overlap. On either side of the teeth-tongue cluster is a ground depression 1.3 centimeters deep and 4.5 centimeters wide; however, it is not the characteristic ground pit. The tongue and teeth are damaged, but it is possible to note the bifurcate, downward projecting, typically Olmec fangs (Figure 13). Hands and feet are apparently not portrayed. At the side of the hands, however, a design appears which could be stylized claws or fingers. The arms are 88 centimeters long.

Clothing consists of a tripartite abdomen wrap with a dangling piece from the top rung which may extend downward to become a cod piece covering the genitals. On the front of the abdomen wrap there may have once been an anthropomorphic face plaque as in Monument 10, but erosion makes it impossible to be certain. There is, however, a blank rectangular area there which appears to have once contained low relief. The back of the piece is ground quite flat with the abdomen wrap being a single piece and being only faintly visible.

Erosion is very heavy on this piece. Cheeks, jowls, and the chin are moderately well modeled. The neck is very thick, with a circumference of 103 centimeters. The hole in the lap-crotch area is only a ground depression; it does not penetrate to the bottom of the piece. Figure 14 gives a detailed drawing of Monument 9, La Venta.

The piece is now in the Museum of Tabasco in Villahermosa. In 1952 (Drucker 1952: 178-179), the piece was still at Comalcalco.

Monument 10, La Venta (Drucker 1952: Pl. 60)

Monument 10 is a human figure seated cross-legged, leaning forward. It is hunched over at the shoulders with the arms coming straight down in the front of the figure and apparently grasping the ankles (cf. Drucker 1952: 179). Fingers are depicted very crudely with some grooving, and toes are depicted crudely by incision. The piece is 107 centimeters high, 96 centimeters wide, with a thickness of 67 centimeters. The headdress is simple, with a 12-centimeter wide band encircling the lower portion of the head, and becoming slightly wider in the back. It is positioned straight on the head. Straps hang down 14 centimeters, covering the ears, but are badly eroded so that no details may be positively ascertained. The nasion, although badly damaged, was probably double. The nose is very scaled and eroded, as is the mouth. However, it is possible to see that the lips were a slightly raised continuous band with no corner overlap, very similar to that in Monument 9, La Venta. The whole mouth assemblage, in fact, was probably very similar to Monument 9. Faint traces of a right fang projecting downward indicate it was also bifurcated. Eyes are in the jaguar-god shape with the outward corners projecting downward. The neck is massive, with a circumference of 100 centimeters. Two incised lines 5

centimeters apart encircle the neck, giving the impression that the figure is wearing a collar. The back is flattened and shows no signs of clothing except the top band of an abdomen wrap. In front, the abdomen wrap is overlaid by a rectangular plaque, which is very badly worn, but which was probably a circle or an anthropomorphic face. A smallish rectangular cod piece is present below this, presumably to cover the genital area. On the left side, the abdomen wrap is divided into five parts. These parts are depicted with incised lines which become typical sharpening grooves on the thigh. At the end of these grooves nearest the knee, the decoration stops. On the right side, the abdomen wrap is divided into only two parts and only three sharpening grooves are present on the thigh, one of these very faintly. These grooves are interesting and present a rare case where sharpening grooves are actually incorporated into the decorative elements of a sculptured piece. The whole piece suffers very badly from erosion. Cheeks and jowls, however, appear to have been very well modeled. Ground round depressions are still visible in each side of the mouth. In addition, a slight ground depression may be found on top of the headpiece. There may have also been an anthropomorphic face plaque on the back. However, erosion is so bad that it is difficult to be certain.

Monument 11, La Venta (Drucker 1952: Pl. 61)

Monument 11 of La Venta is a grotesque seated figure with the face of a jaguar-god (Drucker 1952: 179). It is 91 centimeters high with a width of 57 centimeters and a thickness of 83 centimeters. Eyes consist of rectangular depressions 2 centimeters deep and roughly 12 by 5 centimeters. No iris is depicted. The nasion is double. Thick angular brow ridges are depicted above the eyes. The broad nose shows some damage. The mouth is of the jaguar-god, with both lips being bow-shaped and continuous in a band with no corner overlap. The tongue is triangular, with the left fang showing bifurcation. Chin and cheeks are well modeled. Corners of the mouth are depressed, but are not pits. Ears are 19 centimeters long by 5 centimeters wide, raised 2 centimeters from the head. They are eroded, but may have at one time been portrayed in some detail. The head of the piece is tilted back at such an angle that the eyes look almost straight up. The peculiar swollen headdress of the piece is damaged in front on the right side. It has a groove down the center of the top much like that on the Las Limas baby head (see Medellin 1964). The arms are 71 centimeters long, damaged in the area of the hand, but apparently clutching a plain, small box-like object against the left leg. The left leg is crossed in front of the piece, while the right leg is twisted back toward the buttocks in a pose similar to that of the Minatitlan Wrestler. Although badly damaged, it is certain that the right leg terminates in something which is not a human foot. It is much more of a claw-like element. The left foot is unclear and crude, but could also be a tripartite claw as easily as a foot. The figure is without decoration except for a raised motif on the lower portion of the back which apparently rose from a more complex element in the buttocks region,

which has since been sheared off in a very clean fracture. This element, shown in Figure 15, which may represent a tail or a sprout of corn, is about 29 centimeters high and is raised about 4.5 centimeters from the back of the sculpture. The neck is massive, with a circumference of 104 centimeters. The maximum relief of the piece is 32 centimeters from the belly to the outer arms. The hole in the lap-crotch area of the piece penetrates completely through the sculpture.

Monument 21, La Venta (Drucker, Heizer, and Squier 1959: Pl. 50, Fig. 56)

Monument 21 is a seated human figure with its arms resting on a thick desk-like table in front. The right arm is back against the chest, while the left one is extended forward across the top of the desk or table. The piece is 54 centimeters high, 59 centimeters wide at the table top, and 50 centimeters thick. The human figure projects 20 centimeters above the table. Interestingly enough, both arms are of the same length, 51 centimeters. The piece is headless, the head having been fractured off and the fracture ground smooth. The circumference of the fracture is 66 centimeters. The human portrayed is a robust individual with a well modeled chest. No clothes are apparent, but a V incised between the shoulder blades 7 by 17 centimeters, and one at roughly the hips 7 by 11 centimeters, suggest, respectively, a cape and a breech cloth. These are possible later additions to the piece, but they recall the incised capes and genital coverings of some other Olmec pieces. Aside from these, the back is badly eroded, and does not appear to have been particularly well modeled. The so-called table or desk slants upward slightly toward the front. On its top, just to the front of the right arm, are two typical axe-sharpening grooves 1 centimeter deep and roughly 25 centimeters long. No detail is discernable below the level of the table's projection. A basic outline of the hands is shown, but no detail of the fingers is given. Drucker, Heizer, and Squier (1959: 200-201) feel that the monument is stylistically similar to Altar 6 from La Venta. The material from which Monument 21 is sculptured is the same as that of Altar 7, La Venta, and the Monkey statue (Mon. 56) from La Venta (Williams and Heizer 1965: 20).

Monument 23, La Venta (Drucker, Heizer, and Squier 1959: Pl. 52b)

Monument 23 from La Venta is a human figure, life-sized, seated with its legs crossed in front. It is 63 centimeters high, 74 centimeters wide, and 63 centimeters thick at its thickest point. The feet, the arms, and the head have been destroyed. All the breaks are sharp, but somewhat eroded and old. The hips have also been broken off. The legs are massive at the top and taper toward the bottom.

The piece wears a collar, most of which is not apparent, and a three-part, horizontally divided abdomen wrap. From the collar in front hangs a sub-rectangular pectoral ornament, possibly a mirror, apparently devoid

of any design. From the front of the abdomen wrap hangs a series of three tassel-like objects which rest on the thighs of the piece. These tassels actually fall from a rectangular buckle-like element in the center of the abdomen wrap. From below the wrap, a small, puffy cod piece covers the genitals. A raised but damaged area on the thighs may be where the hands rested at one time (this is not a decorative element, as it is unconnected to any of the other such elements).

The figure is rather fattish, but the whole piece is very well modeled. The neck break is small, with a circumference of 93 centimeters. This, and the general posture, elaboration of dress, etc., make me believe that this piece is close to the Laguna de Los Cerros style, and probably temporally related to it.

In back, a skirt covers the buttocks and is shown with an incised line where the thighs join the buttocks. A knot was tied to the center of the abdomen wrap in the center of the back. The back is well modeled. A flattish headdress apparently once covered the back of the neck, as a portion of it remains just below the fracture. Drucker, Heizer and Squier (1959: 202-204) have described this piece in some detail.

Monument 30, La Venta (Clewlow and Corson 1968: Pl. 9c)

The piece is a seated figure sculptured in basalt, with the right leg crossed in front, and the left leg tucked to the side like the famous Wrestler. The head has been fractured off. Both arms arch forward, grasping the leg. The right toes are crudely incised. The left foot is crudely blocked out. The chest is flattish and not well modeled; it is covered with an abdomen wrap which thickens on the back and the sides. The abdomen wrap is 25 centimeters high. The neck fracture is ground smooth. Its circumference is 74 centimeters, being quite thick. On the bottom of the piece are 11 axe sharpening grooves, ranging from 2 to 4 centimeters deep and from 10 to 30 centimeters long. A larger ground depression, 5 by 26 centimeters, is also present on the bottom of the right leg. These sharpening grooves are arranged in no particular pattern, and are of such varied size and depth that I feel that they may have actually been used as sharpening grooves for whetting the pieces used in actual work on the monument. Although the area is badly eroded, it appears that a puffy rectangular cod piece hung from the abdomen wrap to cover the genitals. The top of the back shows some modeling. The chest is decorated with a St. Andrew's Cross on a neck plaque measuring 18 centimeters long and 7 centimeters wide. The maximum relief on this piece is 23 centimeters from the belly to the outer leg. The piece was excavated in 1968 from the Stirling group. It has been described by Clewlow and Corson (1968).

Monument 31, La Venta (Clewlow and Corson 1968: Pl. 9d)

Monument 31 is a seated figure carved in basalt (cf. Clewlow and Corson 1968). It is broken, but is still 52 centimeters high, 66 centimeters wide, and 40 centimeters thick. Both arms are broken off at the shoulders. One leg has been fractured off at the knee, the other at the upper thigh. The piece is flat and hammer dressed, slightly pitted at the bottom. Three sharpening grooves are placed down the back roughly symmetrically. One is also present on the left outside thigh. The head has been broken off, and the break is ground or smoothed. The circumference of the break is 76 centimeters. It appears that the right leg crossed in front of the piece, while the left one doubled back to the side like that on Monument 30 and the Wrestler. Although the piece is rather worn all over, it appears that there were no decorative elements or articles of clothing on it except for the rectangular puffy section covering what would be the genitals. This piece does not appear to have been particularly well modeled, although it is not angular. The ground grooves on the back are placed symmetrically enough to suggest their incorporation into the piece as hair or designs of some sort. The small ones are 3 by 26 centimeters, the large one 3 by 36 centimeters. Perhaps the 3 by 15 centimeters groove on the bottom of the right outside thigh served a similar purpose. The maximum relief on this badly damaged piece is 26 centimeters from the belly to the right knee.

Monument 38, La Venta (Clewlow and Corson 1968: Pl. 10d)

Monument 38 of La Venta is a fractured portion of a seated figure carved in basalt. Only a portion of the cod piece and a portion of the right foot or hand are showing. This represents the lower right portion of the sculpture. On the left side a channel is worked which, if studied further, might prove useful in discerning manufacturing technique. Figure 16 shows a reconstructed drawing of Monument 38. The piece was found at the base of the south pyramid platform, east of the center line. It is 58 centimeters wide, 45 centimeters high, and 48 centimeters thick. Two 18 centimeter long sharpening grooves are found on what is probably the stomach portion of the piece. Monument 38 is so badly damaged that no more may be said about it at this time (Clewlow and Corson 1968).

Monument 40, La Venta (Clewlow and Corson 1968: Pl. 11a)

Monument 40 is a seated human figure, headless, with legs hanging over the side of what was a throne-like seat. It is 74 centimeters high, 46 centimeters wide, and 28 centimeters thick.

The head has been snapped off and the fracture ground smooth. The circumference of the fracture is 57 centimeters. The feet are worn lumps. The fingers are vaguely shown by incision. The front of the piece is worn, but was never particularly well modeled. In back, the back is rather

flattened, but traces of an incised triangular cap remain between what may have been shoulder blades. No other designs are present on the piece. The maximum relief on the piece was 11 centimeters from the knee to the belly. The throne-like seat is unusual, and the figure itself is quite unlike any other found in the Olmec sculptural corpus. The piece was first described by Clewlow and Corson (1968).

Monument 48, La Venta (Clewlow and Corson 1968: Pl. 12d)

Monument 48, La Venta, has been described by Clewlow and Corson (1968: 177) as:

"...a badly eroded fragment of a larger piece with nothing more than a foot crudely sculptured in the lower right hand corner. At one time the piece was probably a fat, squatting figure of an animal or man. Made of basalt, the fragmentary monument is 40 cm. high, 35 cm. wide, and 28 cm. thick."

The bottom of the piece is almost completely flat. It is fractured on the top, the back and the left sides in what appear to be exceedingly old and badly worn fractures.

Monument 70, La Venta (Clewlow and Corson 1968: Pl. 14e)

Monument 70, La Venta, is a fat squatting figure 83 centimeters high, with a width of 56 centimeters and a thickness of 73 centimeters. The figure holds a flattish metate with the back edge turned up in front of its belly. Arms and legs are shown slightly modeled, and fingers and toes are shown in low relief by the use of incised lines. The head of the figure is crowned with a Mohawk-like raised strip, possibly hair, 14 by 31 centimeters. The face shows a badly eroded double nasion, and a damaged broad nose. All that can be ascertained of the mouth is the bean shaped pits in the corners. Eyes were ovoid depressions 2 centimeters deep and 8 by 3 centimeters. Ears are damaged, but were realistically incised with an extended lobe and plugs consisting of circular disk and tassel. The figure wears no clothes. The squatting position may be ascertained by viewing the lightly incised lines representing legs on either side. In addition to the central figure, there are two other faces carved on the head, one on each of the two sides, and one on back. All three are of similar shape and proportion, so that the head actually consists of four faces. All are damaged to some degree, but between them the following may be seen: they are 26 centimeters high and 26 centimeters wide, with puffy cheeks, revealing some modeling. Mouths are open, with no teeth showing. The nasions are double. The nose extends out almost in an aqualine fashion. Eyes are depressed almond shaped pits, with no corner overlap. Eyeballs are shown in raised relief. Each face shares its ears with the face to either side of it. Thus, although there are four faces, there are only four raised ear clusters (all the three smaller

ones are indistinct), each one serving two heads. The maximum relief on the main figure is 19 centimeters from the metate rim to the neck. It has been previously illustrated by Williams and Heizer (1965), and was described by Clewlow and Corson (1968) who noted its superficial similarity to La Venta Monument 5.

Monument 72, La Venta (Clewlow and Corson 1968: Pl. 15a)

Monument 72, La Venta, is a very badly eroded large squatting figure, 126 centimeters high, 70 centimeters wide, with a thickness of 44 centimeters. It wears a helmet-like headdress of which no details are discernable. Eyes are carved as depressions. The nasion is probably sub-rhomboidal. No mouth is visible. Cheeks appear to have been well modeled at one time. Arms rested on the front knees of the figure. No clothing is discernable on the piece. Ears and ear ornaments were at one time present, but no details remain today. The helmet had a 5 centimeter wide chin strap which encircled the cheeks and chin just in front of the ears. The figure is so badly damaged that it is impossible to tell whether it was uncompleted or badly eroded or both. Some damage appears deliberate. Only faintly noticeable on the back of this piece are five low relief faces much like the ones on the stylized jaguar mouth head of Monument 71, La Venta. These small faces are roughly 13 by 13 centimeters, positioned as shown in Figure 17. One of these small faces is also present on the shoulder of each arm and on the sides of the headdress as well. These tiny faces are very badly eroded, but they appear to have had a wide continuous band representing the mouths. A protruding tongue is also visible on at least two of the faces. No other details are present. In fact, without the use of artificial lighting, it is almost impossible to see these small carved faces at all. This piece was at one time very impressive and was probably a quite important example of Olmec sculpture. Its original location at La Venta is unknown (cf. Clewlow and Corson 1968).

Monument 73, La Venta (Clewlow and Corson 1968: Pl. 15b)

Monument 73 is a small human figure seated cross-legged (cf. Clewlow and Corson 1968). It is 32 centimeters high and only 25 centimeters wide and 28 centimeters thick. The head has been broken off, and the fracture is somewhat worn. The piece itself appears to be a miniature example of other, large seated Olmec figures in stone. The figure is nude. Arms, chest and belly are well modeled. The break at the neck is only 19 centimeters across. The hole in the crotch-lap area penetrates completely. Feet and hands are shown by incision. Toes and fingers are not shown. Monument 73 is a well made pretty little piece which may be relatively early.

Monument 74, La Venta (Pl. 2)

Monument 74 of La Venta is a basalt piece and was at one time a very superb monument. It stands 64 centimeters high, 36 centimeters wide, and 44 centimeters thick. Unfortunately, it has been broken off at the base of the nose with a very ragged fracture of about 125 centimeters' circumference.

The piece at one time represented a squatting human figure, with the front of the face in full sculptural relief, but the rest of the figure in low relief. On the right side, what is mainly visible is the lower portion of an ear and an ear ornament, not quite distinct as to exact shape. This "ear ornament" may also be the lower part of straps from a helmet. Also, a prominent forearm and hand are shown. On the left side, the same details are visible, very indistinctly, as this side is badly damaged. The block is ground flattish and smooth in back with no incising. In front, it appears that the piece is squatting on an 8 centimeter high platform. Feet are then vaguely shown by low incision. Above the feet is a blank, smooth area, probably representing a block-like palette, held against the chest by two hands. The bottom remaining part of the face shows a very well modeled chin, mouth and jowls. Fleshy cheeks, bow-shaped upper and lower lips, and typical Olmec upper gum are also present. Traces of what may be fangs are present. The upper lip is a typical jaguar-god mouth cluster. It is difficult to say what type of nose was present.

The piece is interesting in that it shows the stressing of head features with minimal expenditure of skill on the rest of the piece. The piece bears a resemblance to Monument 52 of San Lorenzo. Monument 74 of La Venta was found in a road cut excavation somewhere to the south of Monument 75 by local construction workers in 1969. No one seems to be sure of the exact location, and I have indicated it as an approximation in Figure 6.

Monument 75, La Venta (Pl. 3)

Monument 75 was found in 1969 where the road from the Zona Roja to the Stirling milpa crosses the new road cut trench (Figure 6). It represents the remains of a figure seated on a platform with the left leg crossed in front and the right leg extended back along the side of the leg. The arms are straight and extend forward to the front of the legs. The piece is 60 centimeters high, 34 centimeters wide and 64 centimeters thick. The right front hand is gone, but the left one is either a fist or a type of claw. No foot is shown on the left leg, but the right one has the remnants of a claw-like foot very much like that on Monument 11 from La Venta. A right calf is vaguely shown in low relief. The piece wore an abdomen wrap, which is now nearly obliterated. Also, it possessed half of a "corn stalk tail" like Monument 11, both shown in Figure 15. The head is unfortunately broken off with a badly gouged and ground fracture with a circumference of 74 centimeters. There are indications that the platform on which the

sculpture was carved may have been at one time decorated with low relief carving, but it is very difficult to be certain. It is unfortunate that this piece is so badly destroyed as it represents a very interesting example of Olmec sculpture.

DISCUSSION

Of the 75 numbered sculptural monuments from La Venta, 17 are in-the-round seated figures, or portions thereof, constituting the single largest category from that site. Unfortunately, even though the category itself contains numerous examples, a trait by trait comparison of the individual pieces produces few meaningful conclusions. There are several reasons for this, the first of these being that there is enough individual variation in the pieces to make a complete attribute by attribute comparison pointless. That is, unlike the colossal heads, which all had a number of specific attributes in common, and could be examined for variation within each single attribute, the seated figures show enough individual variation in conception and execution that very few single attributes appear in all the pieces. Thus, in terms of attribute comparisons, it could practically be said that each figure constitutes a separate sculptural category. Secondly, the seated figures have been subjected to considerably more damage through erosion and intentional mutilation than the colossal heads, with the result that comparison is often inhibited for even those attributes which are manifest in each figure. Nevertheless, from the trait comparison of La Venta seated figures, summarized in Table 6, a few general tendencies may be seen to emerge.

Perhaps the most noticeable feature of the La Venta seated figures as a category is the fact that ten of them have no heads. In at least eight of these cases, this destruction appears to have been deliberately and intentionally carried out (Mons. 38 and 48 are too obliterated to say). In six of these eight cases, the fracture was ground smooth or polished after the removal of the head. In all but two of these cases (Mons. 23 and 73), the neck was massive in proportion to body size. What this means is that an enormous amount of force was required to sever the head from the body and, moreover, that a certain technical expertise was necessary to shear the head off cleanly without shattering the entire body of the sculpture as well. Thus, it may be said that the technology of monument destruction approached the status of an art among the Olmecs. The energy and skill which was devoted to the mutilation of seated figures at La Venta indicates that this activity was an important one, and one may logically infer that it may have been attended to with considerable ceremony. It is of great interest that the seven pieces of seated statuary from La Venta which retain their heads to this day are the seven largest seated figures (Mons. 5, 8, 9, 10, 11, 70, and 72), and that in each case they are larger than any of the headless pieces would be even if they had their heads. This raises the question of whether there was a technical limit to the size of a figure which could be correctly and ceremonially beheaded, or whether cultural factors determined which (in this case, the larger) pieces were to remain intact. Unfortunately, data on the condition and location of the larger pieces at the time of recovery is inadequate to provide even a guess.

In contrast to the high percentage of La Venta seated figures with the heads removed, only two of the monuments seem to have had the arms deliberately destroyed (Mons. 23 and 31). In the case of Monument 23, this trait is coupled with a very delicate neck, carved with considerable attention devoted to the upper trunk detail. In both attributes, La Venta Monument 23 seems close to the seated figures from Laguna de Los Cerros, which show a tendency toward having had arms destroyed, and great attention centered on delicate neck sculpturing. In terms of stylistic seriation, Monument 23 is closer to the Laguna de Los Cerros pieces than to the other La Venta ones, and is most probably a product of the Laguna de Los Cerros sculptural school.

Four of the La Venta figures are depicted holding objects in their hands (Mons. 5, 11, 70, and 74, respectively holding a bowl, a box, a metate, and a sort of palette). All these objects can be described as utilitarian. There seem to be no particular other traits which correlate with the act of holding such objects, as various postures as well as facial attributes and clothing combinations may be found in these four figures.

With respect to facial attributes, double nasions seem to predominate, as do bow-shaped upper and lower lips. The jaguar-god mouth assembly is present in four pieces (Mons. 9, 10, 11, and 74), three of which exhibit bifurcate fangs (Mons. 9, 10, and 11). L-shaped eyes appear in three figures (Mons. 8, 9, and 10) and are apparently not always associated with the jaguar-god mouth assembly. Six basic postures are represented in the La Venta figures, none of which appear to be positively correlated with any other specific traits. The most common posture is a simple cross-legged one, found in five figures (Mons. 8, 9, 10, 23, and 73). All the figures which retain their heads wear headgear of some sort, and one of the beheaded pieces (Mon. 23) shows evidence of having worn a headdress. Five of the figures wear no other clothes (Mons. 5, 8, 70, 72, and 73); however, in no case are any genital organs depicted. The use of abdomen wraps, a common Olmec garment, and simple genital coverings are well represented in the La Venta seated figures. Two of the pieces wear collars (Mons. 10 and 23), as well as pectoral plaques and two additional pieces (Mons. 9 and 30) exhibit plaques without collars. In one case (Mon. 23) a figure with a collar also wears a short skirt. Capes are unusually rare in La Venta seated figures, appearing on only two pieces (Mons. 21 and 40). This is in contrast to seated figures from San Lorenzo and Laguna de Los Cerros, which show a much higher incidence of cape use.

Two other attributes appear to be particularly characteristic of La Venta seated figures. The first of these is the use of claws or claw-like elements at the end of appendages in place of hands or feet. Three of the La Venta figures (Mons. 9, 11, and 75) appear to carry this trait, which is found on none of the pieces from San Lorenzo or Laguna de Los Cerros. The only other figure on which it is found is the strange "Proboscis Statue" (below), which appears to have been carved purely in the La Venta style. The second attribute peculiar to La Venta is that a high proportion of the figures seem to have not been well modeled over their entire surfaces. Instead, emphasis on sculptural molding was centered on the heads, particularly the facial regions of lips, jowls, cheeks, and nose, while the body parts, such as trunk, legs, and arms were done more crudely, in a blocky fashion, with a noticeable lack of detail when compared to the face. While it may be that the category "Well-modeled" is, to a certain extent, subjective, a comparison of the La Venta seated figure corpus to those of other sites

will convince the reader that a certain amount of anatomical detail, insignificant as it may seem at first, is lacking in the La Venta bodies. That this was probably the result of a conscious decision on the part of La Venta's sculptors or rulers, and not simply a function of lack of skill, is evidenced by the detail and care shown in treatment of the faces and heads of the seated figures. As is noted above, this fascination with the heads is characteristic not only in their manufacture, but in their later destruction as well.

THE LA VENTA "SCHOOL"

Despite the fact, as noted above, that there is some difficulty with uniform comparability of traits, it seems possible to isolate and define, in general terms, a La Venta "school," or style, with respect to seated figures. Figures in the La Venta school may be characterized as exhibiting massive necks in proportion to body size. Larger pieces (over 80 centimeters in height) show undue attention to facial detail, while smaller ones tend to have met their end in the breaking off of the heads and grinding down of the fractures. Less attention is paid to the anatomy of sculptured body parts. Objects, when held in hands, tend to be of a utilitarian nature. No single posture or clothing combination is diagnostic, but capes are rare and, when present, are not well executed. There is a tendency for crudely done claws to appear instead of hands or feet.

Of the 17 seated figures from La Venta, two are too fragmentary to allow assignment to any sculptural school (Mons. 38 and 48), while two others (Mons. 23 and 73), on the basis of neck size, modeling, and overall appearance, are probably more closely related to the carving style centered at Laguna de Los Cerros. All the rest seem to be aptly characteristic of the La Venta style. Within this corpus, it is worth noting there are at least two pieces (Mons. 11 and 75) which are so unusual in conception and so alike in execution that in all probability they were carved by the same master. The hand of a single master has been previously suggested for colossal heads (Clewlow, Cowan, O'Connell, and Benemann 1967), pairs of stelae (Heizer 1967), and another pair of seated figures (Clewlow 1970), so it is not unreasonable again to infer that La Venta Monuments 11 and 75 were also carved by a single master or "micro-school." These two highly unusual pieces are all the more interesting in that they represent a good example of diminutism, a term defining the relationship between two pieces which are nearly identical in appearance, but with one being large and the other being small. Diminutism may well be a unique and diagnostic component of Olmec monumental sculpture in general, although more examples need to be found before this can be proved. (Another striking example may be seen in comparing the Las Choapas monument with Mon. 37, San Lorenzo; see Cats, below). Meanwhile, it seems logical to believe that the same artist was involved in both the large and small models of the same figure.

SEATED FIGURES FROM SAN LORENZO

Nine of the 65 numbered monuments from San Lorenzo fall into the seated figure category. Thus, in terms of quantity, it would seem that this category was less common at San Lorenzo than at La Venta.

Monument 10, San Lorenzo (Stirling 1955: Pl. 15b)

Monument 10, San Lorenzo, is a seated jaguar-god figure 116 centimeters high, 78 centimeters wide, with a thickness at its maximum point (back of the hip to the right knee) of 65 centimeters. The piece wears a headdress consisting of a simple band 12 centimeters high wrapped all the way around the head. A squarish projection rises 11 centimeters above this band with a 5 centimeter deep V-shaped cleft running from the front to back. The headband is seated straight on the head. No chin strap is present and it is difficult to see whether or not an ear or ear ornament was present on the piece, due to damage. The neck is massive in proportion to the body, with a circumference of 119 centimeters.

The piece exhibits the classic Olmec snarling jaguar face. It has a double nasion. The eyes are horizontal slits with the outside corners turned downwards, the commonly utilized Olmec were-jaguar eye type. Irises appear in both eyes, shown by incising and slight flattening. This is unusual for this type of eye. The nose is broad, with two drilled pits serving as nostrils. The mouth consists, typically, of an upper raised muzzle, an upper gum, and two bifurcate fangs projecting downward from the upper gum. The lower lip is damaged. The hands are large, with fingers shown by ground incisions. Held against the chest in the hands are two crescent-shaped pieces. The leg position is difficult to ascertain, in that both legs are broken, but it was probably cross-legged. The piece wears the typical Olmec abdomen wrap, shown as a raised piece of cloth entirely surrounding the thorax. A dangling breech clout also hangs down to cover the genital area. This genital covering is shown by incising. The back of the piece is quite flat, with the buttocks shown, however, in very realistic modeling. The face is well sculptured and both arms are shown with flexed biceps. The rear right portion of the headdress, as well as the lower lip, have been fractured off with clean breaks. The left leg has been broken off at the hip, the right one at the knee, with both leg fractures worn.

The maximum relief of this piece is 25 centimeters from the right knee to the crotch.

The piece was first described by Stirling (1955: 14) and is made from Cerro Cintepec basalt (Williams and Heizer 1965: 17).

Monument 11, San Lorenzo (Stirling 1955: Pl. 16a)

Monument 11 of San Lorenzo is a cross-legged, seated human figure holding a bar. The piece is 68 centimeters high, 74 centimeters wide from knee to knee and 70 centimeters thick from knee to back. Stirling (1965: 14) feels that the piece may be a woman. However, this interpreter sees no reason to feel so. The left hand of the piece is shown realistically with tapered fingers, but without nails. The arms are massive, but well modeled to show musculature. The leg position is cross-legged. The right leg

tapers to an amorphous stump below the left thigh. The feet are not shown. The costume consists of a band of cloth around the entire abdomen with a breech clout hanging in front and back to cover the genitals. A portion of a cape covers the right arm and the torso from the shoulder. No decorative elements are visible. The back of the piece is awkwardly proportioned, perhaps due to damage and the presence of the cape. The connecting point of the breech clout, however, is apparent.

In terms of damage, the head has been fractured off sharply, as has the underside of the right thigh. The circumference of the neck fracture is massive, measuring 123 centimeters. There is considerable scaling on the back and right hand of the piece.

One would say that this particular sculpture is well modeled with some grinding visible at the junctures where the bar and the lap meet. It is interesting to note that while the chest, hands, and lap are masterfully executed, the thighs, buttocks, and lower back are badly proportioned, being too thick and massive, and are rather awkward.

Monument 12, San Lorenzo (Stirling 1955: Pl. 16b)

Monument 12 of San Lorenzo is a human figure, seated cross-legged holding a baby on its lap (Stirling 1955: 15). The piece is 58 centimeters high, 70 centimeters wide, and 50 centimeters thick. The seated figure is large and rather fat. Its legs are crossed in front of the body, with the feet shown as well as the toes by incising. Draped across the legs, apparently hanging from the area of the loins, is a loin cloth divided into five parallel portions by incised lines.

The seated figure also wears a cape which encloses the back in a sort of half shell, which is decorated with incised horizontal lines, as shown in Figure 18. The cape is raised in relief 5 centimeters from the right leg.

The baby is well modeled, with fleshy chest and stomach. It is apparently nude, although much detail has probably been worn away. Unfortunately, no facial features are present. One of the most interesting features of this piece is the position of the baby. Unlike the usual stiff infants found in the laps of Olmec seated figures, this one is comfortably and casually relaxed. Its right arm is laid on its stomach, while its left arm is thrown casually back over the left shoulder beside the head. The legs are draped easily over the left arm of the seated central figure, the left one being flexed a bit more and raised slightly higher than the right. These slight differences in posturing give the observer of the piece an impression of casual dynamism.

The whole piece is badly weathered and has suffered some scaling. The head of the central figure is broken off and the fracture is worn. The fracture has a circumference of 101 centimeters.

The casual approach to the subject matter and its positioning and the use of the cape as a sort of half shell around the back of the central figure make me believe that this monument was executed by the same artist that sculptured Monument 47 from San Lorenzo, the seated figure with the snake held in its hands.

Monument 24, San Lorenzo

Monument 24 of San Lorenzo consists of nothing more than the lower legs of a seated person, with hands grasping some sort of rectilinear bar. Its height is 25 centimeters, its width 77 centimeters and its thickness 34 centimeters. The piece originally represented a cross-legged seated human figure wearing a loin cover. The bar is poorly shown. Hands are rudely done, with fingers depicted by deep incisions. Toes and the bottom of the right foot, positioned below the left knee, are shown in slight incised relief. The piece is broken with a sharp fracture. It appears to have been very well made and would have had a maximum relief of more than 34 centimeters.

Monument 26, San Lorenzo

Monument 26 of San Lorenzo is a broken human torso holding a cestus-like object against its chest. The piece is 69 centimeters high, 65 centimeters wide and 50 centimeters thick. The figure is squatting in a hunkering position, so that, in actuality, the object held against the chest is also held against the front of the legs. The piece is badly damaged with the fractures worn and ground down. The act of holding an object against the chest recalls Monument 19 from San Lorenzo. The shoulders and arms of San Lorenzo 26 are fairly well modeled but the rest of the piece is blocky and crude. This is particularly true of the front portion, which appears not to have been completed. The legs are reminiscent of a jaguar, and are small when compared to the arms. No clothing is apparent on the piece. It is impossible to tell what the hands held as this particular portion of the piece is crude and badly damaged.

The head has been fractured off, the break having a circumference of 110 centimeters. A peculiar angular channel has been cut between the legs down the front of the piece. The piece appears to have been unfinished and, if so, this angular channel may afford a clue as to how such sculptures were made. The first step would have been to block out the piece of stone in the crude form to be assumed by the completed sculpture. Secondly, the basic sculptural shape would have been blocked out further with the use of angular channels and cuts such as appear on the front of San Lorenzo 26. As a third step, these cuts would have then been shaped and refined until they assumed the proportions of the finished piece. Perhaps channels such as these explain the large blocked holes in altars; that is, they were the beginnings of other niches that were never completed. The piece has not been fully described in a published report, but is mentioned briefly by Coe (1968a: 70).

Monument 34, San Lorenzo

Monument 34 of San Lorenzo is a kneeling headless human figure which is unique in that it possesses sockets at the shoulders which once housed movable arms (cf. Coe 1967a, 1968a: 49). The piece is 76 centimeters high, 55 centimeters wide and 46 centimeters thick. It is exceedingly well executed and well preserved, except for the missing head and arms. The right leg is kneeling, the foot a bit awkwardly placed and shown with toes incised. It is well modeled, however. The left leg is in a crouching position, with ankle bones indicated by modeling. The left leg is adorned with a bracelet around the upper portion of the calf, shown in Figure 19. The piece wears an abdomen wrap of about 9 centimeters high just under the arms. From it hangs a long suspended loin cloth which extends beneath the legs and joins the abdomen wrap again in the back of the figure. In addition, a tight fitting, kilt-like skirt seems to cover the buttocks in back. A collar apparently hung around the neck of the figure, and a round pectoral plate with incised designs hung from the collar. The pectoral is shown in Figure 20. The head has been fractured off with a clean break, the fracture of which is 105 centimeters in circumference. The sockets for the arms are 10 centimeters deep and 9 centimeters wide. No signs of wear or striations appear inside them. They are no smoother than the outside stone, so perhaps they were never heavily used as sockets. Viewed straight on, the sockets are positioned so that if the arms dropped straight from them, they would hit the legs. Thus, the socketed armpiece probably had to extend out considerably from the body of the sculpture. The whole piece is exceedingly well modeled and stands as a masterpiece of Olmec sculpture.

Monument 47, San Lorenzo (Coe 1968a: Fig. 10)

Monument 47 of San Lorenzo is a seated, headless human figure, with the head of snake, possibly a fer-de-lance, held in its hands (Coe 1968a). It is 70 centimeters high, 78 centimeters wide and 76 centimeters thick. The left leg is broken off. The right leg is crossed in front. The right hand is positioned over, and the left hand under, a large snake head, which is held between the two hands. It is difficult to see what is left of the snake, but it appears to bifurcate and enwrap the body. That is, in the back of the snake head, a raised relief belt goes off and around either side of the human torso. A small loin cloth is apparent on the left side in the lap over the area covering the genitals. Not much detail is present on the head of the snake, but the eyes are shown in low relief. The fingers and hands of this piece are awkward and disproportionate. A plain bracelet appears on each wrist. The arms and chest, however, are fairly well modeled. The figure wears a long wide cape which flows down the back. The cape is tied on with a cord around the shoulders and the top of the chest. Figure 21 shows the knot used to tie the cape in front. The head is fractured off with a clean fracture. The circumference of the break is about 130 centimeters. The cape in back is plain except for slight traces of a horseshoe-shaped incising

at the bottom (see Figure 22). In terms of sculptural treatment, the cape actually acts as a shell around the back of the body, thereby obviating the necessity to completely sculpt the human torso. In this sense, it recalls Monument 11 from Laguna de Los Cerros as well as Monument 12 of San Lorenzo.

Monument 52, San Lorenzo (Beverido 1970a: Fotos 82, 84, 85)

Monument 52 of San Lorenzo is "one of the most beautiful and complete Olmec statues ever found at San Lorenzo: a standing were-jaguar with snarling mouth and cleft head, the great Olmec rain-god himself" (Coe 1968b: 89). The piece is shown in a squatting position, legs tucked up and the arms resting on the knees. The head is cleft and the piece wears what appears to be a sort of helmet. On the chest is worn a plaque incised with an X. The eyes are human with no corner overlap, and with irises present. The upper lip is snout-like, and the upper gum and typical Olmec infant mouth are clearly present. No fangs are apparent. The piece has a channel down the back shaped very much like a drainstone. The piece has not been published in full and no other details are present. When I visited San Lorenzo, it could neither be photographed nor measured due to peculiar local circumstances. Aside from its artistic importance, the sculpture is of interest for having been located by magnetometer (Varion Associates Magazine 1968: 11; Beverido 1970a: 157).

Monument 54, San Lorenzo

Monument 54 of San Lorenzo is a badly worn and broken torso of a human being. No arms, legs or head are apparent on the piece. It is so badly worn and mutilated that its value for comparative purposes is practically nil (Beverido 1970a: 176-199).

DISCUSSION

Of the 65 numbered stone monuments thus far recovered from San Lorenzo, nine are seated figures or portions thereof. Thus, it would appear that this particular form of sculptural expression was much less common and less important at San Lorenzo than at La Venta. Table 7 lists the attributes of these figures. Of the nine San Lorenzo figures, five (Mons. 11, 12, 26, 34, and 47) appear to have had the heads deliberately broken off, while two (Mons. 10 and 52) retain their heads and two (Mons. 24 and 54) are too fragmentary to be certain. Of the five which were beheaded, only two (Mons. 12 and 26) have had the fracture ground down, marking a sharp departure from La Venta, where smoothing of the fracture was a common practice. Worthy of note is the fact that both of the San Lorenzo figures which retain their heads possess a version of the jaguar-god mouth assembly, and only one (Mon. 10) has the L-shaped or jaguar-god eye. Like the La Venta figures, arm breakage in the San Lorenzo pieces was not commonly practiced, as all of the pieces which are complete enough to tell (Mons. 24 and 25 are fragments) retain their arms with the exception of Monument 34, which probably possessed socketed, removable arms.

Five of the San Lorenzo seated figures (Mons. 10, 11, 12, 26, and 47) have necks of massive circumference in proportion to body size, while only one (Mon. 34) has a delicate neck. (Mons. 24 and 54 are damaged and there are no measurements available for Mon. 52.) In this respect, the San Lorenzo pieces were well-modeled all over, with considerable care paid to details of body anatomy. Only Monument 26, which may not have been completed, seems to have been crudely executed (Mon. 54 is too badly mutilated for comparison). Thus, the peculiar attention focused upon heads (both their making and breaking) of seated figures at La Venta seems to be somewhat diminished at San Lorenzo. This is perhaps reflected in the fact that six of the San Lorenzo figures hold objects in their hands (Mons. 10, 11, 12, 24, 26, and 47) and, moreover, that these objects appear to be highly ceremonial in nature (they include peculiar crescent-shaped objects, a bar, a baby, a cestus and a large snake), contrasting with the La Venta figures, which hold more utilitarian objects. It is of interest that Proskouriakoff (1968: 121) has characterized San Lorenzo sculpture as having "an essentially ritual motive," and feels that it "unmistakably symbolic"

Since only two San Lorenzo figures have heads, it is impossible to comment on facial attributes of the group as a whole. Three postures are represented, with cross-legged seating being the most common, found in five monuments (Mons. 10, 11, 12, 24, and 47), and squatting next, found in two pieces (Mons. 26 and 52). Monument 34 has a unique, half-kneeling posture. Clothing combinations tend to differ from the La Venta group, with capes being more common, appearing on three figures (Mons. 11, 12, and 47, all of which, in contrast to La Venta figures, have very prominent capes), and total nudity absent. Collars (Mon. 34), plaques (Mons. 34 and 52), skirts (Mons. 12 and 34), abdomen wraps (Mons. 10, 11, and 34), and simple genital coverings (Mons. 10, 11, 12, 24, 34, and 47) are present in various combinations.

THE SAN LORENZO "SCHOOL"

Although the sample size is small, and although trait comparability for all the pieces is far from uniform, it is nonetheless possible to tentatively identify a San Lorenzo "school" or style of carved seated figures. The diagnostic qualities of this style, while general in nature, are still distinct enough within themselves, and more so in comparison with the diagnostic features of the La Venta figures, to suggest the type of cohesion one would expect in a localized sculptural workshop dominated by a smaller number of prominent artists. The San Lorenzo seated figures of carved stone may be characterized as tending to have heads fractured off, but with no undue attention centered on treatment of the fracture after breakage. Necks tend to be massive in circumference in proportion to body size, and considerable detail is revealed in sculpturing body anatomy, as well as facial features. A high percentage of the figures are portrayed as holding unusual objects, presumably of a ritual or ceremonial nature, in their hands. Nudity is absent and large, prominent capes are common items of clothing.

Of the nine figures known from San Lorenzo, two (Mons. 24 and 54) are too fragmentary to allow definite assignment to any particular style, while six others appear to be classic representatives of the San Lorenzo school (Mons. 10, 11, 12, 24, 47, and 52). Monument 34 contains many San Lorenzo style features, as well

as many other characteristics and, at this time, must be considered too unique to fit any single "school" definition.

SEATED FIGURES FROM LAGUNA DE LOS CERROS

Five seated figures are thus far known from Laguna de Los Cerros, but it is likely that a number of others will eventually be recovered there (Medellin 1960). Even with so small a sample, a number of stylistic observations may be made on the pieces.

Monument 3, Laguna de Los Cerros (Medellin 1960: Pls. 16, 17)

This is the piece which is published by Medellin (1960) as Monument 3 from Laguna de Los Cerros. It is 60 centimeters high, 43 centimeters wide and 29 centimeters thick. It represents a seated human figure, with the head, the legs, and the arms fractured off with clean breaks. The piece exhibits good modeling of the back, the chest, and the rather fat belly. It wears an abdomen wrap which is divided in back into five parallel sections. This division is not apparent in front, as it fades out at the sides, partially due to erosion. A small indistinct cod piece covers the genitals in front. In the back, a triangular breechclout hangs from the lower rung of the abdomen wrap and disappears into the crack between the two buttocks. A triangular incision also appears between the two shoulder blades in back. Whether it depicts a small cape or is part of the back modeling is difficult to say. It is probably the latter, however, as no corresponding incision is found in front. The neck fracture has a circumference of 54 centimeters, and shows that the neck was delicate in modeling and very realistically proportioned.

Monument 3a, Laguna de Los Cerros (Plate 4)

Monument 3a of Laguna de Los Cerros is a human figure, which was probably at one time seated. The piece is labeled Monument 3 in the museum at Jalapa, although it is a different sculpture from the one published by Medellin (1960) as Monument 3. Until the piece is published, I shall designate it as Monument 3a, to distinguish it from Monument 3. Monument 3a represents a man dressed in a short cape. The head has been broken off with a sharp fracture. The legs also have been broken away below the waist. The piece is 59 centimeters high, 46 centimeters wide and 26 centimeters thick.

The figure wears a cape which goes back over his shoulders and hangs down 27 centimeters on his back. The cape is apparently held on with a drawstring, shown in raised relief across the clavicular region and front part of the chest. Hanging over this drawstring are the tassels of a cord which apparently tied around the neck for decoration. These tassels recall the back of the NS 1 colossal head. Around the lower part of the abdomen, a cloth, shown as 10 centimeters high, is wrapped. It

is shown by incision and slightly raised relief. A breechclout probably hung from it in front to cover the genital area.

In the back of the piece, the cape constricts towards the lower portion to a width of 19 centimeters and continues toward the bottom of the piece. It is shown as being laid over the abdomen wrap, which is set around the somewhat paunchy figure at a slightly oblique angle. Over the cape is a double cord ending in a tassel which hangs down the back 36 centimeters from what was probably an elaborate, apparently tied, piece that was certainly part of the headdress. This may be seen in Figure 23.

This piece is exceptionally well modeled in the clavicle, chest and neck area. The neck is delicate, with a circumference of 63 centimeters. The delicacy of the neck allows for the fineness of the clavicle modeling noted above. The figure represented is a fattish, slightly paunchy character, whose original posture is impossible to ascertain.

Monument 11, Laguna de Los Cerros (Medellin 1960: Pl. 23)

Monument 11 of Laguna de Los Cerros (cf. Medellin 1960) is a seated human figure 70 centimeters high, 52 centimeters wide and 59 centimeters thick at its thickest point, which is the left leg to the back of the piece. The head has been fractured off and the break ground down as with Monument 30 from La Venta and a number of other seated figures. The circumference of the neck break is 65 centimeters. The chest is well modeled, but the arms are shown as rather awkward. The right arm extends straight down from the shoulder, with the hand broken off. The left extends across the stomach to the right knee. The left hand is badly modeled, with only the thumb being crudely outlined by an incision. Additionally, the left arm is 66 centimeters long from the top to the wrist, while the right arm is only 58 centimeters long from the top to the wrist, giving an additional appearance of awkwardness.

The leg position is difficult to ascertain. The right leg probably crossed in front of the piece. The left one may have projected backwards as in "The Wrestler."

The figure wears an abdomen wrap 19 centimeters high, shown by incision around the lower abdominal area. A narrow breechclout hangs from it over the genitalia. No other clothing is evident. No decorative elements are noticeable.

The back of the piece is somewhat damaged on the left, but was apparently flat with a raised strip down the back just to the left of center. The back was a flattish area, now badly fractured, and may have been an incomplete or poorly made cape.

It is my opinion that this piece was either not completely finished or it was not meant to be completely in the round, because of:

- (a) Treatment of the back
- (b) The pediment which exists between the right arm and the body, and
- (c) The platform of 6 centimeters' thickness on which the entire figure rests.

Monument 8, Llano de Jicaro, Laguna de Los Cerros (Medellin 1960: Pl. 22)

This is a large, peculiar piece, probably representing a human figure, perhaps unfinished, represented in a seated position. Its total height is 197 centimeters, its width 135 centimeters, and its thickness 91 centimeters.

Eyes are present, depicted as blank rectangles in raised relief. Arms droop down and rest on the lap or the base. Hands are not shown in detail, but appear as somewhat amorphous, drooping stubs. Ears are present, shown in raised relief. The back shows some damage in the form of what appears to be unintentional scaling.

This piece is difficult to assess. Its rectilinear, blocky proportions, the great size of the head in comparison to the rest of the body, and the total lack of any fine modeling argue against its being Olmec. On the other hand, its location, its general shape, the presence of rectangular panels for eyes (much like the curly-haired heads from Laguna de Los Cerros) all could be interpreted as making the piece a rough-out or not yet finished piece, eventually to have the head better shaped, the base turned into crossed legs, and the hands made more distinct (cf. Medellin 1960, 1963a). Perhaps Llano de Jicaro was the sculptural workshop for Laguna de Los Cerros. It will be interesting to see what we learn when additional data on this important site is published. If not an Olmec rough-out, the piece must belong to a much later tradition of Gulf Coast stone carving.

Stone Box with Figure Seated Atop It from Laguna de Los Cerros (Plate 5)

This monument is a square stone, carved in a box-like shape, with a portion of a human figure remaining atop it. Very little remains of the human figure. The height of the broken figure above the top surface of the box is 22 centimeters. The length of the leg down the left side of the box is 29 centimeters. Only on the left side of the figure does the leg hang down on the side of the box. This is the only side of the box, also, which is sculptured at all. Figure 24 shows details of this side of the piece. It is difficult to reconstruct the posture of the human figure, but it is probable that the arms reached forward to the slab in front of it, and the right leg was probably crossed beneath the arms, the

toes of the foot projecting between the left arm and the left thigh. Figure 25 shows a drawing of the seated figure. The human figure appears to have been rather awkwardly proportioned.

It is conceivable that the piece was unfinished or has been badly damaged. Perhaps the box was at one time a throne. The crossed motifs on the left side of it are certainly within the Olmec canon.

DISCUSSION

There are five seated figures from Laguna de Los Cerros for which information is available, as described above. Of these, at least one is so unusual (Mon. 8, Llano de Jicaro) that it must be considered as either incomplete or non-Olmec in derivation. In either case, it is not useful for comparison with the other pieces. A second figure from Laguna de Los Cerros, the badly destroyed figure seated atop the box, is not useful for comparison because little more than one leg remains. It should be stressed that this figure appears to be an Olmec carving and is of interest because of its unique conception, and the obvious insight it provides into the highly experimental nature of Olmec art in general and the art of Laguna de Los Cerros in particular. However, it allows little comparison with the other seated figures from the site. Thus, our discussion must center on the remaining three figures (Mons. 3, 3a, and 11), the attributes of which are presented in summary form in Table 8.

All three of these pieces have had the heads removed, and in two cases (Mons. 3 and 3a) the fractures were ground. Legs were also broken on all three pieces, so it is impossible to ascertain posture for any but Monument 11, which appears to have had the right leg crossed in front and the left leg tucked back along the side. All three figures wore abdomen wraps and simple genital coverings, while two of them (Mons. 3a and 11) almost certainly wore capes and Monument 3 probably did as well. The most distinctive single trait about the pieces is that all three exhibit quite delicate necks, realistically fashioned in proportion to body size. All three are also exceedingly well modeled all over, with particular attention paid to the musculature of back, chest and abdomen.

THE LAGUNA DE LOS CERROS "SCHOOL"

Even with such a small sample it is possible to give a provisional working definition of a Laguna de Los Cerros style with respect to seated figures. They are all exceedingly well modeled all over and have the most delicately and realistically proportioned necks of all the Olmec seated figures. Heads are commonly broken off, and clothing tends to consist of a genital cover, abdomen wrap and a cape. The general sculptural approach seems to be experimental, with a great variety of conceptions available, even within so small a corpus. One fact that strengthens the contention that Laguna de Los Cerros produced a sculptural style of its own is the existence of other categories of sculpture from the site, in addition to seated figures, which share the characteristics of good modeling and experimentalism. This was shown for colossal heads and shall be discussed again under standing figures and altars.

MISCELLANEOUS SEATED FIGURES

There are six known monumental seated figures in the Olmec style which did not come from large, well known sites. They are considered under a "miscellaneous" category, although as stated below they are stylistically akin to figures from the larger sites.

Proboscis Statue in the National Museum of Mexico (Cervantes 1968: Figs. 13, 14)

This strange piece, often referred to as a proboscis statue, is a figure, probably human, represented in a kneeling position. The arms are placed upon the knees. All features of the sculpture are very indistinct due to a great deal of erosion. However, it is possible to note that feet are portrayed as claw-like, and in this respect are very similar to the ones of La Venta Monument 11 in the Museum of Tabasco. The proboscis statue, like Monument 11 from La Venta, had the head tilted back so that the face is looking straight at the sky.

This head appears to have been cleft down the center with the typical Olmec V-shaped cleft. Only the scantiest details of this have remained and the face is badly weathered. It has at least four sharpening grooves or defacements of the La Venta variety upon it. No details of hands, arms, clothing or decoration remain. Nor is there evidence of a tail. Lumps are present where ears must have been.

One of the most peculiar features of this piece is the projection which extends from the bottom of the chin to the belly. It is a 9 centimeter wide raised piece, recalling the loose skin in the neck region of a lizard or a turkey. In the literature, this projection has been called a proboscis. Above it and adding to the problems of interpretation is a mouth-like arrangement, so badly worn as to prevent determining its original contours. It appears, however, that two large fangs, the mouth corners and part of the gum remain indistinctly on this second face. (The first face points at the sky. This second one faces the viewer with eyes appearing to look out horizontally.) From this, the proboscis hangs to the once very well modeled chest and fat belly, which are now badly eroded.

At least two interpretations appear as likely for this piece. The first is that the sculpture exhibits dualism, with two actual face panels shown. A second explanation is that one face (the top) is earlier, as it harmonizes with the rest of the body, and that the other face is later--perhaps carved after the first was destroyed or eroded. It is difficult to say now which of these interpretations is correct. However, it is certain that the piece is very interesting and important.

Cervantes (1968), in a detailed article, has suggested that the piece may represent a masked individual. The use of masks is common in Olmec art

and Cervantes cites modern ethnographic data to back his suggestion that the two faces may actually be a result of the use of masks.

The piece was discovered at Arroyo Sonso, in the heartland of the Olmec country. It was first reported by Nomland (1932), who suggested that the piece was an elephant-like statue. Some of the confusion surrounding later interpretations of the piece may stem from this early evaluation.

Figure 26 shows Cervantes' sketch which reveals the similarities between this proboscis statue and Monument 11 of La Venta.

The Olmec Wrestler (El Luchador Olmeca)

The Olmec Wrestler is a magnificent seated human figure, much discussed and often photographed in both popular and scientific journals. An account of its discovery has been published by Corona (1962) and a great deal of discussion has appeared about the piece. Williams and Heizer (1965) have discussed the distinctive stone from which the monument was made.

The piece is 65 centimeters high, 54 centimeters wide and 43 centimeters thick. The head is depicted with no headdress of any sort. Faint brow ridges are shown above the eyes. A nasion is present, depicted as a swelling just above the deepest indentation of the nose bridge, but is of unique shape. The nose, although damaged, appears as an Olmec nose. Eyes are represented as sharply cut-out elliptical pits, quite unlike any on other Olmec sculptures. The mouth is closed, with the upper lip bow-shaped and the lower one straight. No depressions occur in the mouth corners. There is no joining or overlap of the two lips.

Above the upper lip is a faint moustache which curves down past the mouth to join a goatee at the base of the chin. Cheeks, chin and the fleshy part of the lips are very well modeled in typical Olmec style. The neck is well proportioned, being 38 1/2 centimeters in circumference. Arms are very well modeled also, with musculature of the biceps region as well as the wristbones shown in detail. The former has some precedents in Olmec art, the latter none.

The chest and back are well modeled, with the back depicted showing torsion and a great deal of musculature. Hips are shown clearly and realistically. Legs are very well proportioned and modeled, with musculature carefully sculptured. Ankle bones are present. Feet and hands are done with grace, care and accuracy. Ears are present, with conical drilled pits at the bottom of the earlobes. Perhaps these pits once contained ear-plugs or other ornaments.

The left leg is positioned as tucked back to the side of the piece, while the right one is crossed in front of the body.

The figure wears a belt of about 2 1/2 centimeters in height around the waist. In back, a triangular breechclout 16 by 4 centimeters hangs from the top of it over the slit between the buttocks. It is shown by incision. In front, a more or less rectangular cod piece covers the genital area.

The Wrestler is so distinctive and masterfully executed that it deserves a bit of comment. Olmec artists, for the most part, appear to have been preoccupied in their carving of large stones with the heads and faces of their work. These areas, especially lips, cheeks, and chins, are always superbly modeled, while other parts of the seated human figure, particularly appendages, are often crude and disproportionate. That the artists had the talent to make the Wrestler, if they so desired, is evident. All that would need to be done would be for the artist to apply the skill and care normally given the facial areas to the rest of the body. Perhaps this is what occurred with the Wrestler. Certain other Olmec sculptures are very well treated in other portions than the heads, but none show the overall mastery that the Wrestler evidences. Why this particular piece would be so well treated remains a mystery. Another remarkable fact about this piece is its completeness and absence of damage.

Seated Figure from Cruz de Milagro, Sayula, Veracruz (Medellin 1963b; INAH Boletín 5: Foto 11)

The Cruz de Milagro monument is a spectacularly beautiful example of a typical Olmec figure. The figure is seated cross-legged with no feet depicted. It is 127 centimeters high, 76 centimeters wide and 79 centimeters thick. The hands are fairly well modeled fists, with fingers incised, resting on the ground in front of the legs. The arms, however, are somewhat squarish, in fact basically columnar, with rounded corners.

The headdress is in the form of a helmet consisting of a double band with a turban above it. A raised band passes across the top of the head, and a rectangular projection rises in front over the headband. The ears are covered with straps from the helmet and appear to possess the tubular lobe plugs. These are reminiscent of those on the Nestepe and Tres Zapotes colossal heads. The nasion is sub-rhomboidal. The eyes are shown as fleshy and partially closed, with deep slits portraying the eye itself. Small drilled holes portray the irises. No overlapping of the corners exists, but tear ducts are present in the inner eye corners. The mouth is open with three teeth showing. The upper lip is bow-shaped, the lower one straight. Exceptionally fine modeling of fleshy cheeks, the chin and fleshy areas of the lips appear on this piece. The neck circumference is massive, being 102 centimeters.

The chest and back of the Cruz de Milagro monument are well modeled, but without decoration. The only clothing is a short skirt, undecorated except for an incised fold starting at the intersection of the legs and belly and running backwards and down to the base of the rump. This monument is certainly one of the finest examples of Olmec monument carving. It has been briefly published by Medellín (1963b: 11) and a photograph published in No. 5 of the INAH Boletín (1961: Pl. 11)

Las Limas, Veracruz Monument (Medellin 1965: Fotos 5 - 10)

The Las Limas monument is an absolutely beautiful green stone carving of a seated human figure holding a were-jaguar infant across its lap. The piece is 54 centimeters high, 38 centimeters wide and 22 centimeters thick, and was found near Las Limas, Veracruz (Medellin 1965; Beltran 1965).

The Seated Figure. The seated figure has tattooing depicted by incisions on his arms, face and knees. This tattooing is roughly bilaterally symmetrical on the face (cf. Medellín 1965: Foto 10), but different on the arms and knees. Professor Michael Coe has recently offered an interesting interpretation of these tattoos (Coe 1968b: 111-114). The headdress is a helmet with short straps which reach down to the midpoint of the ear. They have no decoration, nor does the headdress itself. The feet and hands are well modeled, with fingernails shown by incisions. The back is flattish, with a narrow belt around the waist from which hangs a long, thin cod piece. The head shows the characteristic elongate deformation. The ears are depicted realistically without decoration except for some slight, but very faint incising. Eyes are shown as incised slits, with dark inset stones. The nasion is sub-rhomboidal, with the nose aquiline and realistic. Drilled circular pits have been employed for the making of the nostrils. The mouth is open, showing six teeth and a tongue. Both lips are bow-shaped. The cheeks, lips and eye sockets are very well modeled. Drilled pits are visible in the mouth corners.

Infant Held in Lap. The infant held in the lap has the typical cleft head of the were-jaguar baby. It wears a headband and some sort of strap from the head down the side of the piece. The eyes are chipped-out holes, and have not been smoothed or rounded. The nasion is sub-rhomboidal. The nose is wide with drilled pits for nostrils. The mouth is open with no teeth visible. Only the infantile, toothless, upper gum is present. The integumentary upper lip begins immediately below the nose, a characteristically Olmec artistic phenomenon. The upper and lower lips are both bow-shaped, with no pits in the mouth corners. Around the neck is suspended a plaque with the St. Andrew's cross design element. A similar, though slightly larger element forms the stomach cover from which hangs a small triangular cod piece. The feet of the infant are crudely

done by incision with no nails shown. The right hand is well done, the left hand poorly done, with no fingernails shown on either hand.

This piece is truly an Olmec masterpiece and was removed, perhaps forever, from public scrutiny when it was stolen from the museum at Xalapa on October 12, 1970.

The Monument of San Martin (Idolo de San Martin Pajapan) (Medellin 1968: Fotos 6 - 9)

The Monument of San Martin is a large and lovely piece which has been described, at least partially, in a number of other places (Blom and La Farge 1926: Fig. 433; Covarrubias 1946: 80; Medellin 1960; Clewlow 1970). The description here, then, will concern itself primarily with those features which are of use in comparisons with other Olmec monuments.

The Monument of San Martin is 139 centimeters high in total, 93 centimeters wide and 92 centimeters thick. The length of the bar, which is grasped in the hands of the figure, is 93 centimeters.

Headdress. The headdress is placed on the head straight. In back, a decorated stringer hangs down from the lower headdress element, past the neck, all the way to the abdomen wrap. This is seen in Figure 27. The face on the front of the headdress has a sub-rhomboidal nasion, a broad nose with nostrils ground out, and a very apparent septum. The eyes are slanted at a 35° angle. The eyes are shown by incision, with no iris or corner overlap, but with tear ducts present. The mouth is open, with gums, fangs and tongue showing. The fangs are eroded, but appear to have been bifurcate. Both lips are bow-shaped. The chin is very well modeled, as are the puffy cheeks. Both sides of the headdress are similar, with seven back-swept elements in the central part, possibly representing feathers, terminating in a V-shaped cleft. On the lower band, four identical decorative elements appear on either side. The entire headdress appears to have been affixed to the head as a large hat-like helmet.

Main Face. The main face of the figure shows damaged lips and damaged nose, both damaged by sharp fractures. The eyes have no tear duct nor is there an overlap in either eye corner. The iris is shown by flattening. The face exhibits fleshy cheeks and a well modeled chin. The upper lip is bow-shaped, the lower one is probably straight. The mouth is slightly open with no teeth showing. Tiny ground pits are visible in the mouth corners. The ears are covered with large ear ornaments which are eroded, but which have a forward facing design which is much like that on top of La Avispa,

Monument 43 from San Lorenzo. This consists of a circle within an incised ring; the circle has four small ground pits within it, which may be a stylized or badly eroded representation of the were-jaguar face.

A bib hangs down from the lower part of the face beneath the neck, between the arms. It is eroded but it may have also had a small head on it.

The surface of the figure itself has been badly abraded. Both arms appear to have heavy bracelets, as well as tattooing in horizontal stripes above the shoulders. It is impossible to discern exactly what designs are represented in the tattoos. The left hand is placed over and the right hand under the bar. The bar has a cross-shaped element on its right end. The legs show indistinct tattooing. On the right leg, several types of tattooing are apparent, while on the left this is much less distinct. The back of the piece shows an abdomen wrap, more complex than the usual Olmec ones. It has horizontal incisions, and a large hanging cod piece with a probable jaguar head upon it. The piece hangs down below the rump. The left foot of the piece is tucked under the buttock, while the right foot is positioned against the bar.

The Chalcatzingo Figure (Cook de Leonard 1967: Fig. 11)

The Chalcatzingo figure is a carved human figure, somewhat fattish, shown in a seated or possibly kneeling position. It is 52 centimeters high, 52 centimeters wide and 64 centimeters thick. The head has been fractured off with a sharp break, leaving a fracture with a circumference of 105 centimeters.

The piece apparently wore a collar, shown by one incised line, from which hangs a pectoral plaque with a cross-shaped element on it. A tripartite abdomen wrap is present below this in the front of the piece. In the center of this wrap is another design element (Figure 28). A three-part loin strip covers the center of what would be the leg area. Since the legs are not actually depicted, it is impossible to tell if the figure was kneeling or seated cross-legged.

In the back, a simple skirt covers the area of the buttocks. Lower arms and hands have been fractured off. The figure is heavy, squatty and not particularly well made. Arms are angularly portrayed on the side of the piece. A piece hangs on the back of the shoulders which is probably a drape remaining from what was once a headgear on the piece. The piece has been described elsewhere and is felt by some to be a unique expression of Olmec monument art (cf. Guzman 1934; Cook de Leonard 1967: Fig. 11). However, I feel that while the piece is definitely Olmec, it is peripheral artistically and probably geographically to the main centers of Olmec art. It is now in the Museo Nacional in Mexico City.

DISCUSSION

Since all the miscellaneous seated figures were found at separate sites, no attempt will be made to discuss them as a stylistic unity. As Table 9 demonstrates, they contain a wide variety of facial, postural and decorative attributes. It is certainly worth calling attention, however, to the fact that they seem to share the one attribute of being in an exceptionally good state of preservation. None have arms or legs missing and, with the exception of the Chalcatzingo piece, which lacks a head, they are all essentially complete. This, of course, has nothing to do with the way the pieces were carved, but does reflect on how they were treated after their completion. For some as-yet-unknown reason, the inhabitants of the large sites felt a compulsion to ceremonially mutilate and bury many of their finest sculptures. It would appear that at the smaller and less important sites, fine sculptures were granted much more care and protection.

Some of the figures in the miscellaneous category may well be fitted into one of the three "schools" or styles defined above. It has already been noted that the Probovis statue and the Chalcatzingo piece seem to be representative of the La Venta style. In addition to these, the Idolo de San Martin Pajapan may also be assigned, at least provisionally, to the La Venta style. This assignment is based on the fact that Monument 44 of La Venta is the head of a figure which is so nearly identical to that of the San Martin piece that they must have been created by the same master sculptor (cf. Clewlow 1970). Although it has not been established where these similar figures were carved, the unusual burial circumstances of Monument 44 at La Venta suggests that both pieces may have a ceremonial affinity with that site and, until further evidence is available and since none of its traits contradict the La Venta style definition, I shall tentatively assign the San Martin piece to it. I shall also assign the Cruz de Milagro figure to the San Lorenzo style. This figure, with its simple cross-legged posture, massive neck and carefully sculptured body, easily fits within the confines of the San Lorenzo style definition. The Wrestler and the Las Limas piece, which are certainly two of the greatest Olmec sculptural masterpieces, are left to stand alone, unassignable to any of the more common styles.

SUMMARY AND CHRONOLOGICAL CONSIDERATIONS

In the foregoing discussions, three "schools" or styles of carving monumental seated figures in-the-round have been isolated and defined. They have been named, respectively, the La Venta, the San Lorenzo, and the Laguna de Los Cerros styles after the sites with which each is primarily associated. The next step of analysis is to determine, as was done with the colossal heads, what the existence of these styles means and, in particular, what chronological significance may be attributed to them. It has already been noted that uniformity of trait comparability is not good, even for discussion of the figures from one site or within one style. It is therefore even more difficult to attempt a seriation analysis of all the figures in all three styles. Unfortunately, stone figures do not readily lend themselves to other approaches and so, regardless of how few comparable traits are available, a seriation must be attempted for the monumental seated figures. Table 10 presents 12 traits and schematizes

how the three styles are serially related through them. It will be noted that the traits used are a combination of attributes acquired in the actual carving and those which were acquired after manufacture, during destruction in some cases. Strictly speaking, this makes any seriation less reliable. However, since we have no stratigraphy for most pieces and since we know there was a great deal of reuse and movement of monuments, I have used the trait combinations which allow some insights into total history of the pieces and not just those acquired initially. Thus the seriation may, in a sense, be termed cultural or utilitarian as well as stylistic.

As may be seen, the first six traits show that the seated figures from San Lorenzo and La Venta are more closely related to each other than either group is to the style of Laguna de Los Cerros. Both the La Venta and San Lorenzo styles exhibit massive necks in proportion to body size, the presence of arms, objects held in the hands, the use of decorative pectoral plaques, and the presence of legs in varied postures, while the Laguna de Los Cerros style tends toward delicate necks, broken arms and thus no held objects, lack of pectoral plaques, and broken legs. In addition, the Laguna de Los Cerros pieces show a tendency toward experimentalism in conception, while the La Venta and San Lorenzo figures seem to follow a number of more standardized forms. Although these traits show the La Venta and San Lorenzo styles to be closely connected in a general way, it should be pointed out that in a specific sense they are separate entities, as the fact that one group holds ceremonial and the other utilitarian objects and the difference in variability of postures demonstrates.

The second six traits seem to establish a closer relationship between the Laguna de Los Cerros and San Lorenzo figures than either group shows with those from La Venta. The former two styles exhibit well modeled bodies, a tendency toward head removal with little attention centered on the neck break, no nudity, no use of claws, and common use of well executed capes, while the latter tends towards less well modeled bodies, heads broken off in small figures with great attention on the fracture, nudity, some claws, and a rarity of capes, poorly executed when present.

From this data a surprisingly neat lineal seriation may be inferred which places the San Lorenzo style in a central position, sharing qualities with the styles of both La Venta and Laguna de Los Cerros which, in turn, occupy either end of the series, sharing few qualities with each other. Since there is no direct method to obtain an absolute date on ancient stone sculptures, we must fit any temporal inferences gained from the seriation into the chronological framework of the archaeological sites themselves. I begin with the styles of San Lorenzo and La Venta, since it is from these two sites that we have the most precise chronological information. Coe (1970: 26) has stated with certainty that "most of the monuments" at San Lorenzo were carved during the San Lorenzo Phase, which dates between 1150-900 B.C. For the purposes of fitting the seated figures into an absolute time scale, then, we can say that all the San Lorenzo style pieces had to have been carved by 900 B.C. As a matter of opinion, and here I must confess to speculation (as must anyone who, with present evidence, attempts to refine the stone monument chronology), it is my feeling that 900 B.C. is a perfect terminal date for the San Lorenzo style seated figures. Furthermore, it is my feeling that all the San Lorenzo style seated figures were carved by masters who knew each others' work, probably within a period of 50 years, but certainly within no

more than 100. By Coe's chronology, this would place all the seated figures within San Lorenzo Phase B, from 1000-900 B.C. My reasons for this placement are that the seated figures appear to be the product of some artistic evolution; that is, they show a certain standardization and cannot be termed "sketches" as can the earlier colossal heads. The seated figures show a large number of facial, clothing and postural combinations which indicate, again, in contrast to the colossal heads, that the artistic tradition had mastered the medium of stone in full, and that the artists had evolved a technical freedom of choice with respect to presentation of their subject matter. In short, they seem to represent the conclusion of a sculptural tradition at San Lorenzo, one which may have ended relatively abruptly around 900 B.C. at that site, but which was carried on a bit further, perhaps, at La Venta. Coe (1968a: 62) has noted that the two sites contain a nearly identical corpus of monuments. I agree with this, particularly with respect to the seated figures. However, I feel that the difference in "school" or style which I have defined and seriated above may be interpreted to mean that seated figures were carved a bit longer in association with La Venta, and that the La Venta style figures represent one, or perhaps two, generations more of slow stylistic evolution away from the San Lorenzo style. La Venta has been dated as occupied between 1000-600 B.C. (Berger, Graham, and Heizer 1967: 5) and Coe has stated that "after 900 B.C., when San Lorenzo began returning to the jungle, the torch of Olmec civilization must have passed to La Venta" (1968a: 89). Thus, my reconstruction of the chronological relationship between seated figures from La Venta and San Lorenzo, based on stylistic definition and seriation, is entirely compatible with the archaeological evidence from both sites. While the difference between the two styles argues for some temporal separation, the similarities would seem to restrict this temporal factor, as I have said, to a couple of generations at most or perhaps 100 years. It is, then, my feeling that none of the La Venta seated figures were carved later than roughly 800 B.C.

The Laguna de Los Cerros style is more difficult to fix temporally because little is known about the site's specific chronology. The site was, however, apparently occupied over a long period of time, ranging from the Preclassic to the Classic period (Medellin 1960). On purely stylistic grounds, I would place the Laguna de Los Cerros seated figures in the Preclassic period, slightly earlier in time than the seated figure style at San Lorenzo. As I have noted, the Laguna de Los Cerros pieces are less standardized and tend towards experimentalism. An emphasis on physical detail is present, which seems to have been supplanted by cosmological or iconographic considerations in the San Lorenzo pieces. I would place them speculatively several generations, or perhaps 100 years, earlier than the San Lorenzo style, or beginning roughly at the end of San Lorenzo Phase A. My speculative reconstruction of the chronology of seated figure styles is shown in Table 11.

It should be noted at this point that I have carefully avoided stating that the named styles were made at the site for which they are named. At this stage of our knowledge, it is impossible to state where the figures were made. Heizer has noted that "since both the San Lorenzo and La Venta people were capable of moving very large stones, the shipping of finished sculptures from one site to another is a possibility that cannot be ignored" (1971: 52). Another possibility is that finished sculptures could have been

brought to the main centers from smaller workshop sites nearer the stone source. What we do know is that there was close artistic and stylistic contact over a wide area (cf. Clewlow 1970) and that much more research is needed to ascertain the exact logistics of ancient sculptural manufacture and movement. The assumption which is made in the above discussion, however, is that the figures found at each site, if not made there, were at least made for that particular site, presumably on request from its authorities. Thus, the sculptures at each site represent trends and styles of that site's elite, even though perhaps not manufactured on the spot. Heizer is correct in stating "that the La Venta sculpture may be viewed as a local collection formed over a period of time" (1971: 52), and the implication is that stylistic trends for that site will be apparent regardless of the place of origin of the sculptures.

HIGH RELIEF SEATED FIGURES

Nine seated figures in high relief are found in the Olmec monument corpus, five from La Venta, two from San Lorenzo, and two from Laguna de Los Cerros. All are executed in a way which clearly relates them to the medium of three dimensional carving. For this reason, they are considered in connection with and as a related component of the full round seated figure category.

Altar 2, La Venta (Stirling 1943b: Pl. 38)

Altar 2, La Venta, has a seated human figure positioned cross-legged in the niche in front. The niche is arched and is only 8 centimeters deep. The figure appears to be male (Stirling 1943b: 53). Both legs of the figure are crossed in front, while the figure itself is seated on the ground. It was holding an object in its lap, perhaps a baby, but the piece itself is too badly eroded to tell. It wore a helmet-type headdress, with a chinstrap which appears to have extended all the way around and under the chin. Ears were present, and so were circular earplugs 7 centimeters in diameter, which are now badly eroded. Eyes were recessed, and the nasion is depicted as sub-rhomboidal. No other details of the piece are currently present. It is badly eroded and may not have been particularly well carved to begin with. Stirling (Ibid.) notes that the Altar 2 figure may hold an infant, as on Altar 5, but states that "the workmanship on Altar 2 is so primitive as to make the comparison a libel."

Altar 3, La Venta (Drucker 1952: Figs. 51, 56, 57, 69)

Altar 3, La Venta, contains a human figure, probably a male (Stirling 1943b: 53-54) seated in the frontal niche. The piece is badly eroded so that no details are available about the face or headdress. Both arms are broken off at the shoulders, but a portion of the right hand remains grasping the right leg at about the center of the calf. The right leg crosses in front of the figure, while the left leg extends backward, along the side, like the Wrestler, and ends against the back wall of the niche.

The niche is rectangular on Altar 3, rather than in the usual arch shape. Another unusual feature is that the niche figure is seated on a 17 centimeter high platform, rather than on the ground as is usual. At the top of the niche, a 20 centimeter high panel projects outward from the niche's back wall. This joins the headdress of the piece and was probably a device used to save the sculptor the labor of removing that much more stone from behind the headdress. Thus, the figure is not in the round, but in high relief.

The figure contained a chest plaque which was decorated with some sort of ornament. This ornament is badly eroded and is shown in Figure 29. The flat collar which Stirling mentions is probably a cape and is visible hanging down over the right shoulder. Ear ornaments are present, but no detail is discernable. A plain chinstrap is also present, but does not appear to go all the way under the chin. The entire figure appears to have once been very well modeled, with the jowls particularly realistically depicted.

Altar 4, La Venta (Stirling 1943b: Pls. 37, 38)

Altar 4, La Venta, has a high relief figure seated cross-legged in the front central niche. The figure was probably a male (Stirling 1943b: 54-55). The face is damaged, but it is possible to see that the eyes were recessed, and the chin strap completely encircled the chin. A headdress is present, set at an oblique angle. It probably represents a type of lattice. It may also represent a stylized jaguar mask, but is too eroded to tell for certain. The figure is wearing a necklace composed of two layers, from which three dangling pieces hang in the front. From this necklace, another element hangs which connects to a broad, raised piece, which is joined to the abdomen wrap evident near the lap of the figure. The figure is seated cross-legged, with the left hand held over the right foot, and the right hand held under a rope which extends around to the right side of the altar where it wraps around the right arm of a seated captive figure. Stirling (1940: 325) notes that "the sculpturing on this stone is of a very high order." The figure displays good modeling on the chest, shoulders and arms. The head, by virtue of the fact that a 5 centimeter wide hole exists between it and the back of the niche, is actually sculptured in the round. This represents a very difficult feat of carving. Stirling (Ibid.: 325) has characterized the posture of this figure as "easy and realistic," noting that it lacks "the stiffness and conventionalization that characterizes most Middle American art."

Altar 5, La Venta (Stirling 1943b: Pls. 40, 41)

Altar 5, La Venta, contains a magnificently carved human figure in high relief, seated in the niche at the front of the altar. The figure wears a high headdress on which appear several indistinct tassel-like decorative elements. Around the base of the headdress is a band upon which the Olmec "X" appears on either side, and in front the band is decorated with a typical were-jaguar baby face. The figure is wearing large circular

earplugs and a flattish collar or small cape over the shoulders and hanging down onto the front of the chest. The figure has a sub-rhomboidal nasion, and its eyes are shown cut out by the incision process, with tear ducts in the inner corners. Both lips appear as bow-shaped. Lips are parted and slightly open, with no teeth showing. The shoulders, arms and face of this figure are exceedingly well modeled, as is the right foot below the knee. Both legs of the figure are crossed in front of it.

Lying upon the lap of the main niche figure is a badly eroded, limp baby-like creature. This infantile personage, often interpreted as a cross between a jaguar and a human being, has been seen on a number of other Olmec figures. This particular example is badly eroded, but it is possible to ascertain that the head was apparently cleft, although the right portion has been fractured off. This is congruent with other figures of the same category. A headband is present just above the forehead of the piece. Its nasion and eyes are quite indistinct. The mouth was probably in the typical jaguar snarl. The belly is swollen and breasts are raised and slightly swollen also. Its hands are at the side of the belly. The legs, broken off, appear to droop off the left leg of the central niche figure. A small cod piece covers the infant's genital area. Stirling (1943b: 55-56) is certainly correct in calling this piece "one of the finest examples of sculptural art from pre-Columbian America."

Altar 6, La Venta (Stirling 1943b: Pl. 38)

Altar 6, from La Venta, is a very unimaginative example of a so-called table top altar. It has a figure seated in front on a 30 centimeter high platform projecting 5 centimeters from the front of the piece. The figure is portrayed very clumsily. It is nude, except for a headdress and ear decoration. Although no genitals are shown, it is assumed that the figure is male. Its legs are crossed in front, with arms resting on the knees and hands hanging down. No fingers or toes are shown. Wormanship is very crude and angular, with very little modeling done. Ears probably were shown as slightly raised with incised circles. The nose is an incised triangle. No details of mouth or nasion are present. The headdress is faintly shown, and is illustrated in Figure 30. One plain circular earplug is present on the left ear. None is present on the right. The figure on Altar 6 is probably the poorest example of high relief carved seated figures from Olmec altars (cf. Stirling 1943b: 56).

Monument 14, San Lorenzo (Stirling 1955: Pls. 21b, 22)

Monument 14 of San Lorenzo is a typical Olmec table top altar. It is discussed in more detail under "Altars" below. On the front it has a seated human figure shown emerging from a niche. The height of this figure is 109 centimeters, its width 92 centimeters and its thickness 25 centimeters. Its head is eroded and indistinct. The ears, however,

appear to have been done realistically. A small cod piece covers the genitals, and hangs from an obvious abdomen wrap divided into four horizontal sections across the stomach. No decorative elements are apparent on the piece except for a plain rectangular plaque which rests on the right crossed leg of the figure.

Although badly eroded, very good modeling may still be seen on the figure. The face breakage was probably intentional, but erosion is also heavy. Stirling (1955: 16) has commented:

"It is worth calling attention again to the similarity of this monument to Altar 4 of La Venta, which it resembles as to material, form, dimensions, and subject matter. In addition, both monuments have had the carvings at one end carefully defaced, and in the area thus produced, deep rectangular niches were excavated."

Monument 20, San Lorenzo (Coe et al. 1966: Foto 26)

Monument 20 of San Lorenzo is a large table top altar with a seated figure emerging from the niche in front. The figure is very badly eroded, and details have been obliterated. It may be said, however, that the figure is portrayed as seated cross-legged, holding a baby on its lap (Coe et al. 1966; Coe, Diehl, and Stuiver 1967). It appears to have worn a headdress and circular earplugs, and seems stylistically akin to Monument 14, San Lorenzo.

Monument 5, Laguna de Los Cerros (Medellin 1960: Pl. 19)

Monument 5 of Laguna de Los Cerros is a diminutive altar, with a figure emerging from a niche inside. The piece itself will be discussed further below under Altars. For now, we will concern ourselves with the niche figure, which is 48 centimeters high, 36 centimeters wide and 20 centimeters thick. The figure is depicted as squatting, and wears an apparent abdomen wrap around the stomach and a plaque which hangs below the neck. The face is damaged, but it appears to have worn a turban. The left arm is missing, and the right arm hangs down past the knee to the crotch. The hand on the right arm is also missing. This little figure is well modeled, with very little angularity (cf. Medellin 1960: 90-92). One very peculiar characteristic of this piece is that the underneath side of the altar block is hollowed out inside, and the sides smoothed. This accomplishes the triple effect of lightening the piece, providing some storage space (possibly for ceremonial paraphernalia) and lending an air of authenticity to the cavern or niche from which the seated figure emerges.

Small Altar-Like Block with Figure on the Front, Laguna de Los Cerros (Pl. 6)

This piece is badly eroded, but was once a well made, smallish altar, with a figure carved on the front in the same position as the usual niche figures, but without a niche. The figure, badly eroded now, was carved in a seated position, presumably cross-legged. The arms are shown as bent at the elbows, and holding an indiscernible object against the chest. Eyes were probably depicted as slits. The nasion is sub-rhomboidal. The headdress recalls that on the figure from Cruz de Milagro. The headband was triple, and was crossed by two top pieces (see Figure 31). Straps hung down from the headdress and covered the ears. The ears are not shown, but they may have been wearing the circular or tubular lobe plugs which are apparent. The height of the figure is 66 centimeters, and its width is 32 centimeters. The entire piece is discussed more fully below under "Altars."

DISCUSSION

As is noted in the descriptions, all nine high relief figures appear on the frontal portion of altars and are portrayed, to greater or lesser degree, as emerging from within the altar itself. Altars of the Olmec style actually consist of three components, namely the large, shaped stone block, the frontal high relief figure, and the side panels, often carved in low relief. These three components may be considered as chronologically independent since each may be altered, re-worked or added to without disturbance of the others. Although this was certainly not always the case, it certainly was in some instances and for this reason I have separated the components for discussion purposes. The high relief figures shall be discussed here and the other components under appropriate headings below (see Tables 1 and 2 for cross-indexing).

Stylistic comparability of the high relief seated figures is limited by the small size of the sample and by the fact that within the sample a great many traits are either obscured by erosion or completely obliterated. Nevertheless, it is obvious that the high relief figures belong in the same genre as the seated figures in-the-round. Table 12, which summarizes some of the specific traits of the high relief figures, reveals broad similarities in the range of dress, facial attributes, and postures with the three dimensional figures. Headdresses, earplugs, capes, collars, plaques, and abdomen wraps are all present in various combinations. Three postures are used, with cross-legged being the most common. Six of the figures hold an object in their hands (Altars 2, 4, and 5 of La Venta, Monuments 14 and 20 of San Lorenzo, and figure on the block from Laguna de Los Cerros). In two cases (Altar 5, La Venta and Mon. 20, San Lorenzo), the object is certainly an infant, and in one case (Altar 2, La Venta), it probably is. Interestingly enough, two of the figures also appear to hold ropes (Altar 4, La Venta and Mon. 14, San Lorenzo). Of all the figures, only two are definitely not well modeled (Altars 2 and 6, La Venta).

Stylistically and chronologically, I have related the two high relief figures from Laguna de Los Cerros to the "school" of seated figures in-the-round from that site. Their small size and lack of standardization clearly link them together stylistically,

while the latter trait and their excellent and delicate modeling provide the links with the style defined for full round figures. A second stylistic grouping consists of the figures on Monuments 3, 4, and 5, La Venta, and Monuments 14 and 20, San Lorenzo. This group, which shows consistency in modeling, apparel, object held and overall composition, fits well into the San Lorenzo seated figure style, as defined above, and is probably temporally related to it. A third stylistic grouping consists of the figures on Monuments 2 and 6, La Venta. Both figures are blocky and badly executed, and would thus appear to be somewhat later in time than the second group. It is difficult to be more specific than to suggest that these pieces were probably carved after 800 B.C. This implies that they are slightly later than most of the three dimensional figures in the La Venta School. In the case of Altar 6, the piece was not even found in direct association with the main ceremonial area of the site (Stirling 1943b: 56). Table 13 recapitulates my stylistic and chronological placement of high relief seated figures.

LOW RELIEF SEATED FIGURES

Altar 3, La Venta (Drucker 1952: Figs. 51, 56, 57, 69)

In addition to the figure seated in the niche of Altar 3, La Venta, two figures appear carved in low relief on the side of the altar. They are described by Stirling (1943b: 54) as follows:

"They face each other and are apparently engaged in lively discussion. They are realistically carved, and the attitude and action is surprisingly realistic. The figure on the observer's right has a rather large pointed beard. He has a small headdress with a forehead band, and wears a belt and a string of beads around his hips. The other figure also wears a small headdress with a chinstrap, and seems to have a small beard or a pointed chin. He wears a necklace and a broad pelt."

These two figures appear to be Olmec, but it is impossible to discern any other details than those described by Stirling.

Altar 4, La Venta (Stirling 1943b: Pls. 37, 38)

A human figure seated, carved in low relief, appears on the right side of Altar 4, La Venta. The figure was partially destroyed when found and is in even worse condition now. The best photograph of the piece appears in Stirling (1943b: Pl. 37). All that may be said of the figure is that it was seated, probably cross-legged, and wore a small abdomen wrap. The face and headdress are destroyed so that it is impossible to ascertain whether or not the figure represented an Olmec. A rope appears to encircle the waist and right arm of the figure, and is in turn carved along the side of the altar and is held in the hands of the frontal niche figure, causing some observers to speculate that a "captive" is portrayed.

Altar 5, La Venta (Stirling 1943b: Pl.s 40, 41)

In addition to the central niche figure, four seated figures are carved in low relief on Altar 5. According to Drucker's nomenclature (1952), these figures shall be referred to as Figure 3, Figure 6, Figure 8 and Figure 9. All four of these figures are characterized by having large but typically Olmec headdresses. Figure 8 and Figure 9 wear large circular earspools. They all appear as seated cross-legged in a typical Olmec posture. The face of Figure 9 is not visible, but the faces of the other three are typically Olmec, with the down-curved, snarling lips and typical Olmec mouth and eyes. It is possible to see that Figure 3 has bow-shaped lips, parted, with traces of teeth apparent. Figures 6 and 8 also have bow-shaped lips, parted, but with no teeth showing. All three figures (3, 6, and 8) have eyes shown as small and made by incision. Figure 9 wears a collar with a chest ornament similar to the central niche figure and Figure 6.

Monument 19, La Venta (Drucker, Heizer, and Squier 1959: Pls. 49a, 49b)

Monument 19 from La Venta contains a low relief human figure, seated in the coils of a plumed rattlesnake. The figure has been completely described by Drucker, Heizer, and Squier (1959: 198-199). It is only necessary to remark here that the abdomen wrap, the cape, the shoulder collars and the headdress all appear to be typically Olmec. Facially, the features of the figure are also shown as totally within the Olmec canon. What is unusual, however, is the posture of the figure. The figure is displayed as seated with legs outstretched before the body rather than in the usual cross-legged position. The significance of this posture will remain unknown at this point. Perhaps it has to do with the association of the figure with the plumed serpent.

Monument 61, La Venta (Clewlow and Corson 1968: Pl. 13d)

Monument 61 from La Venta is a round stone disk with a low relief figure carved on the front. The figure is seated cross-legged. Its right arm is shown very vaguely, and the left arm is very indistinct. The figure once wore a large flowing headdress. At one time it was apparently a very handsome piece, although now it has been so badly eroded as to be nearly impossible to see except at certain times of the day when lighting conditions are perfect. Figure 32 shows a rough sketch of the seated figure on Monument 61. Lack of detail makes it impossible to tell if the piece is stylistically Olmec for certain.

Monument 14, San Lorenzo (Stirling 1955: Pls. 21b, 22)

In addition to the niche figure on the front of Monument 14 of San Lorenzo, the left side holds a low relief carved figure. This seated figure is described as follows by Stirling (1955: 15-16):

"On the south is a single seated figure, wearing a wide-brimmed headdress surmounted by the clutching talon of a bird of prey. A number of droplike ornaments are pendent from the brim of the headdress. From the ear lobe hangs a curved ornament. Around the neck is a double string of beads from which hangs a star-shaped gorget with a circle in the center. Each upper arm is encircled by an arm band, and a broad belt is worn about the waist. The features in profile are typically "Olmec" in character. The right arm is extended and is lightly grasped by the left hand. The stone is broken away at the right hand, but I suspect that when complete it was shown with a rope attached to the wrist as in the case of the figure on the south end of Altar 4, La Venta. The carving is in good condition, and considerable skill was exhibited in its execution. An interesting effect of perspective is achieved in the handling of the shoulders. Directly in front of this figure are the remains of two deeply carved rectangular niches, no doubt carved subsequent to the original sculpture."

In addition to the features noted by Stirling, it may be added that the piece shows tear ducts in the inner eye corner. The eye corner, however, has no overlap. An iris is not shown.

The Alvarado Stela (Covarrubias 1957: Fig. 29)

The Alvarado Stela contains two figures carved in low relief. The first, on the front, is a standing figure and will be considered in the chapter Standing Human Figures. The seated figure is on the side and is a fat individual with a single sash around his belly. He is an apparent captive, seated cross-legged, with arms apparently bound at the wrists and reaching upward toward the hand of the main figure. He has on a tight fitting simple headpiece or helmet, and large circular earspools. Although the facial features of this figure are indistinct, the lips and nose appear thick and flabby, the face puffy and very Olmec-like. He is seated on an extension of the platform on which the front figure stands. Of the two figures on the Alvarado Stela, the seated figure is the more Olmec of the two. The piece has been described by Covarrubias (1957: 69).

Low Relief Seated Figure, Chalcatzingo Relief I (Grove 1968b: Fig. 1)

Included in the extensive low reliefs at Chalcatzingo, Morelos, is a seated figure, positioned within a "cave" or niche, with legs dangling from a seat much like Monument 40, La Venta. A number of descriptions and interpretations are available for the figure (Guzman 1934; Gay 1966; Cook de Leonard 1967), but the most applicable in the present context is by Grove (1968a: 135-136, 1968b), who notes that the headdress is typically Gulf Coast Olmec, and that the figure carries a ceremonial bar. The figure also seems to wear a cape and an abdomen wrap. Facial features are lacking or indistinct.

DISCUSSION

Three points of contrast may be pointed out with respect to low relief seated figures and those fully in-the-round. First, although the sample is small, a different pattern of distribution exists. The low relief figures seem concentrated at La Venta, with only one at San Lorenzo, and none known from Laguna de Los Cerros. This differs from the round figures, which are significantly present at each site. Secondly, two of the low relief figures wear beards (two on Altar 3, La Venta), while at least one other has a beard-like chinstrap (Mon. 19, La Venta). Thirdly, most of the low relief seated figures are small components within a larger scene, and in these cases, the event portrayed seems clearly more important than the seated figure in it. (Mon. 61, La Venta, may be an exception to this; however, it is not certain that the piece is of Olmec origin. Likewise, the "captive" on Altar 4, La Venta, could be a later addition.) Only on Altar 5, La Venta, do the low relief figures even engage in an event whose subject matter is related to any of the full round figures (in this case, the holding of infants). With the sculpture in-the-round, the individuals portrayed are clearly more important than the action in which they are engaged. Despite these differences, some of the low relief seated pieces are clearly Olmec, as details of posture, headgear and clothing reflect. The point here, of course, is that they represent a separate style or workshop altogether from the three dimensional styles. Some chronological difference is suggested by the fact that La Venta, which was occupied by Olmecs longer than San Lorenzo, contains most of the low relief pieces. Presumably, then, they may be placed relatively late in the sculptural sequence. This shall be discussed in more detail under "Low Relief Panels" below.

OTHER POSSIBLE SEATED FIGURES

Below are listed five additional pieces of seated sculpture which will probably prove to be Olmec when they are more clearly understood. I have not personally seen any of these pieces and am unable to completely evaluate them on the basis of published data. For this reason I have not referred to them in the above discussions or in the tables. All five pieces are three dimensional and I list them here on the presumption that they will one day be charter members of the Olmec corpus.

Monument I, Tres Zapotes (Stirling 1943b: Pls. 9a, 9b)

Monument I of Tres Zapotes is the lower portion of two crossed human legs which were probably once part of a seated figure. If so, they **could** be Olmec in origin (Stirling 1943b: 23).

Monument M, Tres Zapotes (Stirling 1943b: Pls. 11b, 11c, 11d)

Monument M of Tres Zapotes (Stirling 1943b: 24) is the body and head of what was probably a seated human figure in Olmec style. At least, the facial features appear to be characteristically Olmec, while the body, which has arms and legs broken off, appears less so.

Monuments 2, 3, and 4, Estero Rabon, Sayula

Medellin (1960: 75-76) has very briefly mentioned three decapitated, seated human figures, one holding a baby. From preliminary information, one might assume they will prove to be Olmec, as the same site has produced one certain Olmec sculpture (Monument 5).

CHAPTER VI

STANDING FIGURES

Standing figures of more or less human appearance occur in Olmec monumental sculpture in three forms. The first is that of free standing, three dimensional figures. I shall discuss this small group first, and then consider the other two forms, namely high relief and low relief figures.

Monument 37, La Venta

Monument 37, La Venta, is included in the standing figure category because in a sort of Rorschach test sense, it may appear to be one. However, it is so badly eroded and so covered with lichen that no features whatsoever are discernible. In a vague way, it is shaped like a standing human. Of sandstone, the piece is 1.83 meters high, 78 centimeters wide and 28 centimeters thick. It is designated as No. 13 at the Parque La Venta and has been published by Clewlow and Corson (1968).

Monument 57, La Venta (Clewlow and Corson 1968: Pl. 13a)

Monument 57, La Venta, is a much altered headless torso of what was probably a standing human figure, and is thus included in this section. It is 73 centimeters high, 52 centimeters wide and 28 centimeters thick. It was found during the 1968 field season at La Venta (Clewlow and Corson 1968: 178). The figure is fashioned in a piece of unusual green, serpentine-like stone, which has been very highly smoothed and polished all over. The head of the piece has been fractured off and the fracture polished very smooth. The circumference of the fracture is large, being 84 centimeters. Faint traces of biceps and forearms appear on either side of the piece. The right hand seems to have reached up to the chest and been placed over a rectangular chest plaque, probably suspended from a cord or necklace. A very indistinct, long linear element projects up vertically from the left forearm. The middle section of the chest, beneath the plaque, is modeled as slightly swollen, perhaps with a type of garment. The relief, however, is so low as to be impossible to ascertain for certain. At the bottom center of the piece is a U-shaped, cut-and-smoothed channel some 20 centimeters high, 10 centimeters wide, and 6 centimeters deep. Six axe-sharpening grooves are also present on the lower right hand front side. No detail is apparent on the back and sides which, although cracked and weathered, still retain a high polish. The smoothing, in fact, was applied over the cracking in back. As the piece is so smoothed, it is difficult to ascertain details on the photograph; thus a sketch of it is included (see Fig. 33).

Monument 19, Laguna de Los Cerros (Medellin 1960: Pls. 24, 25)

Monument 19 from Laguna de Los Cerros is a standing figure, 157 centimeters high, 67 centimeters wide, with a maximum thickness of 44 centimeters. It was found by Alfonso Medellin Zenil (1960) and has been commented on by a number of other writers (cf. Smith 1963: 133; Bernal 1969: 64). Although the head has been snapped off with a clean fracture just above the base of the neck, it is obvious that the piece represents a standing male human figure.

The figure wears a full length cape in back, which is attached and held on by means of a thick drawstring across the clavicles and upper chest. Around the neck is a cord or necklace from which is suspended a triangular chest ornament (see Fig. 34). Around the waist is a double band of cloth, tied in front with a simple knot (see Fig. 35), from which hangs a relatively elaborate breech clout. The entire back of the piece is wrapped in a cape which forms a sort of half-shell into which is inserted the standing figure itself. The left side of this cape is badly scaled off, but traces of two flame brow masks may still be seen. On the right side, three of the flame brow masks exist spaced at 23, 62, and 103 centimeter distances, respectively, from the top of the cape. A detailed drawing of one of these masks, all of which are similar, is shown in Figure 36. The center of the cape in back is without decoration. However, a probable portion of what was once the headdress appears in relief raised 6 centimeters high at the top of the cape, and hangs down the back for a distance of 48 centimeters. It is drawn in Figure 37.

The left arm is missing altogether, while the right arm is fractured off just below the elbow. The neck of the figure is realistically proportioned, having a circumference of about 79 centimeters. The stone working itself on the piece is quite angular and sharp, especially at the portions of the lower piece where the legs merge with the background.

The cape, which, as stated above, has been executed as a sort of semi-circular half-shell extending full length on the figure, represents a very interesting solution to the problem of how to make a standing human figure in the round stand up without toppling over. It is important to be aware of the fact that the sculptor of this piece was clearly innovating in that he was even attempting a life size standing human figure in the round. (There are no precedents for this figure--all other large human figures in standing positions are on low relief slabs.) The half-shell cape was his solution, and a brilliant solution at that, to the problem of preventing the piece from falling over. The entire sculpture is a piece in the round, but technically, the human figure is in very high relief, since at no point is perforation complete or relief on the human body fully executed. This fact, combined with the angularity of sculpturing on the lower portion of the piece, gives the figure a certain clumsiness, particularly below the level of the arms. However, when one considers the challenge presented by the concept

of such a figure and the creativity with which it was handled, it must be conceded that the piece stands as a tribute to the marvel of Olmec sculptural ingenuity.

Small Stone Torso, Veracruz (Clewlow 1972: Pl. 7)

This is a standing human figurine in stone, the head, arms and lower legs broken off, which is in its present condition 69 centimeters high, 36 centimeters wide and 24 centimeters thick at the hips. It is a beautifully modeled little figure, with a very well sculptured chest and back, and large, yet gracefully executed thighs and buttocks. No clothing of any sort is present. Likewise, no sexual organs at all are displayed. The head was snapped off in a clean break which has subsequently been intentionally abraded. The neck was realistically proportioned, with a circumference of about 49 centimeters.

Other writers have commented briefly on the affinity between the two artistic mediums of clay and stone in Olmec art (Drucker 1952; Coe 1965c, 1970: 26). The Pajapan figure is an obvious example of a figurine type (the piece is particularly similar to Type D figurines from Tlatilco) serving as a model for a stone piece. It is interesting and, again, points to the high degree of skill even in early Olmec sculptural efforts, that the artist could so fluently translate the plasticity of clay to the more difficult medium of stone. It is presently displayed in the Museo Veracruzano in Xalapa.

Monument from Ojo de Agua (Navarrete 1971: Pls. 4 - 9)

Carlos Navarrete has recently published a number of small Olmec pieces from Chiapas and Guatemala, among which is a three dimensional standing figure (Navarrete 1971). The piece comes from the Ojo de Agua ranch near Mazatan, Chiapas, and is 66 centimeters high, 28 centimeters wide, and 24 centimeters thick. Navarrete feels the piece to be Olmec on the basis of the cleft headdress, which resembles that on La Venta Monument 44 and the Idolo de San Martin, and the low relief design of a were-jaguar infant and a jaguar mask which appear on a large pectoral plaque (Ibid: 77-78). While it is true that these are certainly Olmec designs, the sculpture itself is unlike any from the Olmec heartland. The face is obliterated, the headdress indistinct except for the cleft, the neck and body totally unmodeled, the plaque so large as to be un-Olmec, the basal platform unlike any heartland sculpture, and the whole piece so angular and poorly made as to insult most heartland pieces by comparison. For these reasons, plus the fact that it was not found under controlled conditions, it would seem best to merely note the Olmec inspiration for the designs, and not attempt to further categorize or discuss the piece until more information is available. Thus, the following discussion will be devoted to those few pieces found within the heartland.

DISCUSSION

It is difficult to make any categorical statements concerning full round standing figures because that sample size is too small for adequate comparisons. One of the La Venta pieces (Mon. 37) is so badly damaged that no comparative statements may be made about it at all. The remaining La Venta figure (Mon. 57), while badly altered, may possibly be related to the La Venta style seated figures because of its massive neck size, polished fracture, and chest plaque. If so, it might date to around 800 B.C. However, this assignment of a date is tentative, and it must be borne in mind that, although the piece has some qualities found in the seated figure style, its general posture, unusual stone type, high polish, and apparently delicate body modeling make it stand somewhat apart from the seated figures.

The Laguna de Los Cerros figure seems to bear similarities to the seated figure style from that site, on the basis of clothing, experimentalism, and delicacy of neck and body molding. Additionally, the head was snapped off and the fracture untouched. If Monument 19 is temporally equivalent to the Laguna de Los Cerros seated figure style, it might well be the precedent for use of a cape as a half-shell in sculpturing. This trait appears later in two San Lorenzo seated figures, Monuments 12 and 47.

The small Pajapan figure is almost impossible to place stylistically, due to lack of comparative pieces. My guess, however, based on delicacy of modeling and inherent experimentalism, plus the fact that it duplicates an early figurine type and has no later counterparts, would be to place it early, perhaps with the Laguna de Los Cerros style.

HIGH RELIEF STANDING FIGURES

The second form in which standing figures occur is as high relief carvings. There are five of these figures, found on three monuments.

Stela 1, La Venta (Stirling 1943b: Pl. 33)

Stela 1 of La Venta is a large rectangular slab standing 2.33 meters high, with a width of 89 centimeters and a thickness of 71 centimeters. It represents a human figure standing in what may be an "open doorway" (Heizer 1967: 27) or "the open mouth of a jaguar" (Stirling 1943b: 50). The latter suggestion is more probable in that the panel immediately above the figure bears a low relief carving of what may be a stylized jaguar mask. The high relief human figure, with which this section is primarily concerned, is depicted as standing in the niche, having a height of 1.46 meters, a width of 72 centimeters, and a thickness of 18 centimeters. In all probability, the figure is a nude woman, with the belly wide and rather distended, and the breasts puffy. Some arm musculature is shown, and the figure is, in fact, fairly well modeled.

Eyes are depicted by incising; the nasion was probably of the double type. The mouth and nose are indistinct, as the piece is very eroded. A

headdress consisting of a cap-like helmet and a headband with an eroded design is present. Ears are realistic, with bulb and tassel decorations suspended from them. Toes and fingers are depicted by incising. The figure also wears a shortish skirt with four flutes or channels extending up from the bottom, an item of attire that may be typical for Olmec females depicted in monumental sculpture. One of the figures on Altar 3 of La Venta wears a similar skirt.

Monument 18, San Lorenzo (Coe et al. 1966: Foto 24)

Monument 18 is a much destroyed Atlantean altar, found by Michael Coe in the 1966 field season (Coe et al. 1966). It is in poor condition, but what remains is an unusually shaped stone block with a fat Atlantean figure in high relief on two of its corners. The first figure is badly damaged, with only one incised foot really visible. The second figure is exceedingly interesting because of the fact that its head is depicted in 3/4 profile and is 3/4 in the round. This represents a unique figure in Olmec monumental sculpture. The personage wears a breech clout, but no other clothing is apparent. The mouth is open with teeth visible. Both lips are bow-shaped. The lips, chin and cheek are very well modeled. No other details of the head are discernible. The right arm of the figure is extended straight upward over the head, while the left holds a probable celt against the chest and belly. The legs are short and squat, and terminate in feet with toes depicted by incision. This unusual piece is discussed in more detail under "Altars."

Monument 2, Potrero Nuevo (Stirling 1955: Pls. 21a, 33)

Monument 2 of Potrero Nuevo was found by Matthew Stirling (Stirling 1955) and consists of two dwarfish Atlantean figures on the front of an altar, the top slab of which is decorated with stylized jaguar eyes. The entire piece is considered below (see "Altars"). At present, our interest shall confine itself to the high relief standing figures.

The standing figures on this particular piece consist of two nearly identical human atlanteans in high relief on the front of the monument. The figures are 62 centimeters high, and project slightly from the main body of the monument. Each figure wears a head covering which may be stylized, braided hair. The left figure wears a hanging tassel as an ear ornament, while this feature is indistinct on the right figure. No chin straps are present, reinforcing the notion that hair is represented on the heads of both figures.

A shallow incised line appears around the **base** of the neck of each figure, representing perhaps a necklace of some sort. Each figure is also shown wearing a small breech clout suspended from a cord around the waist represented with double incised lines. The right figure has four shallow

incised lines around the upper portion of each arm, probably representing bracelets, while the left figure does not.

Anatomically, both figures are similar, with sub-rhomboidal nasions, flattened irises, eye corners with no overlap, open mouths with teeth showing, bow-shaped upper lips, and straight lower lips. The pudgy dwarfish figures are both well modeled, with very little angularity. They stand with both arms elevated to hold the flat top piece of the altar above their heads.

DISCUSSION

Like their full round counterparts, the high relief standing figures are difficult to assess stylistically or chronologically. Stela 1, La Venta, is completely unlike any other sculpture in the entire Olmec corpus. Its facial features, headdress and ear decoration assure that it was carved by Olmec artists, but its coffin-like enclosure and its female genital organs make it difficult to compare to other pieces. Its realistic sculpturing suggests it was made prior to 800 B.C., but little more can be said.

The San Lorenzo piece (Mon. 18) is also unique for its 3/4 representation of the figure in high relief. It is unfortunate that only one of the atlanteans on this piece remains. The remaining figure, however, is carved in a fashion which is stylistically similar to the two well carved atlanteans on the Potrero Nuevo sculpture. These two monuments are the only Olmec atlantean sculptures known and are of exceptional art historical importance because they represent the first Mesoamerican utilization of the atlantean concept which was to figure so prominently at a later date in the architecture of Toltec Tula and Chichen-Itza. The two Olmec pieces comprise a stylistic and chronological unit which dates from before the end of San Lorenzo Phase B (900 B.C.) and is probably best placed at least 150 years earlier. The form was probably highly experimental and appears at no other time in the Olmec sequence. It is likely that, for stylistic reasons, the two atlantean altars were carved under the authority of the same master sculptor.

LOW RELIEF STANDING FIGURES

The vast majority of standing figures in Olmec art are depicted in the medium of low relief carving. Aside from the fact that they are undeniably Olmec, they share little in terms of comparability with the standing figures in high relief or three dimensions. Very little, at this stage of our knowledge, would be gained by comparing attributes between these categories of figures and no such comparison will be presented here. Moreover, an attribute comparison of all the low relief figures would be pointless since, first, very few traits appear in clear form on many of the pieces with the result that distribution tables would be totally random, and, secondly, because the important thing about the figures is not their individual attributes, but the event in which they participate. The same was true of seated figures in low relief, and both categories shall be more fruitfully discussed under "Low Relief Panels" below. For the time being, it should be noted that low relief standing figures are found primarily at (1) La Venta, (2) small Olmec sites within the heartland, and (3) Olmec localities

outside the Gulf Coast area. There is practically no overlap in distribution between these figures and the high relief and full round sculptures. Most writers feel that a chronological distinction exists, with the low relief figures usually assumed to be late, perhaps even dating to La Venta Phase IV.

In the process of researching this chapter, a number of details were compiled on low relief standing figures which I was able to visit. Many of these descriptive facts have not yet appeared in published form. In the hope that they may be of use to future researchers, particularly when enough data is available to make an attribute comparison worthwhile, I include them in the present chapter.

Stela 2, La Venta (Stirling 1943b: Pl. 34)

The large central figure in this piece has been well described by Stirling (1943b: 50-51) as well as Heizer (1967: 32-34), and for this reason will not be described in complete detail here. For comparison with other standing figures in Olmec monument sculpture, however, a number of particular features will be mentioned. Most noticeable of these is the exceedingly large headdress, held on by a chinstrap. The figure also wears a cape, wrist and ankle bracelets, and circular earspools. He carries a staff, held against the chest, with a tassel flowing from its upper end. The figure has a rectangular projection, probably a set of chin whiskers, extending from its chin. This particular type of beard recalls the chin whisker projection on the main niche figure in Altar 7 from La Venta. Interestingly, another similarity which Stela 2 shares with Altar 7 is the utilization in the sculpture of natural declivities in the stone. The large chunk out of the lower right front portion of Stela 2, for example, is sculptured and incorporated into the whole piece, with relief appearing on all planes. Altar 7 also has low relief on irregular, but natural, surfaces. Fingers on the central figure are shown in incising. The face is not particularly well modeled (recalling Altar 7 again) and, despite much weathering, it is possible to distinguish a sub-rhomboidal nasion. Six smaller figures, depicted as standing in a half-crouch, are also present on Stela 2. All of these smaller figures wear headdresses, broad belts, circular earspools, and capes. Faces of these small figures may be anthropomorphic jaguars, but are too indistinct to be certain.

Stela 3, La Venta (Stirling 1943b: Pl. 35)

Stela 3 of La Venta has been well described and thoroughly discussed by Heizer (1967: 28-32) and will only be treated here for data which may be used to compare the personages portrayed on it with other standing figures in Olmec sculpture. The scene depicted on it is discussed more fully below (see "Low Relief Panels"). Both central figures (L and R, after Heizer 1967) have headdresses, as do the small attendant figures. All mouths in the figure are probably closed, with bow-shaped upper lips. Capes are also worn by all the figures which have not been eroded away. Figure R, although damaged, may have had a tear duct in the inner eye corner. Hands are quite well executed on several of the small subordinate figures.

Altar 3, La Venta (Drucker 1952: Figs. 51, 56, 57, 69)

The figure to the left side of the niche in La Venta Altar 3 is a standing human figure in low relief. It is badly eroded, and difficult to discern in detail. Stirling (1943b: 53-54) feels that the figure represents a female, an interpretation which is in all probability correct, as the breasts, though eroded, appear fleshy and well modeled, and the knee-length skirt recalls that on the female figure in Stela 1 of La Venta. In the figure on Altar 3, a wide belt around the belly appears to support the skirt. The figure is depicted as having what is probably a cap on the top of the head, with hair falling straight from beneath it to roughly shoulder length. Drucker (1952: Fig. 51) has sketched the figure (his Figure 4) as wearing a boot on its left leg, but this feature is no longer visible.

Altar 7, La Venta (Drucker 1952: Pl. 65)

Altar 7, the most recently recovered of the La Venta monumental altars, has been discussed by Drucker (1952: 182-184), but has not been illustrated in complete detail. Drucker discusses a total of six figures appearing in high or low relief on the piece. Two of these, Figure 2 and Figure 5, are standing human figures in low relief. Non-human figures on the altar, and the acts depicted, will be discussed under appropriate headings below. Figure 2, who stands to the right of the central niche face, and points to a spot just above it, is seen wearing a "mitrelike cape" (Ibid.: 184), a wide abdomen belt, and an indistinct ear ornament, probably a spool and tassel. He also appears to wear a chin beard. Figure 5 is so eroded as to be indistinct except for a largish, projecting headdress.

Monument 13, La Venta (Drucker 1952: Pls. 4, 63)

Monument 13 of La Venta has been very well described by Drucker (1952: 180-182, Fig. 61). It consists of a basalt drum 87 centimeters high, 86 centimeters wide and 92 centimeters deep, with a smoothed plane surface on one end, upon which appears the low relief carving of a striding male human figure in profile holding a banner or pennant. The back of the drum is fractured off and the sides, which contain at least 14 sharpening grooves and about 12 ground pits, are roughly hammer dressed. The front of the piece is finely dressed, and the central figure was neatly executed, although it is now showing effects of exposure to the elements.

The figure has an unusual and non-Olmec nose and closed mouth. It wears an unusual and elaborate hairdo (Coe 1965b: 763), a bead necklace, wristlets, sandals and a rather typical Olmec abdomen wrap and penis cover. No ear decorations are worn. The act performed and the unusual, glyph-like elements appearing with the striding figure will be considered more fully below ("Low Relief Panels").

Monument 63, La Venta (Williams and Heizer 1965: Pl. 2d)

Monument 63, La Venta, is a basalt monument with a low relief carving of a "bearded man hugging a monster" (cf. Williams and Heizer 1965: 19). Although much detail has been eroded from the piece, it is possible to clearly discern a man with either a beard or a projecting chin-strap in a scene with an alligator-like creature. The human figure is 135 centimeters tall and has a bulbous nose, and a faintly incised eye and mouth. No other facial details are clear. The figure does, however, wear a large, possibly plumed headdress and a broad abdomen wrap, perhaps tied in back with a sash (see *Ibid.*: Fig. 5). The left arm of the human figure reaches upward to grab the monster, while the right arm grasps it lower down. Fuller discussion of the piece may be found under "Low Relief Panels".

Stela 1, Viejon (Medellin 1960: Pl. 9)

Stela 1, of Viejon, Actopan, Veracruz, has been described by Medellin (1960: 79-82), and commented on in one respect or another by several other authors (Coe 1965b: 742; Smith 1963: 134; Williams and Heizer 1965:22). It is a large low relief slab depicting two standing male human figures facing each other. The figures are executed in low relief. Both faces are obliterated, but it is possible to ascertain that the right figure wore a rather elaborate headdress and a cape which hung from the shoulders. Both figures wore abdomen wraps, the right figure having at least three decorative appendages or tassels hanging from his. The right figure also wears knee pads, and an indistinct mocassin or shoe. He holds a staff resembling a corn stalk in his right hand. The left figure holds a cylinder or a possible knife in his right hand. Few other details are visible.

Chalcatzingo Bas Reliefs

At Chalcatzingo, Morelos, are a series of low relief carvings on natural cliff faces which have received a great deal of attention in literature on the Olmec (Cook de Leonard 1967; Guzman 1934; Grove 1968b; Gay 1966). At least nine different reliefs are presented there. However, in only one, referred to by Grove as Relief II (1968b), are human standing figures depicted. In this particular group of carvings, three figures are of interest. All are standing, wear Olmec headdresses, short capes and abdomen wraps with elaborate knots or tied sashes in front. Two of the figures hold paddles, while the third holds what is probably a plant, perhaps corn. The center figure wears bracelets (wristlets), knee pads (recalling the right figure on the Viejon stela), and ankle bracelets. All the figures also appear to be wearing masks, probably connected with the headdresses, and are thus not subject to a detailed analysis of facial features.

Low Relief Column, Angel R, Cabada

The low relief carving of a standing human figure on a column from Angel R, Cabada, Veracruz, is so indistinct that no useful data on standing figures may be gained from it except to note that the person depicted is wearing some sort of headgear. The piece is more fully discussed under "Low Relief Panels."

Alvarado Stela (Covarrubias 1957: Fig. 29)

The Alvarado stela, first published by Covarrubias (1957), is a five-sided basalt column with low relief carving on two sides. The carving depicts two figures and is covered in more detail below (see Low Relief Panels). The present discussion, however, shall concern itself only with the central standing figure. The central figure represents a standing male, 180 centimeters high and 55 centimeters wide. He wears a large, flowing headdress with a prominent beard-like chinstrap. The left ear is depicted as decorated with a large circular earspool. A long, flowing cape is shown fastened at the shoulders with large puffy epaulets, and tied in front of the chest with a sash and knot. A yoke-like abdomen piece and smaller cod piece are shown. A two-part wristlet, depicted with three incised lines, is worn on the left arm. The figure also wears a very badly eroded and indistinct necklace. Facially, it is only possible to state that both lips are bow-shaped, since the other facial features have been removed by erosion.

CHAPTER VII

COPULATION FIGURES

The iconography of Olmec art is thought to revolve around the concept of the were-jaguar and, indeed, many Olmec monuments combine human and feline characteristics. Three stone monuments in particular have been interpreted by some writers as depicting the primal copulation between jaguar and woman and are thus pivotal to the argument that the mythical origin of the Olmec were-jaguar lies in an actual sexual union between man and beast. These three monuments are Monument 3, Potrero Nuevo; Monument 1, Rio Chiquito; and Monument 20, Laguna de Los Cerros.

Monument 3, Potrero Nuevo (Stirling 1955: Pls. 25, 26a)

I was not able to personally visit this monument, discovered by Stirling. He notes (1955: 19) that it:

"...apparently represented copulation between a jaguar and a woman. The figure of the woman is represented lying on the back with knees drawn upward along the abdomen and with bent elbows, the hands extending upward. The head, hands and feet are missing. The body of the jaguar is missing except for the hind feet, the lower part of a double back ornament and the tail. Ornaments in the form of bands with a decorative attachment in the rear are worn about both ankles. The portions of the jaguar which remain are much more animalistic than in Monument 1, Rio Chiquito; the feet, claws, and tail definitely identifying the subject. As in the similar monument, this one is mounted on a low flat base. Although badly broken, enough remains to indicate that in its complete form Monument 3 must have been a strongly carved and striking piece of sculpture."

Monument 20, Laguna de Los Cerros (Medellin 1960: Pls. 27, 28)

I was also unable to personally inspect Monument 20, Laguna de Los Cerros, which Medellin describes as "...representing two persons.... One of these is lying on its back and has crossed and flexed legs. The other person is seated on the abdomen of the lower figure, with its hands placed on the fallen one's chest." (1960: 65--my translation) He feels that the scene is not a sexual one, but represents "subjection and humiliation of the vanquished by the victor."

Monument 1, Rio Chiquito (Stirling 1955: Pl. 2)

Monument 1 of Rio Chiquito is a seated, headless figure mounted upon a prone, headless figure lying on its back. The piece is 78 centimeters high, 52 centimeters wide, and 82 centimeters long, and is the only copulation figure which I studied personally.

The upper figure is squatting upon the lower figure in a position which perhaps could indicate that the two were having, had just had, or were about to have, sexual intercourse. The head has been broken off the top figure with a ground down and smoothed fracture 96 centimeters in diameter. The arms are broken off, but a trace of fingers on the right breast of the lower figure indicates that the left hand of the upper figure may have at one time grasped it. The left breast of the lower figure is sagging and misshapen. The upper figure wears a collar from which a plain rectangular pectoral plaque is suspended. A cord piece covers the top part of what would be the genital area of the upper figure. This cord piece hangs from the lower part of what appears to be an abdomen wrap covering the area between the top of the cord piece and the bottom of the pectoral ornament. In the center of this apparent abdomen wrap is a rectangular incised square. All these details are exceedingly difficult to see because of extreme erosion on the piece. The right leg of the upper figure is crouched, while the left leg is kneeling and extends back along the left side. The right toes are positioned on the lower figure's chest just to the side of the breast. In back, the upper figure wears a narrow cape which falls in two parts from the neck over the buttocks and over the crossed lower legs of the lower figure.

The lower figure lies flat on its back with its arms to the sides. The head is broken off in a fracture which includes the bench beneath the figure and which has a circumference of 83 centimeters. The legs of the lower figure are crossed at the bottom as if locking in the upper to a sexual position. The lower figure is depicted as lying on a stone block which has a 28 by 8 centimeter long and 2 centimeter deep celt-shaped ground depression on the right front side. The left side has been somewhat scaled. In the footlock of the lower figure, the right foot is positioned over the top of the left foot. The lower figure is apparently nude.

This piece is not exceptionally well modeled. In fact, the modeling and sculpturing are rather poor. Its interesting facets lie in the scene that it is intended to depict.

Some difficulties arise in the interpretation of this piece. It is difficult to state for certain that the scene depicted is a sexual one because:

- (1) No genitals are portrayed,
- (2) The lower figure is not a female for certain, and

- (3) The position is one which is anatomically difficult, if not impossible, to realize.

If it is not sexual, it could be interpreted as a victorious warrior seated upon his fallen victim. The swollen objects in the breast area are indistinct and eroded enough so that they could have been part of a uniform or objects placed there by the upper figure.

On the other hand, the general posture is sexually suggestive, especially the locked legs. If the piece is indeed a copulation act, then it represents a very interesting comment on Olmec sexual practices. If it is not a copulation, then it represents an interesting comment on the practices and fantasies of those who say it is. I make no guess at this time. It is interesting for me to note, however, that all the local men with whom I talked in San Lorenzo rather proudly explained this sculpture as representing a sexual act, doing so in most cases with wry grins on their faces. One wonders if a projection of local sexual fantasies might have played a part in the original interpretation of the piece when it was discovered by Stirling (1955: 8).

DISCUSSION

Since the time of Stirling's discovery of two of the above monuments, Coe (1965c: 14, 1965b: 751) has been the most energetic proponent of the interpretation that they represent acts of copulation. Iconographically, the argument has great merit; however, in the particular cases of these three monuments, it is weakened by the fact that no sexual organs are apparent, and in no case may the act be identified positively as a sexual one. Medellin's view (1960) that they represent the conqueror and his fallen foe is also quite plausible. It would seem that for the present the issue must remain unresolved, for, as Bernal (1969: 67) points out, "the three stones are in such a poor state of preservation that it is impossible to describe their true significance with absolute certainty." In this context it should be noted that Furst has recently provided a metaphysical interpretation of the were-jaguar theme which does not utilize a sexual origin (1968).

Having never actually seen the Laguna de Los Cerros or Potrero Nuevo pieces, I am unable to offer any guess as to their chronological placement. The Rio Chiquito monument, however, on the basis of neck circumference, fracture treatment, body sculpturing, and the highly visible presence of sharpening grooves, seems to fall squarely within the La Venta seated figure style, and is undoubtedly chronologically tied to it.

CHAPTER VIII

SMALL HEADS

A number of sites within the Olmec heartland have yielded small stone heads carved in the Olmec style. Some of these have obviously been broken from larger monuments, probably seated figures, while others, particularly the low relief incised faces, are complete units within themselves.

Monument 29, La Venta (Clewlow and Corson 1968: Pl. 9b)

Monument 29 of La Venta (cf. Clewlow and Corson 1968) is the broken portion of a human head with a turban. It is attached to a flat background piece of stone. The turban or headpiece is wrapped around the head, projecting some 8 centimeters from the temple of the piece. A band 10 centimeters high seems to constitute the lower part of the turban or, perhaps, is a distinct part of the headgear from it. On top of the turban is a drilled or ground hole without a nipple. On the forehead and the left side of the piece are 13 smaller drilled pits, like pock marks or decorations of some sort on the face of the human figure. The nasion is sub-rhomboidal. Eyes are ground pits with pupils incised. The eyes were depressed and the irises are somewhat shown by flattening.

The piece is probably a peculiar example of those pieces which have the necks cocked back at grotesque angles such as Monuments 9 and 56 from La Venta. It could also be the niche figure and portion of a background broken from a large altar such as are known from the La Venta and San Lorenzo sites.

Just below the left eye under the head at the point of the fracture is a grooved or ground trough some 10 centimeters wide and 20 centimeters long, at a depth of 7 centimeters. It is difficult to say whether this trough was a functional feature of the sculpture or if it was placed there after the breakage. The trough recalls the hollowed space behind the niche figure in Monument 5, a small altar from Laguna de Los Cerros.

Monument 44, La Venta (Clewlow and Corson 1968: Pls. 11e, 12a)

This important piece has undoubtedly been broken from a larger figure much like the San Martin monument. It has been described as follows by Clewlow and Corson (1968: 175-177):

"This is the most interesting and important piece to be recovered during the 1968 field season. It is significant not only as a work of art in itself, but also because of the remarkable similarities it bears to the famous Idolo de San Martin Pajapan (Blom and La Farge

1926: Fig. 433; Covarrubias 1946: 80) now in the museum at Xalapa Veracruz. (See Pl. 15c and 15d.) Although the San Martin piece is complete while the La Venta monument consists only of the head and headdress, the pieces display so much in common that it would not be difficult to imagine that they were the work of a single artist.

"Monument 44 is a large human head atop which rests an elaborate headdress consisting of a face with decorations, and with two "were-baby" faces, one below each ear of the main human head. The main face is, unfortunately, somewhat eroded, but it is possible to see that the eyes were executed as incised and flattened, and with tear ducts present in the inner corners. The nose is broad, with the nasion sub-rhomboidal in form. The lips are bow-shaped and slightly parted; no teeth are showing in the mouth. The entire face is extremely well modeled and realistic.

"The front of the headdress displays a large anthropomorphic face on which detail is somewhat difficult to discern due to erosion. The eyes are shown as incised, angular slits on either side of a broad, flat nose. The mouth exhibits the characteristic Olmec snarl. The gum is apparent beneath the upper lip but no trace of fangs can be detected. The chin, jowls, and the puffy flesh around the eyes are sculptured with a convincing and delicate precision.

"On the sides, the main portion of the headdress was decorated by a series of upward and backward projecting parallel incised lines, possibly representing feathers. There are 10 of these lines on the right side, and 11 on the left. Below these a head band is present, eroded on the right but shown as being divided in three identical-sized rectangular sections on the left. These sections once bore incised decoration but it is not now possible to ascertain what details were originally present.

"In the back, the upper portion of the headdress is divided into four parts by the intersection of two deep V-shaped channels--one running horizontally, the other vertically--through the center. Below this, the headband is plain at the end, but in the center it supports a raised rectangular border within which is a much-worn face about which it is only possible to say that the upper lip is bow-shaped, that gums are present, and that the eyes appear to have been inset rectangles. Below this an indistinctly incised piece appears as draping on the back of the neck.

"Two axe-sharpening grooves appear on the top of the headdress, toward the rear. A fractured portion in the center top of the piece is probably the remaining evidence of what was once a cross-like projection, such as may still be seen on the Idolo de San Martin.

"Monument 44 is 55 centimeters high, 43 centimeters wide, and approximately 50 centimeters in length. Preliminary x-ray fluorescence tests on the basalt from which it is made indicate that it came from the same stone source as did the basalt of the Idolo de San Martin (Dr. F. H. Stross, personal communication)."

Monument 64, La Venta (Clewlow and Corson 1968: Pl. 14a)

Monument 64, La Venta, is a badly damaged and severely eroded small head which was apparently snapped from a body to which it was once attached. It was incorrectly published (Ibid.) by Clewlow and Corson as a standing figure, a fact which may attest to the state of disrepair of the piece. Close inspection, however, reveals that it was a human or jaguar-god face wearing an indistinct cleft headpiece. The piece is 54 centimeters high, 40 centimeters wide, and 31 centimeters thick.

Monument 65, La Venta (Clewlow and Corson 1968: Pl. 14a)

Monument 65 from La Venta is a small head, very much eroded, with the hands in front beneath it. It is 66 centimeters high, 43 centimeters wide, and 40 centimeters in depth. The eyes were inset, with tear ducts in the inner corners. The nasion is sub-rhomboidal. The lips are indistinct, but apparently the upper one was probably at one time bow-shaped. The mouth is open, but no teeth are discernible. The chin and cheeks were once quite well modeled. Bean-shaped pits appear in both mouth corners. The head is covered with a headdress, details of which are indeterminable. Ears projecting 6 centimeters from the side of the head and 18 centimeters high are displayed. Circular lobe plugs are present, but no design is apparent on them. The nose was broad and prominent. Fingers are shown faintly on the right hand, none are shown on the left. The top of the piece was more or less flat, and was ground that way. The top also possesses seven circular ground pits, 2 centimeters wide and 1 centimeter deep. The back of the piece is peculiar, showing a bulbous upper portion, and a strangely sectioned lower part. Figure 38 shows this in some detail. No legs are apparent. The hands rest against the chest, immediately below the face. It has been described by Clewlow and Corson (1968).

Monument 6, San Lorenzo (Stirling 1955: Pl. 14)

Monument 6 from San Lorenzo is a human head, broken from a much larger, probably human, figure. It is 87 centimeters high, 66 centimeters wide, and 60 centimeters thick. It is a largish head wearing a headdress. The nasion is sub-rhomboidal. The nose has been damaged, but was once quite broad. The upper lip is bow-shaped. The lips are parted, with teeth present but worn. Two small drilled pits appear in the mouth corners. The eyes are representative, elongated, incised slits, with no corner overlap and possible tear ducts in the inner corners. Stirling (1955: 13) feels that the eyes "have a puffy appearance and the lids are shown as half closed.

In this respect they resemble the eyes on the atlantean figures on Monument 2, Potrero Nuevo." The entire face is fattish and fleshy, and very well modeled. The ears are present and realistic, with lobes shown as elongated, wearing wide circular earplugs facing outward. The headpiece or headgear is tripartite. It consists of a headband over which is a protruding sub-rectangular piece. Under the band is a smooth cranium cover. The head has been broken from a larger body with a sharp fracture, the circumference of which is 142 centimeters. Stirling (*Ibid.*) feels that the head was broken off at an angle which suggests that the original body may have "been in a recumbent position or that the complete monument may have had the form of Monument G at Tres Zapotes." The back of the headgear is flat and divided, and the back of the head and neck of the figure are also quite flattened.

Small Metate from San Lorenzo

A small four legged metate with a face carved on the front in low relief is this piece from San Lorenzo. The top measures 36 by 22 centimeters, with an incised border of 4 centimeters around the edge. The piece is 14 centimeters high. The face is roughly 11 centimeters high, 13 centimeters wide and has a maximum relief of 4 1/2 centimeters. It is very badly eroded and therefore very indistinct. Eyes were only raised lumps, 2 by 1 centimeters, with no details visible. The nose appears to have been aquiline. The upper lip is bow-shaped, while the lower one is straight. The mouth is shown as open with no teeth apparent. Largish, fleshy cheeks modeled well are apparent on the face below the eyes. This piece may be comparable to the Catemaco face, as well as to Monument 27 from Laguna de Los Cerros, and the small incised disk from Tres Zapotes.

The border around the working platform of the piece makes it apparent that it was never used for grinding, at least not in the usual fashion. For this reason, it is included in the present study. The piece is published in Stirling (1955) as a "stone vessel."

Monument 27, Laguna de Los Cerros (Medellin 1960: Pl. 30)

Monument 27 from Laguna de Los Cerros is a small round face carved in low relief on a small roundish stone measuring 15 centimeters high, with the worked surface 39 by 37 centimeters. The face is indistinct due to erosion, but it is possible that the nasion was sub-rhomboidal, and the mouth was open with teeth vaguely visible. Eyes are circumscribed by ground incisions, with the iris shown by a longitudinal slit. The eyes do not overlap at the corners. The upper lip is bow-shaped. The piece has been published in Medellin (1960).

Small Low Relief Face, Tres Zapotes (Clewlow 1972: Pl. 8)

In the small museum at Santiago Tuxtla is a disc-shaped stone on the front of which is carved a low relief were-jaguar face. Although I have no detailed notes or measurements, it is possible to see from the photograph that the face is square, with human eyes, and a were-jaguar mouth. The eyes have incised irises, and the mouth seems to lack the usual bifurcate fangs, and, in fact, has no fangs at all. On the right side of the piece is an apparent ear ornament and on the left is an indistinct element of unknown type. Feather-like tassels, perhaps a sort of headdress, appear both above and below the face. The piece is reported to have been found somewhere in the vicinity of Tres Zapotes.

Small Head, Tres Zapotes

In the courtyard of the museum at Santiago Tuxtla, Veracruz, is a small head presumed to be from the site of Tres Zapotes. The piece may have been broken from a larger body and, although badly eroded, may have been an Olmec monument. It is possible to see that the mouth drooped at the corners, both lips were bow-shaped, and drilled pits were present in the mouth corners. All other details are indistinct. The head is 43 centimeters high, 28 centimeters long and 23 centimeters wide.

Monument 5, Estero Rabon (Medellin 1960: Pl. 1)

The monument from Estero Rabon is a head of a jaguar-god 50 centimeters high, 32 centimeters wide and 37 centimeters thick. The figure wears a headdress which consists of a band 13 centimeters high, crowned by a plain turban which is flattened in back and merges with the band. The eyes are the typical jaguar-god type. The nasion is of the double type, 9 centimeters wide and 3 centimeters high. The nose is broad with the nares, the septum and the nostrils plainly shown. The nostrils are small drilled pits. The upper lip protrudes 9 centimeters from the face in the jaguar mouth style. Fleshy gums are depicted, as are bifurcate fangs. The mouth corners are ground out, but not with drilled pits. Straps hang from the helmet and cover the area where the ears would normally be. Intentional destruction of the piece has marred the area where the ear ornaments would be on both sides of the head. Fleshy, well modeled cheeks may be seen below the eyes. The lower part of the face and jaw have been broken off with a sharp fracture. As a result, no lower lip is visible. The head itself has been fracture off at the neck, the break having a circumference of 97 centimeters. On the left side of the head, just below the helmet strap, an incised line separates the face from the neck. The head is positioned as somewhat cocked backward, with the headdress settled straight on the head. This piece is undoubtedly an Olmec masterpiece and has been published by Medellin (1960).

Monument from Catemaco (Figure 39)

The monument from Catemaco is an oval-shaped or egg-shaped stone roughly 49 centimeters high, 27 centimeters wide in front and 37 centimeters thick, that is, front to back. It has a squarish carved face 13 centimeters high and 16 centimeters wide on the front which shows some similarities in style to the appearance of the colossal heads from a number of Olmec sites. Over the head is a headdress which may be a helmet of the type portrayed in the larger colossal heads. The nasion of this small piece from Catemaco is of the sub-rhomboidal type. Pupils are not shown on the eyes, which are portrayed as raised circles. The mouth is open with no teeth showing. The upper lip is turned down in a bow shape, while the lower lip is straight across. All facial features are shown in raised relief roughly 1 centimeter high. Prominent, somewhat fleshy cheeks are quite apparent. Ear ornaments of the round spool type are present, like those on colossal head La Venta 3. There is no overlap at the eye corners on this piece. The stone from which this piece is made is fine grained, unlike other Olmec stone. The sides of this piece are indistinct, and the relief appears to taper out. Figure 39 shows a drawing of this piece from Catemaco.

DISCUSSION

Of the 11 monuments in this category, only six appear to have been broken from larger figures, either seated or standing. In view of the large number of monumental figures in those categories which have been deliberately rendered headless, it is interesting to ask the question: "What becomes of all those heads?" Perhaps they were further mutilated, beyond recognition, or perhaps they were separately disposed of away from the sites. Whatever the answer, it is interesting that so few severed heads have been recovered, and that none of the heads which have been recovered can be matched with certainty to any of the bodies. At least we know from this that heads and bodies were probably not disposed of after mutilation in the same area of the site, either at La Venta or at San Lorenzo. What we do know about these small heads is that they were carved in the same style as the seated figures, and that at least some of them may be assigned a stylistic and chronological designation on this basis. I would thus assign Monuments 29 and 44 of La Venta to the La Venta style. Monument 6 of San Lorenzo is almost certainly in the San Lorenzo style, while Monument 5 of Estero Rabon strikes me as being closer to the Laguna de Los Cerros style of carving. The small head from Tres Zapotes is too indistinct for judgement, as is Monument 64 from La Venta.

It is a bit more difficult to assess the chronological affiliations of the low relief faces. In all probability, the metate from San Lorenzo dates from the San Lorenzo Phase, so we might infer that this particular form is at least as old as 900 B.C. That the idea of low relief incised faces as a decorative form lasted longer than this may be inferred from their use as headband decorations on La Venta Monument 44, the Idolo San Martin and as integral parts of the external ornamentation of Monuments 70 and 71, La Venta, perhaps two of the latest La Venta seated figures. Thus, it would seem that

the making of low relief faces persisted over a long period of time, and is not particularly diagnostic chronologically. The facial form in low relief is, in fact, simple enough that it need not have reflected stylistic variation over a long period of time. For this reason, I shall consider the San Lorenzo metate, Monument 27 of Laguna de Los Cerros, Monument 64 of La Venta, and the small face from Tres Zapotes to be Olmec--that is, earlier than 600 B.C.--but shall be no more specific on their temporal affiliations.

The Catemaco face and Monument 65 of La Venta are unusual, and with nothing to compare them to, I shall leave them free floating temporally.

CHAPTER IX

CATS

The dominant theme of Olmec iconography is centered around the concept of the were-jaguar (Coe 1965c: 14, 1965b: 751), commonly expressed in certain facial attributes of otherwise human figures. The Olmec preoccupation with feline symbolism is also apparent in the category of monumental sculptures which I have called cats. This category is a broadly defined one, and ranges from full round naturalistic representations of apparent jaguars to highly abstract low relief panels of stylized feline lips and teeth.

CATS FROM LA VENTA

The largest number of cat representations in monumental sculpture from a single site are from La Venta, where 12 of the 75 numbered monuments fall into this category.

Monument 6, La Venta (Stirling 1943b: Pl. 47)

La Venta Monument 6 is a sandstone sarcophagus which Stirling (1943b: 59) describes as "a conventionalized jaguar." Drucker (1952: 26) noted the facial mask on one end and detected "the remnants of stylized legs" along the sides. Reconstructions of the piece show it to have been quite abstract, with bifurcate fangs and flame brows present.

Monument 15, La Venta (Drucker 1952: Pl. 64)

This monument consists of two low relief panel fragments which Drucker (1952: 182) describes as "possibly a stylized Jaguar-monster pattern." The piece is quite abstract, but exact details are lacking.

Monument 25, La Venta (Drucker, Heizer, and Squier 1959: Pl. 53)

This is a large low relief panel on which the remains of a stylized jaguar mask may be seen (Drucker, Heizer, and Squier 1959: 204-206). The surface has been eroded so that only portions of the abstract nose, lips and fangs are present.

Monument 26, La Venta (Drucker, Heizer, and Squier 1959: Pl. 60)

This monument is also a large low relief panel depicting an abstract jaguar mask. Unfortunately, "the damage which the monument has suffered, due to the scaling off of loose chips and flakes of stone all over its surface, make(s) it almost unrecognizable" (Ibid.: 206).

Monument 27, La Venta (Drucker, Heizer, and Squier 1959: Pl. 54)

Monument 27 is similar to the above two monuments in that it is a low relief panel with an abstract jaguar mask. Unfortunately, "the carving on it is so shallow, and the relief so very low, that it is quite difficult to see" (Ibid.: 208).

Monument 28, La Venta (Clewlow and Corson 1968: Pl. 9a)

Monument 28 from La Venta is a fractured portion of the head of a snarling jaguar carved in full round. It was found in the lot to the north of the house of Don Fermin Torres when the area was bulldozed to make room for a new hut in 1968. Although rather broken, the piece shows itself to have been very well modeled and quite naturalistic. The nasion and arrangement of the nose is reminiscent of some of the colossal heads as well as some of the anthropomorphic faces found in Olmec portable art. This piece is 45 centimeters long, 39 centimeters wide, with a height of 40 centimeters. Although eroded, the piece shows a distinctly feline snarling face with large canine teeth bared in an open snarl. The eyes are deeply pocketed depressions (5 centimeters deep) just below the nasion. The mouth, although damaged, shows itself to have been open wide. In the corners are distinct remnants of drilled pits. Toward the back, the piece was completely sculptured, although the modeling is slight. It would appear that the ears may have been depicted as laid flat against the head and slightly raised. That the piece is broken off at the neck is certain, although no clue is afforded as to the position or nature of the rest of the body. The damage appears to be deliberate on this piece, which is first described by Clewlow and Corson (1968).

Monument 41, La Venta (Clewlow and Corson 1968: Pl. 11b)

Monument 41 from La Venta is a crouched jaguar, realistically carved on the front of a largish stone. The stone itself is rich in large black augites. The piece is 45 centimeters high, 32 centimeters wide and 25 centimeters thick. Detail is difficult to discern due to erosion. Eyes, however, were made as wide depressions. The nasion is sub-rhomboidal. The nose was very feline in expression, and the mouth was shown as an incised depression. No other detail is possible to discern. No traces of costume or design appear to be present on the piece. The back is more or less smooth, as are the bottom and sides of the stone (Clewlow and Corson 1968).

Monument 58, La Venta (Clewlow and Corson 1968: Pl. 13b)

Monument 58 of La Venta is a fractured portion of a much larger piece of green schist (Clewlow and Corson 1968). It has been fractured on all four sides. The back has been fractured away as well. Additionally, the upper left quadrant of the front portion of the piece has been exfoliated

away. What remains is a low relief panel with the lower lip of a stylized jaguar face. This lower lip is bow-shaped, and also contains portions of fangs, with rectangular depressions appearing in the corners of the mouth. The piece is 82 centimeters by 47 centimeters by 29 centimeters. Figure 40 shows a schematized drawing of this piece.

Monument 59, La Venta (Clewlow and Corson 1968: Pl. 13c)

Monument 59 of La Venta is an interesting piece in that it presents a stylized jaguar-god face on the body of a naturalistically rendered jaguar with the back legs crouched. Above this is a flat table-like piece. It is 95 centimeters high, 65 centimeters wide, with a length of 113 centimeters. The head of the main figure consists of a well modeled face with a chin and fleshy cheeks especially well done. The nasion, which is above the eye level, is a double one. Eyes are the typical jaguar-god type of eye. The upper lip is stylized and bow-shaped, but is more curvaceous than is usually the case. No lower lip, except a small section between the fangs about 2 centimeters high, is present. The fangs are eroded, but they were bifurcate. The gum is V-shaped as is usual for Olmec upper gums. Figure 41 shows the slightly incised lines which appear above the eyes on the projecting forehead. Very small ground nostril pits are present in the nose. Ear ornaments appear, but their detail is eroded. Chinstraps are shown by incised lines on either side of the face and appear to represent vertical straps 4 centimeters wide just in front of the ear ornaments, recalling those on several of the colossal heads. The hands are crudely shown by incising. Some musculature of arms and shoulders is roughly portrayed with minimal modeling. The chest is represented as swollen and bulbous; it was either deformed or the hands were holding an object against the chest which has by now become eroded to an indistinct appearance. The right hand has been sharply fractured off. On top of the piece are roughly 66 axe-sharpening grooves, 1 to 2 centimeters deep, and ranging in size between 40 by 4 centimeters and 10 by 1 centimeters. There are also ten drilled, round pits on top of the piece. These scars entirely cover the top of the sculpture. From the left side, the piece is not wearing any clothing except the headpiece. Haunches are slightly modeled, with incising used to show the posture of the legs. The right side has five sharpening grooves on its upper portion. The back leg has been fractured off with a worn fracture, more worn than the front fracture. This piece was found in the same general area as Monument 58 and the Long Column; that is, in the open area between the main houses, Zona Roja. It was first described by Clewlow and Corson (1968), and may be an example of a table-top altar, in a rather unusual form.

Monument 60, La Venta (Williams and Heizer 1965: Pls. 2a, 2b)

Monument 60 from La Venta (Clewlow and Corson 1968) is a small, much eroded figure 60 centimeters high, 45 centimeters wide and 35 centimeters thick. It represents a badly defaced squatting jaguar carved naturalistically. The details are quite difficult to ascertain. Eyes may have had bifurcate lids. The nasion is unclear, as are the lips and mouth. For certain, however, the figure is nude. The left leg has been fractured off with the break very worn down. The left arm is missing. The right arm apparently hung in front of the body. The right leg is flexed backward. The figure is seated on its buttocks. The cheeks of the face were well modeled, with no headdress present on the figure. Slight broken nubs on the top sides of the head may have at one time been projecting ears. The tail is split into the peculiar yet familiar element known as the corn-stalk tail in back. It recalls Monuments 11 and 75 of La Venta. Both mouth corners exhibit ground, round pits.

Monument 69, La Venta (Clewlow and Corson 1968: Pl. 14d)

Monument 69 of La Venta is a broken piece of schist with a portion showing low relief designs (Clewlow and Corson 1968). The piece is what is left of a considerably larger piece. It is 101 centimeters long, 44 centimeters wide and 19 centimeters thick. The power portion shows part of what may have at one time been a jaguar mask panel, very much like that in Monument 58. In fact, they could be part of the same stone. Monument 69, however, is badly enough scaled and damaged that it is difficult to reconstruct the mask. Figure 42 shows a sketch of this monument.

Monument 71, La Venta (Clewlow and Corson 1968: Pl. 14f)

A large head-shaped stone with stylized jaguar nose and mouth, and seven little heads carved in low relief on the sides and top (Clewlow and Corson 1968) constitute Monument 71 of La Venta. This peculiar head-shaped piece is 83 centimeters high, 65 centimeters wide and 67 centimeters thick. In front, it has a stylized mouth and nose of a jaguar (Figure 9). This nose and mouth is somewhat damaged at the bottom; no fangs are apparent. The left side of the piece is damaged, but the right side shows what may have been a stylized ear. Presumably, the left side once had this also. Above the nose, ears, on top, and apparently in pairs on the back of the piece are small low relief faces, roughly 20 centimeters by 20 centimeters in size, all contained within similar motifs. Probably there were once ten of these faces, but at least three have been eroded or polished away (Figure 10). From those that are left it is only possible to say that they probably had sub-rhomboidal nasions, bow-shaped upper lips, open mouths with no teeth, and puffy cheeks. Eyes are represented as depressions, but no details may be seen. The entire piece is highly polished all over, and is exceedingly smooth. Most

of the detail on the remaining faces is gone due to this effect. The left side is fractured off, the fracture being somewhat worn.

CATS FROM SAN LORENZO

Cats appear to have been less important at San Lorenzo where they are represented by five out of 59 numbered monuments.

Monument 7, San Lorenzo (Stirling 1955: Pl. 17a)

Monument 7 of San Lorenzo is an elongated feline figure, carved realistically, with the head fractured off and missing. It is 51 centimeters high, 161 centimeters long and 42 centimeters wide. The figure is quite long, with crouched rear legs and is apparently resting on its front legs. The forward part of the front legs as well as the head are broken off with a clean fracture, and have not been recovered. The piece as it now exists has been broken in two, probably during the process of transit to its present location. The circumference of the original headbreak is 92 centimeters. On the right side, the tail is visible, extending forward beneath the right leg and curling up the side of the figure in low relief. Slight traces of an incised design appear on the left side of the figure. Figure 43 shows these designs. Stirling (1955:13) feels that the monument represents a "mountain lion rather than a jaguar."

Monument 30, San Lorenzo (Coe 1968a: Fig. 9)

Monument 30 of San Lorenzo is a broken low relief slab on which is depicted a stylized were-jaguar head in profile on what appears to be the body of a serpent. It is 120 centimeters high, 100 centimeters wide and 14 centimeters thick. The jaguar head has a cross in its eye, a cleft head and what appear to be bifurcate fangs. Coe (1967b: 10, 1968b: 85-86) feels it may be an early representation of Quetzalcoatl. It is shown in Figure 44.

If the fangs are bifurcate on this piece, it may prove to be an interesting piece of evidence relating to the origin of the bifurcate fang form. Split fangs are not an actual feature of jaguar or, for that matter, any mammalian dentition. They are, however, commonly found in serpents, particularly the poisonous species, in which the "split" serves as a channel for the passage of venom into the victim. It is worth considering the notion that bifurcate fangs are actually a serpent-oriented motif and that their common association with jaguar-god masks in the monumental sculpture results from a jaguar-serpent mythical figure.

Monument 37, San Lorenzo (Coe 1967a: Pl. 4)

Monument 37 of San Lorenzo is a seated jaguar figure. It is small and very badly damaged. It has been broken off at the head with a sharp fracture. The piece now stands at 65 centimeters high, 65 centimeters wide and 65 centimeters in thickness. Although it is smaller, it is very remarkably similar to the large jaguar from Las Choapas, described below. This is particularly true of the bottom portion of the right fang which shows bifurcation and a series of parallel bands, identical to the ones on the larger Las Choapas figure. It is unfortunate that the San Lorenzo piece is damaged so that only one fang remains for comparison. It does, however, appear to have been a well modeled miniature edition of the Las Choapas jaguar. The San Lorenzo piece was found in stratigraphic association with San Lorenzo Phase ceramics (Coe 1967a).

Monument 41, San Lorenzo (Coe 1967a: Foto 5)

Monument 41 from San Lorenzo is a large four-sided columnar stone with low relief carvings on one face. These carvings are representative of "a very primitive Olmec relief of a were-jaguar, with smiling mouth and semi-circular dimples on the cheeks. Its enormous left hand partly covers a withered right arm" (Coe 1968a: 51). The piece is 180 centimeters tall and 85 centimeters wide. It is flat on all four sides. It is interesting to see these jaguar-god eye slits in a low relief context, in that they are usually only apparent on sculptured-in-the-round pieces. This piece was found in stratigraphic context with San Lorenzo Phase ceramics and is felt by Coe (*Ibid.*: 64), on stylistic grounds, to be the earliest Olmec sculpture from the site of San Lorenzo. Although little detail remains, the abstract nature of the face is apparent.

Monument 56, San Lorenzo (Beverido 1970a: Pl. 34)

Monument 56 of San Lorenzo is a low relief panel on a long irregular column. Although very badly eroded, it is possible to see the faint remains of what appears as a jaguar attacking a man (Beverido 1970a: 183, Lam. 34). I have copied Beverido's drawing of this relief in Figure 45. As may be noted, no details are available. However, in general appearance, the figure looks naturalistic and recalls the jaguars attacking the men in the Chalcatzingo reliefs. The San Lorenzo monument was found by magnetometer and ceramic associations are lacking.

CATS FROM OTHER SITES

Representations of cats from other sites are extremely rare. Only three are known from the Olmec heartland and four others, all from Chalcatzingo, Morelos, are known from the highlands.

Monument 2, Rio Chiquito (Stirling 1955: Pls. 3a, 3c)

Monument 2 of Rio Chiquito, or Tenochtitlan, is described by Stirling (1955: 8) as:

"...a small figure about 3 feet in length of a snarling jaguar lying in a crouching position, with head turned to the side and the left foreleg raised alongside the head. The treatment is realistic and the general effect rather pleasing."

Small, Crouched Jaguar on Boulder from Laguna de Los Cerros (Clewlow 1972: Pl. 10)

This figure is somewhat reminiscent of Monuments 41 and 60 from La Venta. The piece is badly eroded, so many features are indistinct. It has a rectilinear headdress which is placed on the head at an oblique angle. The eyes are shown by ground depressions. The nasion is sub-rhomboidal and the nose is indistinct, as is the mouth. No ears are apparent. The piece may have been well modeled at one time (the chin seems to show this); however it has been damaged by erosion. This small jaguar from Laguna de Los Cerros is 43 centimeters high, 24 centimeters wide and 26 centimeters long.

Large Jaguar from Las Choapas, Veracruz (INAH Boletín 5: Foto 10, 1961)

The Las Choapas monument is a figure of a squatting jaguar of huge proportions, with large fangs which extend from the mouth to the base of the piece, some 113 centimeters. The top of the head has been broken off sharply and thus probably intentionally. The upper part of the back has suffered some scaling, but enough of the original surface is present to show that the back was without decoration. Likewise, the arms and legs seem to have been plain. The fangs are incised with designs intended to imply twisting or tattooing (see Figure 46). The right fang is incised at the bottom to depict bifurcation. The left is also, but not as distinctly. The upper lip is a bow-shaped affair 10 centimeters wide, raised 2 1/2 centimeters, and 61 centimeters across the muzzle. The possible tongue or fleshy gum projects in front of and between the fangs. Claws are crudely shown by incision. The nose is broad, with nostrils indicated as curvilinear ground slits. The piece is 133 centimeters high, 126 centimeters wide and 101 centimeters thick. It appears to be almost identical, except for being many times larger, to Monument 37 from San Lorenzo, another carved jaguar with distinctively twisted or tattooed fangs.

Jaguars from Chalcatzingo, Morelos

There are four jaguars in the low relief carvings at Chalcatzingo. The first is in Relief III, and appears to be a realistically carved cat licking an unidentified object. Cook de Leonard (1967: 62) feels that it is a tapir, but both Grove (1968b: 488) and Gay (1966: 58) consider it to be feline. It is shown in Figure 47.

Relief IV has two jaguars, each in the act of standing over, or perhaps attacking, a prone human being. Each jaguar is carved realistically except for a possible headdress, coat, and cross in the eye of each. Cook de Leonard (1967: 59) feels that they actually represent gods. They are shown in Figure 48.

The final jaguar from Chalcatzingo is known as Relief IX (Grove 1968b: 489-490) and is a highly stylized abstract rendition of a jaguar face. Eyes and nose are present, as are stylized brows and an open mouth, which, in the case of this remarkable piece, was carved around the entrance to a small cave (Ibid.; Easby and Scott 1970: 79). No fangs are indicated. Grove (1968b: 490) feels that this relief is stylistically related to Relief I at Chalcatzingo and notes its similarity to Monument 15, La Venta. It also appears stylistically akin to Monument 6, La Venta, as drawn by Stirling (1943b: Pl. 47b).

DISCUSSION

Perhaps no other category of Olmec monuments can rival that of Cats for variety of treatment. Table 14 summarizes the various presentations of cats, which run from full round naturalism to highly abstract low relief. The majority of the cats (15 out of 24) appear in low relief. Of these, the majority (11 of 15) are highly abstract representations of the face or portions of the face. This is in accord with the particular awe with which the Olmec regarded the were-jaguar. Bernal (1969: 66) has noted:

"...among the Olmecs the jaguar was the essential animal; very few others appeared. When one attempts to classify human Olmec figures, without realizing it one passes to jaguar figures. Human countenances gradually acquire feline features. Then they become half and half, and finally they turn into jaguars. This is not an evolutionary process but is the result of a typology. What is important is the intimate connection between the man and the animal in the Olmec mind and the manner in which it was reflected in their art."

That the jaguar as an animal by itself was unimportant is reflected in the fact that only 13 of the monuments in Table 14 were carved naturalistically in any component. Of these, only five (Mons. 28 and 41, La Venta; Mon. 56, San Lorenzo; Mon. 2, Rio Chiquito; Relief III, Chalcatzingo) are completely devoid of any symbolic attributes in the form of tattoos, headdresses, crosses in the eye, etc. Thus, it is clear that,

to the degree which Olmec cosmology is embodied in the sculpture, we can clearly discern a mystical cult centering on the jaguar. The presence of cats in the sculpture is generally in terms of the mystical attributes of the jaguar-as-cult-object, and not simply as an animal. To the degree that we can infer from the presence of sculpture, it would appear that the jaguar cult may have headquartered at La Venta. Most of the cats in our sample are from that site (12 out of 24) and, of these, the majority (8 out of 12) are highly abstract renditions, some of them quite complex, apparently the product of considerable conceptual evolution. Grove has noted that the "feline motif appears associated with a complex conglomeration of ideas related to origins, fertility, and probably also rulership" (1972: 162), and Coe (1972) is convinced that feline iconography is at the core of the symbolic expression of Olmec ruling power.

The relative dating of cat sculptures presents an interesting opportunity because, unlike most other categories, a great variety of representations occurs and a longer temporal span is suggested. Coe's work at San Lorenzo makes it clear that Monuments 30, 37, and 41 from that site are no younger than the end of the San Lorenzo Phase or 900 B.C. (Coe 1970: 26) and it would seem reasonable on stylistic grounds to add Monument 7, San Lorenzo, and Monument 2 of Rio Chiquito to that age group. So similar is the Las Choapas jaguar in conception to San Lorenzo Monument 37 that it too must be of the same general age. Of these six pieces, only two are in low relief carvings, with very little abstract complexity. Neither contains any form of element which is not found on in-the-round figures, either seated or standing. Thus, a San Lorenzo Phase date for these pieces is stylistically consistent. The absence of novel abstract elements or decorative features also binds the remaining three dimensional cats, namely La Venta Monuments 28, 41, 59, and 60, and the Laguna de Los Cerros jaguar. All of these pieces are carved, in large part, naturalistically, and none contain symbolic elements which would be out of place as motifs on La Venta style seated figures. I suggest, therefore, that they are probably no younger than any of the La Venta style figures, or about 800 B.C.

The low relief cats from La Venta, on the other hand, all of which depict facial features in a highly abstract manner, show a number of stylistic effects which are not found on the three dimensional figures in any category. As I have suggested, this probably implies more than a difference in workshop and, in fact, a number of clues are available which point to a later date for these pieces. The 1955 excavations showed that two of these pieces (Mons. 6 and 25) were certainly placed in Phase IV and strongly suggested that two others (Mons. 26 and 27) were as well (Drucker, Heizer, and Squier 1959: 50, 206-208). Stylistically, La Venta Monuments 15, 58, and 69 seem to be identical and are probably, therefore, of the same age. To this group also may be added Chalcatzingo Relief IX, whose resemblance to La Venta Monuments 6 and 15 is noted above. Easby and Scott (1970:79) have noted the "Izapan character of the scrolls" on this piece, and suggest that it "may be later than certain of the other rock carvings and pottery found in the vicinity."

If we accept the placement of the La Venta low relief cat monuments as Phase IV, then we are actually saying that they were carved before 600 B.C. Unfortunately, the archaeology cannot now tell us how much earlier they may have been carved, but, in my opinion, they are different enough stylistically from the San Lorenzo cats and the

full-round La Venta cats to indicate a long development. Thus, a date of around 600 B.C. or near the end of the La Venta Phase IV is quite in accord with the stylistic evidence. We know, for example, that simple abstract renditions of feline faces were conceptually available to La Venta artists as early as Phase II, as is demonstrated by the mosaic jaguar masks. It is probably this same early stylistic simplicity which accounts for the "crudeness" of San Lorenzo Monuments 30 and 41. There is, however, no evidence for an early complexity of abstract motifs in the sculptural arts and I would argue that all this indicates a fairly late date for the complex abstract cats. If I am correct in my dating of these monuments, it is the more interesting to recall Berger, Graham, and Heizer's statement (1967: 9):

"We think it worth considering as a hypothesis that the apparently coeval end of the two large Olmec centers of the southern Veracruz-northern Tabasco heartland reflects some great and momentous happening which resulted in the widespread dispersal of the culture carriers, and that this movement is evidenced in such localities as...Chalcatzingo."

If my placement of these pieces so far has been correct, then it remains to place La Venta Monument 71, San Lorenzo 56 and the three low relief naturalistic jaguars from Chalcatzingo. La Venta Monument 71 is a unique monument, which attempts to combine a three dimensional form with a low relief exterior. Stylistically, it is not particularly complex, and thus could be early. As even its general provenance is unknown, I shall place it midway between the complex low reliefs and the figures in the round. The three Chalcatzingo naturalistic jaguars, two from Relief IV and one from Relief III, and the naturalistic jaguar on Monument 56 of San Lorenzo are a neat stylistic grouping. Unfortunately, the latter monument was not recovered in a context with datable ceramics. It is likely, however, that the piece is from the San Lorenzo Phase. If so, it would be in keeping with the naturalistic treatment given to other animals in low relief during that time period (San Lorenzo Monument 21, for example). In this case, it is quite probable that the three naturalistic Chalcatzingo jaguars are of the same general age. This would support the contention that the rock carvings there are of varied ages (cf. Easby and Scott 1970: 79), some of them dating to as early as 900 B.C. (Grove 1968b: 490). Table 15 recapitulates my temporal placement of Olmec cat sculptures.

Two additional cat motifs should be mentioned here, both of them low relief panels on larger, more complicated monuments. The first of these is on Altar 4 of La Venta, and is an abstract rendition of the eyes, nose and mouth of a jaguar, situated on the overhanging table-top directly above the niche figure. It probably dates from La Venta Phase IV and resembles the latest cats from La Venta and Chalcatzingo as shown in Tables 14 and 15. If so, then it is probably considerably later than the remainder of the altar. The second instance is what Stirling (1955: 19) has called "conventionalized jaguar eyes" on Monument 2 of Potrero Nuevo, also an altar. If these are in fact feline eyes, they are probably also late. However, it is likely that they are some other conventionalized motif, and so are not considered here in more detail.

CHAPTER X

OTHER ANIMALS

As was noted in the chapter on cats, Olmec sculpture tended to center less on the jaguar itself than on the mystical connection between man and jaguar. In this sense, it may be said that Olmec artists were profoundly involved with human beings and their works reflect an interest in humanity rather than nature itself. As Drucker noted, aside from cats, "few motifs taken from the faunal resources of the region have been found" (Drucker 1952: 195). Although they are relatively scarce, a few other animal types are found in Olmec sculpture.

SERPENTS

Four serpents or snakes are found in Olmec sculpture, two of them from Potrero Nuevo, one from San Lorenzo and one from La Venta.

Monument 1, Potrero Nuevo (Stirling 1955: Pl. 24)

This piece is described by Stirling (1955: 18) as:

"...a human or anthropomorphic jaguar figure sitting with legs tucked under. Draped over the lap is a realistically carved serpent, apparently, from the shape of the head and body, representing a fer-de-lance. The body of the serpent is lightly held by the left hand or paw of the seated figure in a very natural pose."

I have not seen this piece myself and am unable to add further detail.

Monument 4, Potrero Nuevo (Stirling 1955: Pl. 26b)

This monument was also found and described by Stirling (Ibid.: 20): "A curiously convoluted snake, carved from basalt...was complete when found except for the head...The lower coils were so arranged as to make a firm, flat circular base."

Monument 47, San Lorenzo (Coe 1968a: Fig. 10)

Monument 47 of San Lorenzo is a seated figure "holding the head of a great fer-de-lance in his hands" (Coe 1968a: 54). The snake head is carved realistically, but it is difficult to see what becomes of the body of the snake, which appears to encircle the torso of the seated figure.

Monument 19, La Venta (Drucker, Heizer, and Squier 1959: Pl. 49a)

Monument 19 of La Venta is a low relief slab on which a seated human figure is shown in the company of a large plumed rattlesnake. Drucker, Heizer, and Squier (1959: 199) describe it as follows:

"The upper part of the snake's body is drawn back in a reverse S-curve, as though it were ready to strike. Surmounting the snake's head is a flat crest with two ribbon-like appendages trailing back from the rear part of the head. The snake's mouth is shown open, and the fangs are clearly depicted. It is a strictly realistic representation, and is beyond a doubt one of the meanest-looking reptiles in Mesoamerican art. Down the middle of the snake's body is a double line, marking the separation of the back and belly. A few very lightly incised curves indicate the belly scutes, and a few similar lines indicate scales on the back. The tail with three rattles and 'button' is shown curled up in front of the human figure."

One interesting feature of this monument is that the shape of the stone tends to conform nicely to the outline shape of the snake. In all probability this suggests that the low relief scene was planned to accommodate the surface of the irregularly shaped stone. The carving on this relief is stylistically close to that on La Venta Stela 3 (Ibid.: 198).

DISCUSSION

Stylistically the four serpents in Olmec sculpture may be divided into two groups, the full round (Mons. 1 and 4, Potrero Nuevo, and Mon. 47, San Lorenzo), and the low relief (Mon. 19, La Venta). The San Lorenzo piece may clearly be dated to the same period as San Lorenzo style seated figures, and, on stylistic grounds, the two Potrero Nuevo serpents may be dated as roughly equivalent. The low relief La Venta serpent is obviously later and probably correspond to La Venta Phase IV, when most of the low relief panels at that site were carved (see below).

DOGS

Three canine motifs appear in Olmec sculpture. All three are in low relief, all appear to be running, and two are depicted with large testicles.

Monument 21, San Lorenzo (Coe 1968a: Fig. 4)

A running dog or coyote in low relief appears on one surface of San Lorenzo Monument 21. The head is indistinct, but the legs, tail, testicles and body are clear (Coe et al. 1966). There has been some intentional mutilation, and the piece is datable to the San Lorenzo phase (Coe 1968a: 47-48).

Monument 1, Pilapan, Mirador, Soteapan, Veracruz (Medellin 1960: Pl. 10)

Monument 1 of Pilapan is a low relief carving on a boulder of a running dog or coyote, with testicles showing, and a large headcrest. The figure is 62 centimeters high and 94 centimeters in length. Medellin (1960: 83) has called the figure a deer; however, to this writer it appears to be a canine figure, quite comparable to the one on the bottom of the box in Monument 21 from San Lorenzo.

Monument 2, Pilapan (Medellin 1960: Pl. 11)

This is another small low relief of a probable canine, although Medellin (Ibid.: 84, Pl. 12) feels that it may be a deer. The figure is shown in a "fleeing" position.

DISCUSSION

Low relief carvings of great simplicity were proposed as early as the section on Cats, above. It appears, from the dating on Monument 21, San Lorenzo, that simple low relief carvings of dogs may also date prior to 900 B.C. Stylistically, all three of the Olmec dogs are very similar and it is logical to assume that they are roughly the same age.

MONKEYS

Two probable monkeys, both from La Venta, are present in the Olmec sculptural corpus.

Monument 12, La Venta (Drucker 1952: Pls. 5, 62)

Drucker (1952: 179-180) has presented a detailed description of this "monkeylike figure." In addition to Drucker's comments on Monument 12, I was able to make a few scanty notes one afternoon in the Museum of Anthropology in Mexico which are now presented. The piece is 94 centimeters high, 20 centimeters wide and 24 centimeters thick. The mouth is open with at least five teeth discernible, shown by incision, with the tongue hanging out. The cheeks are very well modeled in the usual Olmec fashion. Both eyes have the diagonal cross in them. The whole piece has much incised tattooing. The nasion is plain, and the nose quite Olmecoid. The piece has an incised channel down the backside.

Monument 56, La Venta (Williams and Heizer 1965: Pl. 1c)

Monument 56 of La Venta is the "monkey statue" with its head tilted back now situated in the Parque La Venta in Villahermosa (cf. Clewlow and Corson 1968). It is 124 centimeters high, 54 centimeters wide and 43 centimeters thick. It has a top knot which is typical of monkeys in Mesoamerican

art and has ears which are portrayed very realistically. The nasion is sub-rhomboidal, while the nose is bulbous, unlike other Olmec pieces. The face is modeled well, with the mouth slightly open and no teeth visible. Lips are both straight and are both thick and protruding in a non-Olmec fashion. The lower lip extends 4 centimeters in front of the upper one and is attached to a lower jaw which is markedly prognathic. Eyes are made with raised circles set within raised rings. The head is tilted straight up toward the sky. Fingers and hands have been broken off with a sharp fracture behind the neck, but at one time they may have been locked there. The musculature of the shoulders and the upper portion of the back have been very well modeled.

In some respects this piece recalls Monuments F and G from Tres Zapotes (cf. Stirling 1943b). One wonders, in fact, if it was intentioned to be a tenoned piece.

The piece is interesting for, although it has many non-Olmec features, it was found at La Venta and has been plotted in on the 1968 map (Heizer, Graham, and Napton 1968). This, in a sense, adds a new dimension to Olmec art, if the piece is from the Pre-classic Olmec period (see end note on p. 111).

DISCUSSION

The two monkeys, although from the same site, are stylistically dissimilar and difficult to assess temporally. The incisions on Monument 12, however, appear similar to those on some of the seated figures like the San Martin and Las Limas monuments and, therefore, may date the piece at prior to 800 B.C.

DUCKS

Monument 9, San Lorenzo (Stirling 1955: Pls. 17b, 18)

This is a stone bowl with high relief carving on the exterior surface to achieve "the form of a swimming duck" (Stirling 1943b: 13-14). It has been described by Stirling (Ibid.). In addition to the duck figure incorporated in the bowl itself, there is a low relief carving of a duck with wings spread and beak open, carved in the center of the breast of the main piece.

Monument 13, Laguna de Los Cerros (Coe 1965c)

Monument 13 from Laguna de Los Cerros is a highly stylized, squarish carving of a duck. It is 62 centimeters long, 44 centimeters wide and 44 centimeters high. The head is missing, having been broken off with a sharp fracture. The chest slopes inward and downward gently from the fracture line at the neck. The whole piece is squarish and rectangular as opposed to the more gently modeled San Lorenzo duck bowl (above). Monument 13 shows relief on the sides in the form of

ground out incisions. The left side, shown in Figure 47, is the best preserved. The right side is similar but has been scaled and broken somewhat. In the back there is a great deal of erosion, but Figure 48 shows what is faintly remaining in terms of incised design. It might be noted that the handling of the feather patterns in the rear of the duck recalls the back of colossal head La Venta 4. No decorative elements are present except for those which are probably associated with feathers or the one scroll-like frontal pattern on the left side.

DISCUSSION

The two stone ducks have little in common stylistically, aside from the fact that both are ducks. No date may even be guessed for the Laguna de Los Cerros piece. The San Lorenzo monument is probably from the San Lorenzo Phase. The exit hole in its side is the same size as the stone drain stones from that site, suggesting that Monument 9 may have been in some way connected to the hydraulic system there. If so, it would confirm a San Lorenzo Phase date.

MISCELLANEOUS ANIMALS

A number of miscellaneous animal representations appear in the Olmec corpus. Most of them are neither very large nor very well made, suggesting once again that they were not of particular importance.

Altar 7, La Venta (Drucker 1952: Pl. 65)

Drucker (1952: 184) describes one certain owl's head, and one other probable one, both in low relief, on Altar 7, La Venta. They were somewhat difficult to discern when Drucker wrote and are even more so now, due to increased erosional damage to the monument.

Stela 3, La Venta (Stirling 1943b: Pl. 35)

At the very top of this piece, in low relief, are "two probable aquatic saurians that look like alligators, one of which has the rattles of a rattlesnake at the end of his tail" (Heizer 1967: 30). The piece is eroded and no more detail is available.

Monument 20, La Venta (Drucker, Heizer, and Squier 1959: Pl. 50)

Monument 20 from La Venta is a possible cetacean or whale. It is 183 centimeters long, 56 centimeters wide and 39 centimeters thick. It has been adequately described and drawn in Drucker, Heizer and Squier (1959: 200). The piece has been roughly shaped and smoothed to its present form, then incised with 1 centimeter deep incisions. Drucker, Heizer and Squier (*Ibid.*) point out that the piece may be non-Olmec; however, there is some precedent for marine art at La Venta and other Olmec sites, and the Olmecs were probably familiar with creatures of the sea.

Monument 63, La Venta (Williams and Heizer 1965: Pl. 2d)

Monument 63, La Venta, is a column with a low relief carving of a man and a large reptile, perhaps an alligator or a fantastic dragon (cf. Clewlow and Corson 1968; Williams and Heizer 1965: 19). The piece is badly worn and difficult to discern. It is shown in Figure 49.

Monument 27, San Lorenzo

Coe (1968a: 70) mentions the existence of this piece, described as an armadillo figure. It is unillustrated.

Monument 43, San Lorenzo (Coe 1968a: Fig. 7)

Monument 43 from San Lorenzo, known as La Avispa or the Insect, is a fantastic eight-legged figure in basalt (Coe 1967a). It has been described as either an insect or arachnid. Four legs appear on either side, bifurcate at the bottom for 3 centimeters. The head has a drilled eye on either side. The upward projecting portion of the back has a circle of 10 centimeters diameter in raised relief in its center. This circle has six drilled holes on the left side and five on the right side contained within it. The top of the piece has been broken off with a sharp fracture and a possible drilled hole, quite small, appears in the center of the breast. Otherwise, the piece shows very little damage. The piece is 41 centimeters high, 35 centimeters long.

Monument 58, San Lorenzo

This piece has yet to be fully described, but is mentioned by Beverido, who calls it a relief of a large fish (Beverido 1970a: Appendix I).

Chalcatzingo Reliefs

Two of the Chalcatzingo reliefs depict strange animals. The first, Relief VIII, has been described by Grove (1968b: 487) as "a lizard or other reptilian creature with a scroll element issuing from its mouth." Agreement is lacking on this, however, and others have called it a "fantastic animal, dog or rabbit" (Guzman 1934: 244), or a fish (Cook de Leonard 1967: 73). The other, Relief V, is either a "stylized reptile" (Gay 1966: 60) or a "composite animal, combining traits of the serpent and crocodile" (Grove 1968b: 489). These two creatures are shown in Figures 50 and 51.

DISCUSSION

Dating of the miscellaneous animals is made difficult by the fact that there is no stylistic comparability between pieces and no seriation is possible. San Lorenzo

Monument 43 is datable to the San Lorenzo Phase and the animals on Altar 7 and Stela 3, La Venta, may date from La Venta Phase IV, but all other examples are, with present information, not datable. Those animal pieces which have been tentatively dated are summarized in Table 16.

End Note

In December of 1973 I was informed by Dr. Gordon Ekholm that he had visited La Venta in February of 1956 and had seen and photographed Monument 56 shortly after it had been uncovered by a bulldozer. At that time the entire face had been freshly fractured off and was not recovered. Thus, the face which I have described is no doubt a later and somewhat fanciful reconstruction. Although I have inspected the piece personally, I failed to detect the reconstruction, as have several other researchers. I am grateful to Dr. Ekholm for this disclosure.

CHAPTER XI

BOXES, BOWLS AND CYLINDERS

The Olmec sculptural corpus is an exceedingly heterogeneous one and includes a number of objects which may have been intended for a utilitarian function at the time of their manufacture. Bowls, boxes and cylinders fall into this category. It is difficult to say if all these pieces were used in some actual function. The bowls from La Venta were apparently an integral part of the stone drain system, although we are uncertain of their exact use. We can assume that the San Lorenzo bowl was used in a like fashion. It is also quite simple to speculate that the stone boxes could have actually served in a number of capacities. It is more difficult to guess the function of the cylinders, which, from their downright homeliness, could hardly have been purely decorative additions to any site. If, indeed, they were functional objects, it remains for an in situ discovery to one day reveal their purpose. It should be pointed out that while these pieces may not be particularly appealing to art fanciers (with the exception of San Lorenzo Monument 9), they were nevertheless carved with delicate skill and craftsmanship, and are certainly worthy of scholarly attention.

BOWLS

Monument 45, La Venta (Clewlow and Corson 1968: Pl. 12b)

This is a large stone bowl, 44 centimeters high, with sides and bottom 8 centimeters thick. Beside it in situ was recovered a 3 inch thick sandstone disk with a diameter of 42 inches, presumably a lid for the bowl (Heizer, Graham, and Napton 1968: 146). No decorative motifs appear on the bowl or its lid.

Monument 55, La Venta (Clewlow and Corson 1968: Pl. 12e)

This is an incomplete stone bowl, slightly subrectangular in shape, which stood 29 centimeters high and had a 58 centimeter diameter. The walls and bottom are 9 centimeters thick. The piece is plain, but well made (Clewlow and Corson 1968).

Monument 9, San Lorenzo (Stirling 1955: Pls. 17b, 18)

Monument 9 of San Lorenzo is a stone bowl which has been described by Stirling (1955: 13-14) as:

"...in the form of a swimming duck, with the two webbed feet projecting in front under the breast. Wings are carved in high relief on the sides. On the center of the breast carved in relief is a quacking duck with open beak and flapping wings. On

each side is a glyph which may represent rain or water. It consists of a wavy band from which hang three long and two short elements. A third glyph exactly similar but somewhat larger is shown on the rear. The top is hollowed into a basin but the upward projecting sides are broken off all around. On the right side a U-shaped opening has been cut through the wing, and a round hole in the bottom may have served as a water drain. The base is smooth and perfectly flat."

In addition to Stirling's information, the following data may be useful. The bowl has a rough length of 94 centimeters, and a width of 89 centimeters, with a height of 46 centimeters. Its diameter is roughly 98 centimeters. The depth of the center is 14 centimeters. The thickness of the sides is 8 centimeters at the top and 13 centimeters at the bottom. The piece was apparently manufactured by hammer dressing. The hole Stirling mentions is 13 centimeters wide on the outside and 8 centimeters wide on the inside; thus, it was apparently made by conically drilling from the outside. The hole which is cut in the right wing as a water outlet is well worked and smoothed over with hammer dressing. Interestingly enough, however, this hole appears to have been added after the full completion of the wing, as one may see where the smoothing of the opening is ground over the earlier wing relief. Thus, it may have been connected with a later or secondary use. This usage may be suggested by the fact that the shaped opening measures 23 centimeters high and 30 centimeters across, and is almost exactly the size of the drain stones at San Lorenzo (Ray Krotser, personal communication). This usage of the bowl in connection with drains would correspond to the stone bowls which were found in rough association with drains in the 1968 La Venta excavations.

DISCUSSION

As was noted in the preceding chapter, Monument 9 of San Lorenzo probably dates from the San Lorenzo Phase. The two bowls from La Venta are probably nearly as old, as they are both associated with a hydraulic system at La Venta which is strikingly similar to the one at San Lorenzo and quite probably of the same age. Since this is not certain, however, I will not assign them a precise date. It is certain that they were associated with Olmec material and therefore must be at least as old as the end of La Venta Phase IV or 600 B.C.

BOXES

Monument 28, San Lorenzo

This piece is mentioned by Coe (1968b: 70) as half of a stone box "broken longitudinally." No other data is available on it.

Stone Box from Matacapan (Clewlow 1972: Pl. 11)

The Matacapan monument is a stone box 103 centimeters long, 67 centimeters wide and 42 centimeters high. It has three carved circles inset in a rectangular frame on either side and one circle carved on either end. Little is known of its provenience. The hole in the center of it is 17 centimeters deep. It is presently in the museum at Xalapa.

DISCUSSION

Stone boxes occur commonly throughout prehistoric Mesoamerica and, without provenience data, it is impossible to date these two examples. It should be pointed out, however, that if these two simple stone boxes are of Olmec vintage, they make logical antecedents (stylistically) for the intricately carved stone boxes which are characteristic of early Post-Olmec sculpture at Tres Zapotes. There is a possibility that the boxes, like the bowls, were used in connection with the hydraulic system. In 1969, at the Maya site of Sayil, I saw a modern Maya farmer utilize a pre-Columbian stone box as a storage tank for water drawn from a cistern.

CYLINDERS

Monument 14, La Venta (Drucker 1952: Pl. 12b)

This piece has been described by Drucker (1952: 71) as a "well-made stone cylinder." It is 51 centimeters high, 38 centimeters in diameter, with both ends flat. "Through its center ran a finished circular hole 9 cm. in diameter, plugged at its lower end by a carefully fitted plano convex stone disc 5 cm. thick. The function of this object is uncertain; it may have been an offertory cylinder." (Ibid.)

Monument 32, La Venta (Clewlow and Corson 1968: Pl. 9e)

"This is a cylindrical stone drum of welded tuff or ignimbrite, and is hammer dressed all around. It measures 64 cm. high and is 33 cm. in diameter. Two drilled pits with dimples appear on the front and side of the piece" (Clewlow and Corson 1968: 173).

Monument 43, La Venta (Clewlow and Corson 1968: Pl. 11e)

Clewlow and Corson (1968: 175) describe this as follows:

"This piece, the so-called 'mushroom stool,' is a short cylindrical column with a marked widening of the platform at one end. This expanded top gives the piece its character as a seat or stool. Made of hornblende andesite, the monument is 41 cm. high and has a maximum diameter of 30 cm. No design or incision is present, but one drilled pit with a dimple is apparent on the upper surface near the center."

Monument 39, San Lorenzo

Monument 39 of San Lorenzo is a large stone tube, drum or cylinder. It is broken in six parts; however, they may be fitted together to form a complete piece. The piece is 55 centimeters high, 39 centimeters in diameter, with walls of 5 centimeters thickness. The cylindrical opening goes entirely through the piece. The fractures are all sharp.

DISCUSSION

With present information it is impossible to identify either the function or the age of Olmec stone cylinders. It is likely that the hollow ones may some day be positively associated with the drain systems. The solid cylinders from La Venta are more difficult to assess. There is a possibility that they were never completed and actually represent an early stage in the manufacture of a more complex monument.

CHAPTER XII

ALTARS

There are 22 monuments in the known Olmec corpus which may be classified as altars. Twelve of these are from San Lorenzo, seven from La Venta, two from Laguna de Los Cerros, and one from Potrero Nuevo. Of those which are complete enough for analysis, a general adherence to a formal concept is definitely maintained. Within this definite form, a wide variation of size and motif is found. However, in no case is the form violated beyond recognition. In this sense, altars are the most characteristic category of Olmec monument.

ALTARS FROM LA VENTA

All seven La Venta altars have been well described in other reports and I shall here only summarize important facts about each.

Altar 1, La Venta (Stirling 1943b: Pl. 36)

This is a large rectangular stone block some 2.92 meters long, 2.08 meters wide and 1.88 meters high. It is "considerably mutilated" (Stirling 1943b: 52-53), but may still be characterized as a large face in front, with a branching hair or headdress on either side and a hairdress in back. An irregular hole runs beneath the main bulk of the piece, with one opening in the mouth area in front. Although rectangular, the piece assumes the general form of a gigantic head.

Altar 2, La Venta (Stirling 1943b: Pl. 38)

This is a rectangular block, 1.35 meters long, 1.29 meters wide and 99 centimeters high, with a seated figure holding a probable baby in its lap carved in the frontal arched niche (Ibid.: 53). Two of the side panels are smoothed, but with no decoration, while the third is rough, probably unfinished.

Altar 3, La Venta (Drucker 1952: Figs. 51, 56, 57, 69)

This is also a rectangular stone block with a high relief seated figure in front in a niche. On the left front panel is a low relief standing figure, while on the left side panel are two seated figures, also in low relief. The right side is broken away. The monument is 1.68 meters long, 1.6 meters high and 1.6 meters wide (Ibid.: 53-54).

Altar 4, La Venta (Stirling 1943b: Pls. 37, 38)

Altar 4 is the largest of the La Venta tabletop altars, with a base measuring 2.57 meters long and 1.83 meters wide, and the top being an additional 92 centimeters in length. The entire monument is 1.6 meters high (Ibid.: 54-55). On the front is a figure seated in a niche and several low relief designs, including a jaguar face panel on the projecting band above the figure. A low relief seated figure is on the right side; the back is plain; and the left side has been defaced and has two deep rectangular niches sunk into it, apparently over a low relief which was once there. An apparent rope in high relief extends from the low relief seated figure on the right side to pass beneath the frontal niche figure.

Altar 5, La Venta (Stirling 1943b: Pls. 40, 41)

This is another large rectangular stone block with a high relief seated figure with a baby on its lap carved in the frontal niche. Low relief panels are present on either end, while the back is plain. Some mutilation has been sustained, but the piece is very close in style and composition to La Venta 4. This monument is 1.55 meters high (Ibid.: 55-56).

Altar 6, La Venta (Stirling 1943b: Pl. 38)

This is a smaller rectangular stone block, with a high relief figure seated on a slightly projecting ledge in front. The sides and back are plain panels. The piece is 1.15 meters high, 1.38 meters long and 87 centimeters wide. It is the same formal concept as the other large altars, but exhibits inferior sculptural workmanship (Ibid.: 56).

Altar 7, La Venta (Drucker 1952: Pl. 65)

This is a large boulder, minimally shaped, with low relief carvings of men and animals all around the exterior surface. There is also a large bearded face in high relief, recessed into the frontal niche (Drucker 1952: 182-184). The piece is very roughly rectangular in shape, measuring 110 centimeters high, 115 centimeters long and 145 centimeters wide.

ALTARS FROM SAN LORENZO

Twelve of the numbered monuments from San Lorenzo are called altars in the literature. Of these, only three (Mons. 14, 18, and 20) are complete and adequately published to permit comparison. A brief description of each of the twelve pieces, however, will be given.

Monument 14, San Lorenzo (Stirling 1955: Pls. 21b, 22)

Monument 14 of San Lorenzo is a large tabletop altar bearing remarkable similarity to La Venta Altar 4. The San Lorenzo monument has a seated niche figure on the front, with low relief carving on each side. One of the sides has deep rectangular niches carved into it and both low reliefs are damaged. The back has been broken off and worn down. What may be a rope passes under the central figure in front. The monument is 4.38 meters long, over 1.5 meters wide and 1.8 meters high (Stirling 1955: 15-16).

Monument 16, San Lorenzo (Medellin 1960: Pls. 2, 3)

Monument 16 of San Lorenzo is a large round schist stone, 2 meters in diameter and 30 centimeters high. It is badly eroded, making interpretation of the low relief on top impossible. Medellin (1960: 76-77, Pls. 2, 3) has called the piece an "altar," but the published data on this piece, also called the "Piedra del Sol," is insufficient for comparison with other monuments in this category. It might be better classified as a low relief panel.

Monument 18, San Lorenzo (Coe et al. 1966: Foto 24)

Monument 18 of San Lorenzo is a very unusual atlantean altar (Coe et al. 1966). The piece is damaged badly and is presently 59 centimeters in height, 120 centimeters long and 73 centimeters wide. A top view of its unusual shape is shown in Figure 52. At least two high relief atlantean figures originally appeared on this piece and their positions are also shown in Figure 52. One of these has been completely destroyed, with only one incised foot still visible. The other is a standing figure with the head in three-quarter profile. Unfortunately, the figure is broken off at the top. The original shape of the altar itself is impossible to discern because the top and the long side have been sheared away. In all probability, however, it was some variation on a rectangle.

Monument 20, San Lorenzo (Coe et al. 1966: Foto 26)

Monument 20 of San Lorenzo is a large rectangular block with a badly mutilated seated figure emerging from a niche holding a baby (Ibid.). It is 2 meters wide, 1.4 meters high and 1.8 meters long. It has been severely mutilated all around, so it is impossible to state whether or not the sides contained low relief.

Monument 29, San Lorenzo

Coe (1968a: 70) has mentioned this piece as a "broken half of plain round altar." No other information is presently available.

Monuments 32, 33, 36, and 38, San Lorenzo

Coe (Ibid.: 70-71) has briefly mentioned these monuments as plain fragments of altars. No other information is available in published form.

Monument 48, San Lorenzo

This piece is "half of broken circular altar" (Ibid.: 71).

Monument 51, San Lorenzo

Monument 51 of San Lorenzo is an enormous plain rectangular block, "deeply scored with axes, probably to remove carved decorations" (Varian Associates 1968: 8-9). The piece is about 1 meter high, 2.10 meters long and 1.80 meters wide (Beverido 1970a: 157).

Monument 60, San Lorenzo (Bruggemann and Hers 1970: Fig. 22)

Monument 60 of San Lorenzo is a large plain fragment of a rectangular altar. One of the remaining sides is dressed smoothly. The piece now measures 110 by 134 by 140 centimeters, and was found in a culturally sterile level by magnetometer (Bruggemann and Hers 1970: 18).

ALTARS FROM LAGUNA DE LOS CERROS

Two small altars have been found at Laguna de Los Cerros. Although not as large as altars from other sites, they nevertheless faithfully represent the emerging niche figure concept.

Monument 5, Laguna de Los Cerros (Medellin 1960: Pl. 19)

Monument 5 of Laguna de Los Cerros has been described by Medellin (1960: 90-92). It is a small, basically rectangular stone block 61 centimeters high, 85 centimeters long and 58 centimeters wide, with a broken seated figure emerging from a niche in front. The side and end panels, although somewhat damaged, appear to have been plain. A portion of the underneath of the piece has been hollowed out and ground smooth.

Altar Block with Seated Figure, Laguna de Los Cerros (Pl. 6)

This unpublished piece is now badly eroded, but was once a well made smallish altar with a seated figure carved on the front in the usual niche-figure position. No niche, however, is present. The piece is broken on both sides and at the bottom of the carved figure. At one time this monument had an overhanging tabletop, such as is displayed on several of the other Olmec altars. The piece is presently 82 centimeters high, 72 centimeters wide and 51 centimeters long. The sides were probably plain.

Monument 2, Potrero Nuevo (Stirling 1955: Pls. 21a, 23)

Monument 2 of Potrero Nuevo is a rectangular stone block 92 centimeters high, 128 centimeters wide and 66 centimeters long. Two fat atlanteans, both standing, appear in high relief on the front. Some low relief appears on the front and on each end. The back panel, however, is plain. The piece has been described by Stirling (1955: 19).

DISCUSSION

Of the 22 monuments which have been called altars in the literature, only 13 are known in sufficient detail for comparative analysis. These 13 altars include all seven La Venta pieces, the two Laguna de Los Cerros pieces, the Potrero Nuevo piece, and three of the San Lorenzo pieces (Mons. 14, 18, and 20). Table 17 is a trait comparison of some of the more significant traits in these pieces. A number of generalities emerge, even though the list of comparable traits is relatively meager.

First, all of the 13 pieces are more or less rectangular and, with the exception of Altar 7, La Venta, they appear to have been deliberately fashioned in that shape. In this respect it is worth suggesting that the three so-called round "altars" from San Lorenzo (Mons. 16, 29, and 48) are probably a totally different category of monument from those under discussion here and that it is perhaps best, to avoid confusion, if they in future studies are referred to by some other term. Secondly, it will be noted that 12 of the monuments exhibit a "tabletop" effect, that is, a flattening and/or horizontal overhang of the uppermost portion of the rectangular block. Thus, the term "tabletop altar," which has been applied to these monuments, is quite appropriate.

The most common theme in these altars is that of the frontal seated figure, portrayed as emerging from a niche. This appears in nine of the pieces and, it will be recalled, in at least one of them (Mon. 5, Laguna de Los Cerros), the altar body behind the niche is actually partly hollowed out. At least six of these seated figures appear to hold an object (babies are held by the figures on Altars 2 and 5, La Venta, and Mon. 20, San Lorenzo; ropes are held by the figures on Altar 4, La Venta and Mon. 14, San Lorenzo; a cestus is held by the figure on the altar block, Laguna de Los Cerros). Others may have held objects, but are too damaged to be certain. Altar 7, La Venta, retains the concept of the niche, but has a full head or face emerging from it instead of a frontal seated figure. Two of the monuments, Monument 18 of San Lorenzo and Monument 2 of Potrero Nuevo, have atlantean themes, with standing figures in high relief depicted as supporting the tabletop portion of the sculpture. These two themes--the niche and the atlantean--encompass all the altars except Altar 1 of La Venta, the stylized gigantic mask and head. It is interesting, however, that this piece also has a hollowed section beneath the main bulk of the monument.

Low relief panels are present on six of the altars in varied forms. In five cases the low reliefs are representational scenes of seated or standing human figures (Altars 3, 4, 5, 7, La Venta; Mon. 14, San Lorenzo). In two other instances, there are simple abstract portrayals, probably feline motifs (Altar 4, La Venta; Mon. 2,

Potrero Nuevo). In five of the altars, the panels where low relief appears have been flattened smooth and then carved. Altar 7 of La Venta is atypical in this respect because its low relief scenes are carved on the natural exterior of the rock without prior preparation in the form of smoothing or flattening. Six of the altars have side and end panels which are either blank or destroyed. Only Altar 1 of La Venta has no panels which could have been utilized for low relief carving, the entire surface being consumed in high relief. Monument 14 of San Lorenzo and Altar 4 of La Venta are of great interest because each has a low relief carving on one side which was erased or smoothed over. This raises the fascinating possibility that the scenes on the low relief panels of altars were periodically altered, replaced, or removed, much like billboards on today's highways. This of course would mean that the low relief scenes now present on the altars could be of radically different age than the altar block itself or its high relief figures, a possibility which, on stylistic grounds, is not unlikely.

For a number of reasons, altars may be considered the most characteristic Olmec sculptural monuments. Most of the important Olmec motifs are present in the altars in one form or another. This includes the prominent use of seated figures, the use of standing figures, and the occurrence of a large head without a body (Altar 1, La Venta). Low relief scenes are also present in representational as well as abstract form, with human as well as feline features portrayed. Several important characteristics noted in other sculptural categories (these are actually qualities which help define the Olmec monumental style as a whole) are present in altars as well, even though the sample is of relatively small size. This includes the presence of pairs of sculptures which are conceptually nearly identical, but are of radically different size. In this case, I refer to Monument 5 of Laguna de Los Cerros and, say, Altar 5 of La Venta. This same characteristic was seen in the small colossal heads of Laguna de Los Cerros and the large colossal heads from other sites and may also be seen in the cat from Las Choapas and Monument 37, the crouching cat of San Lorenzo. Within the altar category may also be seen pairs of monuments which were probably carved by the same master sculptor. Altar 4 of La Venta and Monument 14 of San Lorenzo certainly show this quality, which has also been noted for various pairs of colossal heads, stelae, and seated figures. As Table 18 indicates, the altar may be the type of monument with the longest temporal duration, showing the greatest seriation variation of any other Olmec sculptural form. Lastly, I might point to the tendency toward experimentalism noted in some of the seated and standing figure schools, which exists in the altars in such pieces in particular as the Potrero Nuevo altar and Monument 18, the oddly shaped atlantean altar from San Lorenzo.

It is unfortunate that the term "altar" has been so firmly fixed to this category of sculpture when, in fact, there is no evidence that they functioned as altars. At this point, however, the introduction of any new term would only serve to further confusion. Grove (1973) has recently demonstrated that Altars 4 and 5 of La Venta may well have been thrones and this would seem a logical function for a number of the large "tabletop" pieces.

Chronologically, the altars are difficult to deal with, largely due to the fact that a number of features within the same monument can be temporally independent. That is, the large block of stone may have been shaped during one period and the high relief figures and low relief scenes added separately at quite different times. That this may in fact have occurred is suggested by all the plain altar stones found at San Lorenzo, and by the partial removal of low relief on Monument 14 at San Lorenzo and Altar 4 at La Venta. Nevertheless, I have attempted a rough chronological outline of the altars, summarized in Table 18. As may be seen, the two Laguna de Los Cerros altars are placed earliest in the sequence. This placement is based on the affinity of their high relief seated figures to the "school" of three dimensional seated figures from that site, discussed above under Seated Figures, and on the close similarity in size and apparent simplicity of the altar blocks themselves on both of these pieces, neither of which show any suggestion of having been carved in low relief. They may have been among the first altars carved and probably date from the equivalent of the San Lorenzo Phase A or between 1150-1000 B.C. Next come Altars 3, 4, and 5 of La Venta, and Monuments 14 and 20 of San Lorenzo, again grouped together on the basis of stylistic similarity of the high relief figures, close similarities in the form and stylistic execution of the blocks themselves, and virtually identical patterns of defacement on two of the monuments, Altar 4 of La Venta and Monument 14 of San Lorenzo. Ceramic associations obtained during excavation of Monument 20 at San Lorenzo confirm the placement of these pieces at prior to 900 B.C. or during San Lorenzo Phase B. Coe (1970: 26) places San Lorenzo Monument 18 in this temporal period and, if he is correct, Potrero Nuevo Monument 2 must surely on stylistic similarities be of the same age. The angular, blocky figures on Altars 2 and 6 of La Venta, as well as the awkwardly proportioned dimensions of the stone blocks, indicate a later placement for these two monuments. I have placed them at prior to 700 B.C., but after 800 B.C., which removes them somewhat in time from the better carved seated figures of both the San Lorenzo and La Venta schools, which may be amalgamated in some of the altars. Lastly, I have placed Altars 1 and 7 of La Venta at just prior to 600 B.C. or before the end of La Venta Phase IV. This placement is based on the fact that they stress relief carving, particularly low relief, which probably was latest in the sculptural sequence, and on the absence of seated figures on either piece. Altar 7 in particular shows many stylistic similarities to the latest form of Olmec low relief carving (see below). Moreover, both these late pieces are covered with relief and are thereby polar in a seriation sense to the other altars, many of which emphasize blank or empty panels. As a final speculation, I have added the note that I feel the low relief carvings on Altars 3, 4, and 5 of La Venta, Monument 14 of San Lorenzo, and Monument 2 of Potrero Nuevo were probably added just prior to the end of Phase IV at La Venta and at about that time, or perhaps during the Palangana Phase, at San Lorenzo. It is unfortunate that none of the above examples of low relief carving were found in a stratigraphic situation which would prove or disprove this opinion. It is worth pointing out, however, that none of the altars from San Lorenzo which were found for certain in a San Lorenzo Phase deposit have any signs of low relief carving on panels which could have been thus used. One final point of interest is that both Altar 2 of La Venta and Monument 20 of San Lorenzo were recovered in a buried position with the seated figure facing up. This suggests that a ritual burial procedure may have been practiced on at least some of the altars.

CHAPTER XIII

LOW RELIEF PANELS

Low relief carvings occur in a wide variety of contexts in Olmec monumental sculpture. Some are on huge free standing stone slabs like the La Venta stelae; others are carved in living rock like those at Chalcatzingo; and still others appear on portions of other monuments such as altars. A number of fragmentary monuments also exist with portions of low relief carvings on their surfaces. Whatever the context, the low relief carvings usually appear in either a studiously composed scene or on a specially prepared surface. In either case, they may easily be sorted into units which occupy one plane or consist of one scene. The term "panel" may be applied in either case and, in order to eliminate the connotative confusion implicit in such terms as "stela," I shall use the designation "low relief panel" to apply to any example of Olmec low relief carving. I agree with Heizer (1967: 27) that the term "stela" is improper if strictly applied to the La Venta monuments and would also dispute Stirling's (1965: 723) contention that the La Venta pieces may be connected with the development of the Mesoamerican practice of stela erection which was so commonly practiced in later times.

Individual personages, such as seated figures, cats, etc., on monuments which I was able to personally examine have been discussed as separate entities under appropriate headings above and will not be treated in great detail in this chapter. Rather, this chapter will concern itself with a thematic description and analysis of the low relief panels. Descriptions of each will be no more than brief summaries of accounts which are published elsewhere. I shall attempt to segregate the panels according to whether the carving, if abstract, is simple or complex. While this may seem to be a rather arbitrary dichotomy, a brief perusal of the abstract panels will reveal that this is not the case. No continuum exists and it is quite easy for even an untrained observer to make such categorical distinctions. I have also segregated the low relief panels on the basis of whether one or more persons are portrayed. This distinction is of use when comparing low relief with full round carving. A further distinction is made with representational scenes between what I have called symbolic and historical events. Here I have followed Heizer's suggestion for Stelas 2 and 3 of La Venta that in each case "some quite particular event or situation involving actual persons was being depicted" (1967: 38). I shall refer to any such composition which shows one or more persons engaged in any sort of event which could have actually taken place as having historical content. Any scene which depicts one or more persons in a scene which certainly did not occur, such as the apparent dragon devouring the human in Relief V at Chalcatzingo, I shall refer to as having symbolic content. Those fragments which are too demolished for certain categorization are classified as indiscernible.

LOW RELIEF PANELS FROM THE OLMEC HEARTLAND

In raw numbers, the major portion of low relief panels come from the Olmec heartland, most of these from La Venta. As will be seen, however, a great many

of these are broken or defaced and therefore are of minimal use in meaningful comparison with full panels from the heartland or from outside of it.

Monument 6, La Venta (Stirling 1943b: Pl. 47)

This is the sandstone sarcophagus with the low relief jaguar carved in abstract style (Stirling 1943b: 59).

Monument 13, La Venta (Drucker 1952: Pls. 4, 63)

The low relief panel on this monument depicts a striding human male with a large headdress carrying a flag or pennant. A human footprint and three glyph-like elements are also present (Drucker 1952: 180-182).

Monument 15, La Venta (Drucker 1952: Pl. 64)

This monument, in two fragments, is a probable low relief carving of a relatively complex abstract jaguar mask (Ibid.: 182).

Monument 19, La Venta (Drucker, Heizer, and Squier 1959: Pl. 49a)

This is the remarkable "Rattlesnake monument" depicting a realistically carved human figure with headdress and cape seated close to or upon an enormous plumed rattlesnake (Drucker, Heizer, and Squier 1959: 197-200).

Monument 22, La Venta (Drucker, Heizer, and Squier 1959: Pl. 51b)

This consists of two green schist fragments carved with an elaborate, apparently abstract low relief design (Ibid.: 202).

Monuments 25, 26, and 27, La Venta (Drucker, Heizer, and Squier 1959: Pls. 53, 60, 54)

All three of these monuments are large slabs carved with low relief panels depicting highly abstract, complex jaguar mask representations (Ibid.: 204-209).

Monument 33, La Venta (Clewlow and Corson 1968: Pl. 9f)

Monument 33 of La Venta is a fragment of a very well worked piece. However, it is difficult to tell exactly what it represented. It is probably a low relief panel fragment. It is 41 centimeters long, 39 centimeters wide and 32 centimeters thick. The face is nicely worked and smoothed. It is difficult, however, to make any sense whatsoever from the design. Broken on all four sides, worked on the face, flattened roughly, but uncarved on the back, this piece will remain a mystery until some companion portions of the same monument are recovered (Clewlow and Corson 1968: 173).

Monument 39, La Venta (Clewlow and Corson 1968: Pl. 10f)

Monument 39 of La Venta, although only a fragment, shows two human hands positioned against the chest, with some parts of the forearms and biceps present. It appeared to be part of a representation of a single individual (Clewlow and Corson 1968: 174).

Monument 42, La Venta (Clewlow and Corson 1968: Pl. 11d)

This is a fragment of a low relief panel in which "a hand, part of an arm, and possibly part of the leg of one human figure are clearly visible, and part of the body and leg of another may be present" (Ibid.: 175). The scene appears to have been carved quite realistically.

Monument 58, La Venta (Clewlow and Corson 1968: Pl. 13b)

This is a fragment of a low relief panel with only "the lower lip and part of the fangs of a stylized jaguar mask" remaining (Ibid.: 178). The composition is abstract and was probably complex.

Monument 61, La Venta (Clewlow and Corson 1968: Pl. 13d)

Monument 61 of La Venta is a round stone slab on which a single human figure appears to be seated cross-legged. He apparently wears a large headdress, but the low relief is so eroded as to make further interpretation impossible (Ibid.: 179).

Monument 63, La Venta (Williams and Heizer 1965: Pl. 2d)

Monument 63 of La Venta is a badly eroded basalt shaft with a low relief carving of a "man hugging a monster" (Pellicer 1959). It is also quite possible that the creature portrayed is an alligator or crocodile being carried by a human. For this reason, I have called the scene an historical event.

Monument 66, La Venta (Clewlow and Corson 1968: Pl. 14b)

Monument 66, La Venta is a badly scaled and very sharply fractured slab with nearly obliterated remains of geometric lines done by both incising and low relief on the front. It is 103 centimeters in height, 172 centimeters in length and has a thickness of 37 centimeters. The bottom, the ends and most of the back are scaled or fractured off. Figure 53 shows what remains of the incised geometric design on the front panel.

Monument 69, La Venta (Clewlow and Corson 1968: Pl. 14d)

This is another small fragment of a once-larger low relief panel. The remaining design is indiscernible (Clewlow and Corson 1968: 180).

Monument 71, La Venta (Clewlow and Corson 1968: Pl. 14f)

A stylized jaguar mouth and nose are executed in low relief on the front of this large head-shaped stone (Ibid.: 180-181). Seven small human faces appear in low relief around the sides and top of this piece.

Altar 3, La Venta (Drucker 1952: Figs. 51, 56, 57, 69)

On the front of this altar is a standing figure, quite possibly a rare representation of a female, in realistic low relief. On one of the ends, two additional low relief seated figures are depicted as "apparently engaged in lively discussion" (Stirling 1943b: 53-54).

Altar 4, La Venta (Stirling 1943b: Pls. 37, 38)

On the right end of Altar 4, a single seated figure is carved quite realistically in low relief.

Altar 5, La Venta (Stirling 1943b: Pls. 40, 41)

On each end of Altar 5 are two seated figures, possibly priests, carved realistically in low relief. Each figure holds a "nude infantile figure in amusingly realistic positions" (Stirling 1943b: 55).

Altar 7, La Venta (Drucker 1952: Pl. 65)

At least two standing figures and a number of animals appear in badly eroded and nearly indiscernible low relief on La Venta Altar 7 (Drucker 1952: 182-184).

Stela 2, La Venta (Stirling 1943b: Pl. 34)

Stela 2 of La Venta has been described and analyzed in great detail by Heizer (1967: 32-38). Briefly, the low relief carving depicts a central male figure in full ceremonial regalia standing in a face-on position, surrounded above and behind by six lesser or smaller attendants.

Stela 3, La Venta (Stirling 1943b: Pl. 35)

Heizer (1969) has also analyzed and described Stela 3 of La Venta in detail. The scene depicted on this low relief panel is basically two large and elaborately attired individuals in profile, facing each other, and also surrounded by six small and less well carved attendant figures.

Monument 16, San Lorenzo (Medellin 1960: Pls. 2, 3)

Monument 16 of San Lorenzo is a rounded stone slab some 2 meters in diameter with low relief carving on one face. This face is badly eroded, and it is only possible to see the remains of what may have been bird wings and some human footprints (Medellin 1960: 76-77).

Monument 21, San Lorenzo (Coe 1968a: Fig. 4)

Monument 21 of San Lorenzo is an oblong, box-like stone with a low relief carving on the bottom of a realistically yet simply conceived running canine figure (Coe et al. 1960).

Monument 30, San Lorenzo (Coe 1967a: Fig. 2)

Monument 30 of San Lorenzo is a low relief panel with a representation of a part-serpent, part-jaguar in profile (Coe 1967a). The carving is stylized to a simple degree of abstraction.

Monument 41, San Lorenzo (Coe 1967a: Foto 5)

Monument 41 of San Lorenzo is a large column with a low relief carving on one side. The carving is a most simple abstract rendition of a probable were-jaguar (Coe 1967b).

Monument 42, San Lorenzo (Coe 1967a: Foto 1)

Monument 42 of San Lorenzo is a smoothed column which is fractured off, but which still retains a low relief carving of a human forearm and hand. The carving is very simple, with no attempt at shading or modeling, and is little more than a raised relief with incised surroundings. Coe states that stratigraphically the piece is early and could be the oldest monument at the site (Coe 1967b: 4)

Monument 46, San Lorenzo

Monument 46 of San Lorenzo is a seat-like worked stone with a low relief panel of triangles and radiating lines within a circle apparent on one face. It is a well worked piece; however, the carving is difficult to see because the relief is so low on the worked face as to be practically invisible. The piece appears to have been hammer dressed all over. It is 36 centimeters high, 100 centimeters wide and 18 centimeters thick. The wall thickness of the piece varies between 6 and 20 centimeters. Figure 54 shows the low relief design present on the one face of the piece.

Monument 56, San Lorenzo (Beverido 1970a: Lam. 34)

Monument 56 of San Lorenzo is a large broken portion of a low relief panel on which may barely be seen traces of a jaguar attacking a man (Beverido 1970a: 182-184). The carving is realistically done in a very simple fashion.

Monument 58, San Lorenzo (Beverido 1970a: Pls. 120, 121)

This is a fragment of a low relief panel on which appears, again barely discernible, what Beverido feels is a large fish (Ibid.: 192). The reconstruction (Ibid.: Pls. 120, 121) shows the creature to be slightly abstract and very simple.

Monument 64, San Lorenzo (Bruggemann and Hers 1970: Fig. 28)

Monument 64 of San Lorenzo is a large disc-shaped slab, with a diameter of 2.60 meters, with faint low relief remaining on one face (Bruggemann and Hers 1970). These carvings are indistinct, but seem to be simple geometric designs. In many respects the piece recalls Monument 16 of San Lorenzo.

Monument 26, Laguna de Los Cerros (Medellin 1960: Pl. 29)

Monument 26 is the only known low relief panel from the site of Laguna de Los Cerros. It is fragmentary and bears the remains of what appears to be a very simple executed human figure, perhaps standing or walking (Medellin 1960: 95-96, Pl. 29).

The Alvarado Stela (Covarrubias 1957: Fig. 29)

The Alvarado stela (Covarrubias 1957) is a large five-sided column with low relief carving on two sides. The front side shows a bearded, barefoot standing human figure in profile. The right arm of this figure reaches out and around the column where, beneath it on another side, is carved a fat figure, seated with arms bound and outstretched toward the central figure. It is possible that the seated figure, which is the more Olmec of the two, represents a captive.

Stela of Cerro de la Piedra, Alvarado (Medellin 1960: Pl. 6)

This is a large stela of black basalt with a standing human figure carved in low relief on one face. The figure wears a necklace, a cape and an elaborate headdress (Medellin 1960: 78-79).

Stela 1 of Viejon, Actopan (Medellin (1960: Pl. 9)

The Viejon stela is a large low relief slab on which two large standing human figures are carved. The faces of both figures have been obliterated, but the right figure clearly wore an elaborate headdress, in addition to carrying a "cornstalk" staff in one hand. The right figure also is depicted as wearing a cape. The two figures are posed as if engaged in a meeting or a ritual, and are portrayed very realistically with no noticeable symbolism of posture or gesture. The stone used for the carving has several natural cracks and irregularities over which the low relief was placed with a minimum of smoothing or shaping. Medellin (1969: 79-82, Pl. 9) has published this piece.

Low Relief Column, Angel R. Cabada

A large basalt column from Angel R. Cabada, now in the museum at Xalapa, contains a very indistinct low relief carving which depicts a standing human figure with a large headdress. It is not possible to state for certain if the piece is an Olmec carving; however, the fact that it is on a natural column of basalt, similar to many found in Olmec sites, raises the probability that it is of Olmec vintage.

The Pilapan Reliefs (Medellin 1960: Pls. 10, 12)

At Pilapan Mirador, near Soteapan, Veracruz are two separate low reliefs, both carved in living rock, that appear to be Olmec. Both depict running animals, probably canines, and have been discussed above. They were published by Medellin (1960: 82-85) who feels they might be deer. Both are carved in a simple fashion. Other low reliefs appear in the same area, but all are crudely done and do not have any elements which would identify them positively as Olmec (Ibid.)

LOW RELIEF PANELS OUTSIDE THE OLMEC HEARTLAND

A number of low relief panels have been found outside the Olmec heartland as well as within it. These carvings are of particular interest because, with only two exceptions (the Chalcatzingo seated figure and the standing figure from Ojo de Agua), they are the only monumental sculptural art in the Olmec style from outside the heartland area. In all probability their wide distribution reflects an important event or series of events in the culture history of the Olmecs.

Chalcatzingo Low Relief Panels

The Olmec rock carvings in low relief at Chalcatzingo have been well described (Gay 1966; Cook de Leonard 1967) and subjected to considerable interpretive speculation (Cook de Leonard 1967; Guzman 1934; Grove 1968b). At least nine separate panels have been distinguished by Grove (1968b) whose nomenclature I shall follow below.

Relief I (Grove 1968b: Fig. 1)

Relief I depicts a seated human figure within a U-shaped, cave or horse-shoe element. The figure is elaborately attired and a number of scroll elements issue forth from the niche in which he is seated. A number of symbolic elements, including stylized rain clouds, rain drops, plants, a St. Andrew's cross, and several sets of concentric circles and dots also appear on the relief. Although the human figure is carved in a realistic fashion, the remainder of this relief is a rather complex abstraction subject to various interpretations (cf. *Ibid.*), all of a symbolic nature.

Relief II (Grove 1968b: Fig. 3)

Relief II depicts three standing figures and one seated figure, all human, and all carved realistically as wearing elaborate attire. A number of interpretations of this relief have centered around the symbolism of the phallic erection which is apparent in some reconstructions of the seated figure (Cook de Leonard 1967; Gay 1966; Furst 1965; Pina Chan 1955). Grove (1968b), however, has suggested that the figure does not have a phallic erection and is not bound, a view which apparently sees the event portrayed as more historical than symbolic in nature. I also prefer this view, as it is more in keeping with the marked lack of sexual symbolism in Olmec art.

Relief III (Grove 1968b: Fig. 4)

Relief III is probably a very simple, naturalistic representation of a feline animal licking an elongated object which may be part of a plant.

Relief IV (Grove 1968b: Fig. 5)

Relief IV appears to be two pairs of humans and jaguars. In each pair the jaguar appears to be "standing over the prostrate human figures" (Grove 1968b: 489), who appear to be dead. The jaguars have crosses in their eyes and the scene may thus be symbolic.

Relief V (Grove 1968b: Fig. 6)

Relief V is some sort of fantastic feathered reptile devouring a human being. The scene is obviously of symbolic nature.

Relief VI (Grove 1968b: Fig. 2)

This carving "represents an extremely well-executed squash vine" (Ibid.: 487).

Relief VII (Grove 1968b: Fig. 2)

Relief VII is too badly weathered for identification. It may have been some sort of abstract element.

Relief VIII (Grove 1968b: Fig. 2)

Relief VIII is a complex abstraction with some animal qualities. Grove (Ibid.) feels it may be "a lizard or other reptilian creature with a scroll element issuing from its mouth."

Relief IX (Grove 1968b: Fig. 7; Easby and Scott 1970: 79)

Relief IX is a highly stylized, complex abstract rendition of a jaguar face. The main part of this panel is the rectangular mouth which encloses the opening, in natural rock, to a small cave (Ibid.: 489-490; Easby and Scott 1970: 79).

Low Relief Panels at Las Victorias, Chalchuapa, El Salvador (Boggs 1950: Fig. 1; Bernal 1969: Fig. 34)

At the archaeological zone of Chalchuapa, El Salvador, there is a large boulder, found in the Las Victorias mound group, which has four low relief human figures carved in the Olmec style (Boggs 1950). All the figures are presumed to be male, three of them standing, one seated. Each figure is carved on a panel on each of the four sides of the roughly rectangular boulder. All are realistic. Boggs feels that the four figures, while conceivably constituting one scene, could have been the work of more than one sculptor, at more than one time (Ibid.: 90-91). Bernal (1969: 179) has stated that this group of carvings is the "most characteristically Olmec in the entire Pacific watershed."

Low Relief Panels of Padre Piedra, Chiapas (Navarrete 1960: Figs. 11, 12)

Near the site of Padre Piedra, Chiapas is a large stone slab with low relief carving on one side. The carving shows one standing human figure and another kneeling one, presumably an inferior. Unfortunately, the kneeling figure is badly damaged, and the head and left arm have been broken from the standing figure. This damage makes it difficult to positively identify the pieces as Olmec. However, the attire of the standing figure appears Olmec and the object held in its right hand is nearly identical to the two crescentic objects held by Monument 10 of San Lorenzo. Navarrete (1960: 10-11) has described the Padre Piedra slab.

Low Reliefs of Pijijiapan, Chiapas (Navarrete 1969: Pls. 2 - 5)

Navarrete (1969) has recently published descriptions of some very important relief carvings at Pijijiapan, Chiapas. These panels, like those at Chalcatzingo, are carved in outcrops of living rock. Although all appear somewhat damaged as the result of intentional mutilation, their Olmec characteristics may be easily recognized and the content of the scenes may be described. The first scene or panel consists of three standing figures in low relief. All are well attired and seem to be officials or dignitaries of some sort. Their faces are damaged. One of the figures (the right) seems to be engaged in speaking and faces toward the two other figures (the left). Navarrete calls this panel Stone 1 (Ibid.: Fig. 2).

Panel 2 consists of three persons, all standing, facing what appears to be a large tree (Ibid.: Fig. 3); it is on a separate rock from the first scene described above. Stone 2 also contains a large carving of a helmet-mask in profile, another human figure with the bottom portion worn away (Ibid.: Pls. 2-3), and a worked panel with what was probably a human figure barely discernible (Ibid.: Pl. 4).

A third rock at the site contains a large low relief iguana (Ibid.: Pl. 5).

Stela of San Miguel Amuco, Guerrero (Grove and Paradis 1971: Figs. 2 - 4)

A recently reported panel from San Miguel Amuco, Guerrero, has a low relief which "represents a standing human figure holding a thick staff-like object" (Grove and Paradis 1971). The figure wears a mask-headress, an abdomen wrap, and a cape, and the panel of carving also contains two apparent glyph-like elements.

Comments

A number of other low relief carvings from outside the Olmec heartland have been cited in the literature as being of Olmec artistic origin. Prominent among these are Stela 1 at San Isidro Piedra Parada (Thompson 1943) and Petroglyph 1 at Tonalá (Ferdon 1953). When these two pieces were discovered, the Olmec style had not yet been systematically defined and it was quite reasonable to tentatively note their Olmec qualities. Since then our understanding of the style has grown and so has our list of definitely Olmec low reliefs (above) from outside the heartland. Each new example of definite Olmec workmanship makes the Tonalá and Piedra Parada examples less convincing and less important, and it is probably best that they be removed from the Olmec classification. Thompson noted when he published the Piedra Parada piece that its "general style is reminiscent of that of Izapa" (1943: 101), and it is to that style group that I would now assign the piece. The Tonalá petroglyph, depicting a monkey face, may

appear Olmec in contrast to other carvings from the site, but contains no elements which are exclusively Olmec (cf. Ferdon 1953: 91-92, Pl. 23b). Even in the heartland area, monkeys are rare in Olmec art and it appears unlikely that the Tonalá piece will ever be proven to be Olmec.

Within recent years two important caves in Guerrero have been shown to possess Olmec polychrome cave paintings. These are the caves of Juxtahuaca (Gay 1967) and Oxtotitlán (Grove 1969b, 1970b, 1970c), both containing painted panels which have stylistic elements relating them to the art of the heartland, particularly that of La Venta (Grove 1969b: 422). Although painting is a different medium than sculpture, the cave paintings are related to many of the carved low relief panels in terms of subject matter and conceptual approach, as both forms are basically two dimensional. Grove (1973) has argued persuasively that some of the cave paintings are important iconographic vehicles with close thematic ties to La Venta Altars 4 and 5. It is hoped that further work on the cave sites and cave art will yield refined dates which will be of great comparative value in a final determination of the chronology of Olmec low relief carving.

DISCUSSION

Proskouriakoff (1968: 128-129), in discussing particular problems in the study and analysis of Olmec sculpture, has noted that "most important of these are: first of all, the chronological position and sequence of the Olmec stelae and rock reliefs." This is an often expressed attitude and, indeed, because so much of the sculptural art which succeeds the Olmec period is primarily low relief (the Monte Alban and Dainzu *danzantes*, the Tres Zapotes and Izapa boxes and low relief panels, and the Maya stelae *cult* are all good examples), the exact dating of the Olmec low relief style is a critical point in tracing the development of the Protoclassic and Classic styles from the Pre-classic Olmec three dimensional carving (cf. Smith 1963). Many of the differences between low relief carving and in-the-round figures which are commonly noted by writers on the Olmec may be accounted for by basic differences in the medium used. That is, a number of non-comparable trait differences exist between the two dimensional and three dimensional forms. Proskouriakoff, however, has pinpointed a number of attribute distinctions between the two modes (1968: 121-123) and has stressed the fact that Olmec low relief carving is essentially historical in content (Proskouriakoff 1971: 148). She notes that (1968: 121) "the stelae...are credibly realistic portraits and descriptions of historic scenes." Heizer (1967: 36), commenting on La Venta Stela 3, has also noted that a "dramatic moment in some historic event or episode may be the original inspiration for the scene." C. Cook de Leonard (1959: 339), while differing in reconstruction of detail, also offers essentially an historical interpretation of Stela 3.

Table 19 is a comparative summary of various descriptive attributes of Olmec low relief panels. It bears out the observations that many of these panels emphasize historical content. A number of other interesting comparisons and groupings may also be noted with respect to the overall composition of the panels. In the 23 panels

from La Venta, for example, none are of the simple abstract category, but eight (Mons. 6, 15, 22, 25, 26, 26, 58, and 71) are composed in a complex abstract manner. San Lorenzo, on the other hand, exhibits a reverse situation and has six simple abstract panels (Mons. 30, 41, 42, 46, 58, and 64) and no complex abstract ones out of a sample of nine panels. At La Venta, ten of the panels have a clear historical content (Mons. 13, 61, 63, 71, Altars 3, 4, 5, 7, Stelae 2 and 3), and only one (Mon. 19) seems to have heavy symbolic content. At San Lorenzo there are no certain symbolic panels and only two (Mons. 21 and 56) with questionable historical content. I say questionable because in the case of Monument 21, which shows a realistically carved running canine, it is difficult to make a point for the scene having any historical value to its carvers and is probably better referred to as simple representational. With Monument 56, a jaguar attacking a man, the piece is so badly eroded that detail is lacking and it is impossible to say for certain whether an historical or a symbolic situation is implied. It too is better classified as simple representational. Of the other six low relief panels from the Olmec heartland which can be categorized, four (Cerro Piedra, Alvarado, Viejon, Angel R. Cabada) are definitely historical in content, linking them stylistically to La Venta, and one (Pilapan Monument 1) is probably symbolic (i. e., the overly large testicles on the running animal). The other (Pilapan Mon. 3) is probably best referred to as simple representational.

Leaving the Chalcatzingo panels aside for the moment, there are six other panels from outside the heartland summarized in Table 19. Of these, five have historical content (Las Victorias, Padre Piedra, Pijijiapan 1 and 2, and San Miguel Amuco), while one (Pijijiapan 3) cannot faithfully be categorized. Thus, the strongest stylistic connection again seems to be with La Venta. As for Chalcatzingo, one (Relief II) of the nine panels has an historical content and three others (Reliefs I, VIII and IX) are complex abstract in composition. In both of these groups, the stylistic connection to La Venta may be noted. Two definite simple abstract panels are present (Reliefs IV and V), both of which have some symbolic content. Relief IV, in fact, has been classified as abstract only because of its symbolic content; the actual drawings, particularly of the two jaguars, are rendered naturalistically. Similarly, two (Reliefs I and VIII) of the complex abstract panels also have a component of symbolic content. Two of the panels (Reliefs III and VI) are best classified as simple representational. Of all the Olmec sites where only low relief panels are present, Chalcatzingo has the greatest variety of styles in terms of subject matter, and the greatest complexity of motifs and symbolic components.

Stylistically, the differences between La Venta, San Lorenzo and the other sites noted in Table 19 may be summarized as follows. At San Lorenzo, although low relief carving is present, it is relatively simple. The majority of examples from that site are simple abstract pieces, but two very simply executed representational panels are also known. At La Venta, a distinctly different tradition of low relief panel carving appears, a tradition in which simple abstract panels are absent, but very complex abstract panels appear in abundance, along with a high proportion of panels whose content is clearly historical. It is worth noting that over half of the historical panels at La Venta (five out of nine) appear on altar sides and fronts, and on stelae. Panels with clear historical content predominate at other sites with low relief carving within

the Olmec heartland, with the majority (four out of seven) being found in stelae. Outside of the heartland, most of the known panels are of an historical nature, and are thus stylistically comparable to those from La Venta. It is probably of significance that no complex abstract panels have been found outside of La Venta (where they abound) with the exception of Chalcatzingo, where there are three reliefs in this category. Historical and simple abstract reliefs are also found at Chalcatzingo, making it the only site which can compare to La Venta for range of expression within the low relief medium.

Because of its importance in understanding the chronology of Olmec diffusion, the temporal placement of the low reliefs is a problem that has drawn the attention of many writers. A number of general opinions on the relative age of the panels have been published, with most writers subscribing to the notion that they are later than the other Olmec sculptures. Proskouriakoff (1971: 149), for example, notes that it is still impossible to precisely date the rock carvings (and paintings), but suggests that they are relatively late, certainly later than the San Lorenzo three dimensional sculptures and maybe later than La Venta. David Grove (1970b: 6) has stated that the stelae may "belong to a later Olmec phase on the Gulf Coast than the carvings at San Lorenzo, probably to La Venta Phases II-III." Bernal (1971: 35) feels that it "is quite possible that stelae came later than monuments in the round. They would thus reflect phases III and IV of La Venta." He has also noted that "Olmec statuary is uncluttered and only becomes confusing in the great stelae of La Venta. . . . Perhaps this is another reason for considering these Olmec objects as rather late" (Ibid.: 37). In general, Bernal (1968: 141) has opined that "there are two periods of florescence in the southern Veracruz region: one corresponding to large monuments in the round, and a later one corresponding mainly to stelae and sculpture in low relief." He has also postulated (Bernal n.d.: 3-4) that the first of these periods may date to 1200-900 B.C., and the later one to 900-600 B.C. Lee Parsons (1967: Table 1) has also derived a general scheme in which strong Olmec sculptural influence recedes outside the heartland after 800 B.C. and an Olmecoid period emphasizing low relief continues until about 600 B.C. Not all researchers, however, feel that the low reliefs are latest in the sculptural sequence. Medellin, for example, is of the opinion (Medellin 1963) that the low reliefs are "inexpressive" and relatively early, perhaps between 1200-700 B.C. It is contradictions like this which serve to underscore the caution urged by Heizer (1971: 63) who warns that:

"...we cannot date the clearly Olmec-inspired rock reliefs in Morelos, Chiapas, Guatemala and El Salvador, not only because they lack clear-cut ceramic associations, but also because these are stylistically rather different from the reliefs occurring on Stela 2 and Stela 3 at La Venta, the only lowland Olmec site to thus far evidence this form of sculpture."

In addition to the general statements about the relative age of low relief carvings, there have been a number of statements with respect to guesses at dates for specific pieces. Coe (1968a: 64) has noted the relative crudeness of San Lorenzo Monuments 21, 41, and 42, and has suggested that they may have been carved prior to 1200 B.C. Proskouriakoff (1971: 147-148) has pointed out that two of these pieces (Mons. 41 and

42 of San Lorenzo) are suggestive of pictographs and feels they may be the earliest known Olmec sculpture. Bernal (1969: 150) dates the Viejon low relief panel to 1000-500 B.C., following the suggestion of Medellin (1960, 1960a; see also Payon 1966), and also relates the Viejon piece to Chalcatzingo on the basis of strong stylistic similarities. Although he admits that "the dating of the reliefs has not yet been accomplished archaeologically," Grove (1968b: 490) has suggested that some of the Chalcatzingo panels might fall between 1200-900 B.C. Parsons (1967: 183), citing the unusual quality of the scrollwork at that site, believes it may be as late as 600 B.C. Navarrete (1969: 193), noting the presence of Cuadros, Cotorra and Dili pottery in the vicinity, says the Chiapas reliefs could be as old as the San Lorenzo Phase, but he does not press the argument in the absence of sounder associations. The low relief panel from San Miguel Amuco, Guerrero, has been tied stylistically to La Venta by Grove and Paradis (1971: 100) who feel that it dates from after San Lorenzo.

It is worthwhile at this point to briefly mention the estimated dates for the Olmec cave paintings which have been found in Guerrero. Although the paintings are not monumental sculpture, they seem closely related conceptually to the low relief panel carvings and may be closer in this way to the low reliefs than either are to the full round sculptures. Also, the dates of the cave paintings may indicate a period of Olmec presence in the highlands to which sculpture there may also be attributed. Grove, who has studied the paintings in most detail has noted that "like all large-scale Olmec art in central Mexico, the Oxtotitlan paintings are closer in style to the art of La Venta than to that of San Lorenzo," and that "since Nacaste-La Venta II phases show strong central Mexican influences, it is probable that the paintings fall within or near the period between 900 and 700 B.C., when there was reciprocal influence between central Mexico and the Gulf coast" (Grove 1970b: 32). Grove (1969b: 422) has also indicated that the "Olmec art of Oxtotitlan is well developed and sophisticated, and not an incipient style." Bernal (1971: 37) has also commented on the paintings and includes to place them "in the late formative when mural decoration is also present at Monte Alban and early Teotihuacan as well as in other sites and some inheritance from Olmec art is still to be observed."

My own evaluation of the chronological relationships between the various low relief panels will be based primarily on the stylistic categories summarized in Table 19 and the stratigraphic evidence from La Venta and San Lorenzo. A number of my observations are consistent with some of the above opinions, a fact which is, to say the least, encouraging. The stylistic categories to which I refer are five in number: (1) simple representational panels, (2) simple abstract panels, (3) complex abstract panels, (4) historical content panels, and (5) symbolic content panels. Simple abstract and simple representational may perhaps one day be viewed as sub-groups of the same category, the operative concept being the extreme simplicity of each. Most of these are so simple, in fact, that with a larger sample it might be difficult to separate them at all. Historical content and symbolic content panels will probably become easier to separate as the sample grows larger because there appear to be real differences in both concept and composition between the two forms. This is perhaps reflected in the fact that in the symbolical content panels with human beings represented, only one example (Relief IV, Chalcatzingo) has more than one human portrayed, and in this

case, the two humans are not interacting with each other, but are being devoured by separate jaguars. Humans appear as solo figures in the three other symbolic content panels where they occur (Mon. 13, La Venta; Reliefs I and V, Chalcatzingo). (Incidentally, it should be noted here that the complexity of the Chalcatzingo reliefs requires dual categories for some; that is, they may be symbolic and abstract at the same time.) The reverse is true with historical content panels in which the majority (14) have more than one human portrayed, and a smaller number (six) exhibit solitary humans (see Table 19).

Within the Olmec heartland, low relief panels in the simple abstract category have been found only at San Lorenzo. Coe has demonstrated (1968a, 1970: 26) that almost all of the monuments at this site were carved and set in place by the end of San Lorenzo Phase B. Thus, all the simple abstract reliefs from the site must have been carved prior to 900 B.C. More importantly, one of the low relief panels from the site (Mon. 42) "was found at the bottom of a San Lorenzo A deposit" (Ibid.: 28), allowing for the speculation that the piece and its companions in the simple abstract category could be as old as 1150 B.C. Thus, in my own chronological assessment of low relief panels, summarized in Table 20, I have indicated that all the simple abstract and simple representational panels from San Lorenzo are older than 900 B.C. and I have indicated that three of them may be as old as 1150 B.C. or even slightly older. These three pieces (Mons. 21, 41 and 42) have been singled out for their crudeness (Coe 1968a: 64; Proskouriakoff 1971: 147-148), a quality which could be the result of their being early and somewhat experimental. This same crudeness, which I prefer to see as a function of technical simplicity, could account for what appears to be the distinction between simple abstract and simple representational categories. Neither category is present at La Venta and it is quite possible that the distinction is due more to technical inefficiency than to conceptual intention in the early San Lorenzo pieces. On stylistic ground I have added the two simple representational reliefs from Pilapan to this temporal period. The only other simple representational or simple abstract panels are found at Chalcatzingo on Reliefs III, IV, V, and VI, and I have also placed them in a temporal position prior to 900 B.C., an estimate which is in accord with Grove (1968b: 490).

As has been noted above, low reliefs in the complex abstract category are found only at La Venta in the heartland and at Chalcatzingo in the Mexican highlands. I have placed these complex abstract monuments at La Venta rather late in the developmental sequence for at least two reasons. First, with our present evidence we must assume that simple abstract panels could have been made until 900 B.C. at San Lorenzo. If they were, I would argue that an intervening period of at least one or more likely two centuries would be necessary to account for the enormous development, both stylistic and technical, which is evident in the complex abstract panels from La Venta as compared to the simple ones at San Lorenzo. Secondly, it is an archaeological fact that three of these panels (Mons. 6, 22, and 25) were last set in place during La Venta Phase IV (Drucker, Heizer, and Squier 1959) and at least two others (Mons. 26 and 27) were probably placed during the same phase. While placement during Phase IV does not necessarily mean the panels were carved during the same phase, it makes a late carving date much more likely. Thus I have placed the complex abstract panels at La Venta in the time period 800-600 B.C., with the indication that they were more

likely carved after 700 B.C. On the basis of stylistic similarities, I have Chalcatzingo Reliefs I, VII, and IX in the same temporal category. Relief IX, in particular, is so much like a La Venta complex abstract panel that it is tempting to see it as the work of a La Venta artist whose hand was felt in a number of pieces at that site. It should be recalled that the complex abstract form is found only at La Venta and Chalcatzingo. Incidentally, in a separate stylistic consideration (see Cats, above), it was estimated that the complex abstract panels in the form of feline masks were probably relatively late, both at La Venta and at Chalcatzingo.

Low relief panels with historical content are not restricted in occurrence and, in fact, are known to occur at a minimum of five sites in the Olmec heartland (La Venta, Cerro Piedra, Alvarado, Viejon, Angel R. Cabada) and five sites that lie outside the heartland (Chalcatzingo, Las Victorias, Padre Piedra, Pijijiapan and San Miguel Amuco). There is no other single form of Olmec monumental sculpture which has wider geographical distribution or which has been found at more sites. Unfortunately, none of the known examples can be positively associated with any particular ceramic material which would indicate age. However, there is strong indirect evidence for a late placement within the Olmec sequence. We know, for instance, that no historical panels were carved at San Lorenzo, so the form must be later than 900 B.C. Sophisticated low relief (both technically and conceptually) of an abstract nature appears one or two centuries later at La Venta and it is to this same period, and slightly later, that I have tentatively assigned the low relief panels with historical content. Unfortunately, most of the examples from La Venta are either in a poor state of preservation or are on earlier pieces like the altars, where, as noted above (see Altars), they probably appear as later additions and thereby deprive the investigator of possible chronological clues. The two large "stelae" from that site, however, suffer from neither drawback and it is significant that almost every writer who has mentioned these pieces has placed them late in the La Venta sequence (Proskouriakoff 1971: 148; Grove 1970b: 6; Bernal 1968, 1971). It is my own feeling that they may be the two latest monuments which we have from La Venta, possibly from the very end of Phase IV, and I have so indicated in Table 20. I have placed the other historical panels from La Venta in a late position as well. It is my feeling that they derive from the same technical tradition of sculpture as the complex abstract panels, but that their conceptual references and cultural purposes were entirely different. Obviously, the other historical low relief panels from both within and without the Olmec heartland are stylistically close to the La Venta pieces and, on the basis of present evidence, it seems reasonable to assign them to the same relative temporal period. Again, La Venta and Chalcatzingo share an unusual closeness. At both sites there are panels in which various features of the natural rock face are incorporated into the relief carving (for example, Chalcatzingo Relief IX, Altar 7 panels, Stelae 2 and 3, and Monument 19 of La Venta). The Viejon panel also exhibits this characteristic, which may be a datable factor. Since Viejon had an Olmec occupation until 500 B.C. (cf. Bernal 1969: 150), I have suggested in Table 20 that the low relief from that site could even be slightly later than the end of La Venta IV as, of course, could a number of the other historical content panels. It has been commonly suggested, in fact, that the Olmec rock reliefs at La Venta and outside the heartland provide a developmental link with slightly later sculptural styles,

such as Tres Zapotes and Izapa, which emphasize low relief carving with both historical and very complicated abstract themes (cf. Coe 1957b, 1965a; Quirate 1970; Baudez 1971: 82), and such a notion would not be at variance with my own temporal scheme. It is interesting to point out, in this respect, that Maya stelae are largely historical records (Proskouriakoff 1960) and that Parsons (1967) is of the opinion that Olmecoid sculpture, including La Venta IV, gave rise almost directly to a Proto-Maya phase of relief carving on the Pacific coast.

Perhaps one final point should be made as a termination of this discussion on the dating of low relief Olmec sculpture. Some writers tend to think only of the historical panels when discussing Olmec low relief, and the impression is given that the form itself is rather late. This is decidedly not the case, as the San Lorenzo excavations have shown. Low relief was known as a technique to Olmec carvers from very early times. What happened at La Venta was that low relief was given a new social and historical function--that of recording events. This may well have taken place after sculptors had ceased to turn out three dimensional pieces. The important point here, however, is that an old form was given a new task and not that the form itself was invented at this time.

CHAPTER XIV

MISCELLANEOUS STONE MONUMENTS

In addition to the monuments discussed under various categories above, a surprisingly large number of miscellaneous numbered monuments exist at both La Venta and San Lorenzo. Some of these are obviously fragments of other smashed sculptures or are sculptures which have themselves been mutilated beyond recognition. Others are unworked pieces of stone, such as natural basalt columns, which were placed around the sites in various patterns. Still others are large benches or blocks of stone, worked into their present shape, representing no logical category of decorative or utilitarian object. In terms of art history, these miscellaneous stone monuments are of dubious value, but, because they are so numerous, they represent an important archaeological factor at each site and will be afforded at least a minimal description and discussion herein.

MISCELLANEOUS MONUMENTS FROM LA VENTA

Monuments 16, 17, and 18, La Venta

These are the "massive sandstone blocks at the southern end of the Central Group" (Drucker 1962: 175).

Monument 24, La Venta (Drucker, Heizer, and Squier 1959: Fig. 52d)

Monument 24 (Drucker, Heizer, and Squier 1959: 204) is:

"... a more or less rectangular block of green gneiss, one corner of which had been cut away longitudinally to produce a thick L-shaped cross section. There was no indication of any attempt at ornamentation. However, the piece must have been of some significance. It was placed very carefully with the hollow or concave side downward, at right angles to the centerline of the site and intersecting that line, just north of the tomb of basalt columns."

The piece had been smoothed, is 3 feet, 10 inches long and was placed during Phase IV of La Venta (Ibid.).

Monument 34, La Venta (Clewlow and Corson 1968: Pl. 10a)

This is a broken basalt portion of a larger monument, and is "a large right hand grasping a more or less cylindrical object" (Clewlow and Corson 1968: 174). It is 27 by 54 by 25 centimeters.

Monument 35, La Venta (Clewlow and Corson 1968: Pl. 10b)

This is a 3.53 meter long green schist column, shaped and dressed, but otherwise unworked (Ibid.).

Monuments 36a and 36b, La Venta (Clewlow and Corson 1968: Pls. 10b, 10e)

These are two large boulders of green schist, each with a number of characteristic axe sharpening grooves on it (Ibid.).

Monument 46, La Venta (Clewlow and Corson 1968: Pl. 12c)

Monument 46 of La Venta is a 56 centimeter long, 38 centimeter wide, 17 centimeter high basalt drain block with a female socket inset into the stone at each end. Traces of asphaltum, once probably used for sealing purposes, remain in each socket (Ibid.: 177).

Monument 47, La Venta (Clewlow and Corson 1968: Pl. 12f)

This is a long basalt column with some sharpening grooves which is now in the Parque La Venta in Villahermosa, Tabasco (Ibid.: 177).

Monument 49, La Venta

This is a large column of green schist, with one end flattened (Ibid.).

Monuments 50 and 51, La Venta

These are two large, badly eroded rectangular blocks of sandstone which lie near the ball court on the east side of the Stirling Group. No relief appears on either (Ibid.).

Monuments 52, 53, and 54, La Venta (Stirling 1968a: Pls. 1, 2, 3)

These are three more large sandstone monuments, also badly exfoliated. They apparently, however, were at one time sculptured or carved. Stirling (1968a: 36) feels that they may be earlier than the other carved monuments at La Venta.

Monument 62, La Venta (Clewlow and Corson 1968: Pl. 13e)

This is the exceedingly long (6.63 meters) basalt column in the Parque La Venta. It has some sharpening grooves (Clewlow and Corson 1968: 179).

Monument 67, La Venta (Clewlow and Corson 1968: Pl. 14e)

This piece has been described as a "large block of basalt which has been hammer dressed into its present shape as a bench-like object; no other decoration or sculpturing appears on the piece. It is 90 centimeters high, 207 centimeters long and has a maximum thickness of 90 centimeters" (Ibid.: 180). It is probably an incompletely carved piece.

Monument 68, La Venta (Williams and Heizer 1965: Pl. 2c)

This is a large circular basalt boulder covered with axe sharpening grooves which has been described by Williams and Heizer (1965: 19, Pl. 2c).

MISCELLANEOUS MONUMENTS FROM SAN LORENZO

Monument 8, San Lorenzo (Stirling 1955: Pl. 15a)

Stirling (1955: 13) has described this piece as "a large rectangular stone, perfectly flat and well smoothed on the back. The flat surface of the face is decorated by six symmetrically placed celt-shaped depressions and a raised border around the edge."

Monument 13, San Lorenzo (Stirling 1955: Pl. 11b)

This is a stone ball of basalt, 115 inches in circumference (Ibid.: 15).

Monument 15, San Lorenzo (Stirling 1955: Pl. 20)

This is a broken rectangular stone, "carved as though it represented a chest elaborately bound in ropes (Ibid.: 16). It may have had a figure seated atop it at one time and recalls the stone box with seated figure of Laguna de Los Cerros.

Other Monuments, San Lorenzo

Coe (1968a: 70-71) has briefly mentioned a number of unpublished miscellaneous pieces from San Lorenzo, including Monument 23, a "plain upright stela"; Monument 31, a "broken stone seat"; Monument 35, a "complete stone seat"; Monument 40, a "trough-shaped drain stone"; Monument 44, a "complete stone seat"; and Monument 45, a "plain stela." Four additional miscellaneous monuments, recovered during 1968 and 1969, are listed by Beverido (1970a: Appendix I), including Monument 49, a plain stela of 1.20 meters height; Monument 55, a basalt column 3.95 meters long; Monument 56, a large column which was vertically buried; and Monument 59, a large plain stela. The short field season at San Lorenzo in 1970 produced, among other things, three new miscellaneous monuments. They are Monument 62, a plain semiglobular stone with a diameter of

1.10 meters; Monument 63, an irregular block of basalt; and Monument 65, an L-shaped stone, 80 centimeters long (Bruggemann and Hers 1970: Figs. 26, 27). Three plain stone columns from the nearby site of Tenochtitlan, Monuments 3, 4, and 5 from that site, may also be classified as miscellaneous (Coe 1968a: 71).

DISCUSSION

Needless to say, no stylistic discussion may be offered for such an amorphous category of sculpture as miscellaneous monuments. The category is of archaeological importance, however, for the insight which it provides into Olmec behavior. First, I shall make the assumption that most of the miscellaneous pieces from both San Lorenzo and La Venta were originally placed there during one or another period of Olmec occupation. This assumption is implied in the provenience of some of the San Lorenzo pieces (cf. Coe 1968a: 70-71), and is also indicated by the shape, material, size and provenience of some of the La Venta stones. Monument 24, for example, was almost certainly placed in La Venta Phase IV (Drucker, Heizer, and Squier 1959: 204). If I am correct in this assumption, then it may be stated that in terms of overall tonnage, the miscellaneous monuments represent as large a contribution to the Olmec corpus as any other category except, perhaps, colossal heads and altars. More specifically, this means that in terms of services rendered (i.e., the labor involved in obtaining the stones and the effort required to transport them from source to site) to the ruling body at each ceremonial center, the miscellaneous monuments represent an expenditure of manpower and time great enough to indicate that they played a significant role in the ritual life of that center. This is precisely, again, what is indicated by the careful placement of Monument 24 at La Venta (Ibid.). I have noted above, under Seated Figures, that an enormous amount of social energy went into ritual destruction of various monuments. It is my opinion that the same sort of social energy, in equally enormous amounts, was expended in the procurement, transport and ritual interment of numerous large stones which were never sculptured into recognizable monuments. Unworked stones of large tonnage may indicate a period (perhaps La Venta IV) when three dimensional carving had ceased and large plain stones themselves were of value second only to those with low relief. It appears that the large stones themselves and the ruling power implicit in their presences at a site had a certain level of social value quite removed from the fact that some were eventually made into fine works of art. It is as if the presence of the stones alone was at least a partially sufficient means for a ruler to display his power over and in terms of the many who must have labored in their delivery. Any researcher who attempts to interpret, in general, the place of monumental art in Olmec society should bear this important and peculiar fact in mind.

CHAPTER XV

CONCLUSIONS

CHRONOLOGICAL THEMES

Ignacio Bernal has written with respect to the Olmecs that "it is most important in the future to determine precisely the phase during which those great sculptures were carved" (1971: 33). This is certainly true and, for numerous archaeological reasons, is a problem more easily stated than solved. Some progress toward a solution may be made, however, as Kubler (1961: 72) has noted:

"When it is unlikely that field excavations can solve the problem because the sites are too disturbed, these undifferentiated groups of objects can still be subjected to a stylistic analysis of an art-historical type. Assuming that early and late positions in a series correspond to distinct and definable formal qualities, we can provisionally put the objects in series, as with colossal Olmec stone heads, west Mexican clay sculpture, or Toltec Maya building sequences. These approximations, however coarse and inexact, still are better than no sequence, for it is upon sequence that our awareness of an artistic problem must ultimately rest."

It is in this spirit that a number of chronological estimates have been made in the foregoing chapters. Several main themes may be said to run through these estimates and it would seem appropriate to recapitulate them in a general way here. Information and estimates on specific pieces or categories should be sought in the earlier chapters where discussion is restricted to particular components of the whole Olmec sculptural corpus.

First, one will notice that there is a chronological tendency for pieces of sculpture from Laguna de Los Cerros to be earlier than thematic counterparts from San Lorenzo, and for San Lorenzo pieces to be earlier than thematic counterparts from La Venta. Thus, for a number of given categories, like colossal heads, seated figures and altars, the Laguna de Los Cerros pieces appear to be earliest, with San Lorenzo in the middle and La Venta, generally speaking, at the end of the sequence. This does not, as my earlier discussions note, imply that all figures from La Venta are later than all figures from San Lorenzo, etc., because this is decidedly not the case. What is being discussed here is a general chronological scheme for surviving examples of sculpture from each site. Such a scheme is precarious by definition and could be totally altered by a series of new discoveries. For the present, however, it seems to fit well with what evidence we have. Heizer, for example, has speculated that it is in the Tuxtla Mountains where might be found "immediately earlier phases of this culture" (1968: 24). It is of interest that Laguna de Los Cerros is closest to the Tuxtlas of any Olmec site with large numbers of sculptures. That the sculptors there were familiar

with the main basalt source, Cerro Cintepec, is known (Williams and Heizer 1965), and the site appears to have an abundance of Preclassic pottery (Coe, in discussion with Proskouriakoff 1968: 133-134).

Another tendency which we see in the chronology of the monuments is that within any given category the smaller, simpler pieces seem to fall earlier than larger, more complex ones. This is seen in colossal heads, altars and seated figures, and is probably a function of the evolution of each category experimentally. It does not suggest a differentiation of carving skill, as the earlier pieces in each category except heads are delicately executed. Nor is it to be taken as a general statement for all Olmec sculpture because, as we have seen, the colossal heads may be earlier than most of the other categories. It seems to merely reflect a cycle of development within and for each separate category which is duplicated developmentally in other categories.

A third tendency is one which sees a growing complexity in low relief carving through time with the more complicated compositions appearing latest. This no doubt relates to a developing historical and iconographical sense in the unfolding of Olmec culture. Moreover, low relief carving as a predominant form is quite late in the sequence. That is, although some simple low relief has been recovered from the earliest Olmec sculptural period, most of the low relief panels and all the really complex ones were carved late, probably at the end or just after the demise of full round carving. It is also worth noting that my estimates of low relief chronology show Chalcatzingo to have a very long span of importance in the Olmec sequence. Whether the site was actually occupied that long is a question of prime importance.

My chronological estimates appear in summary form in Tables 5, 11, 13, 15, 16, 18, and 20. As may be noted, various monuments and groups of monuments have been arranged throughout the Olmec temporal sequence in a more or less lineal fashion, roughly correlated to archaeologically established phases, particularly those of San Lorenzo as stated by Coe (1970). It should be emphasized that my chronological scheme is not intended to be a rigid one, but may be viewed as flexible, like an accordion, so that as our social evidence based on more archaeology changes, so will the relationships between the pieces in my scheme contract or expand accordingly. This agrees with Kubler's notion that "without abusing either the archaeological evidence or the anthropological theories, that the ages vary in character according to the number and density of people" (1970: 130). I would expect that additional archaeology would alter and refine my scheme and would hope, when enough sites have been excavated and we do know something more about population density and social organization, that we could abandon altogether lineal stylistic schemes for Olmec sculpture and arrive instead at a more sophisticated, "geometric" chronological model, such as Kubler (*Ibid.*: 127-131) has envisaged, which would account for different rates of stylistic change at different centers of Olmec art production.

PRE- AND POST-OLMEC IMPLICATIONS

The study of monumental sculptural chronology presented herein has not attempted to deal directly with pre-Olmec or post-Olmec styles or chronologies. Some implications are present, however, and for the sake of clarity they should be made explicit. No pre-Olmec monuments have been considered because, as all writers on the subject have mentioned, there seem to be none in existence. Of the pieces studied herein, none are crude or primitive in a developmental sense. None of the monuments show evidence of belonging to a developmentally prolonged or "infantile" stage of early evolution and even the technically early colossal heads seem to appear suddenly and rapidly, with no precursors. Coe (1968a: 65) has argued for a brief, rapid and explosive development of Olmec culture, as have Willey (1971: 107) and Heizer (1968: 23-24, 1971: 62). Nothing in the sculptural chronology would impede such an interpretation and, in fact, it seems to readily support it.

As to post-Olmec developments, Coe (1957b, 1965b) has long argued that the Izapa style followed directly on the Olmec and provided a more or less direct link to Maya and other southern styles. Although some of the stylistic assumptions in this view are still difficult to demonstrate (cf. Proskouriakoff 1968: 121, 1971: 149), the scheme has been generally upheld (cf. Quirate 1970; Baudez 1971: 82-83; Badner 1972: 3-9). The chronological estimates that I have provided, particularly those dealing with low relief panels, would also seem to strongly support the Coe hypothesis.

One interesting problem posed by the sculptural chronologies relates to the connections between the Olmec heartland and the Valley of Mexico and Morelos in the highlands. Tolstoy and Paradis (1970) feel that the most substantive Olmec presence in the Valley of Mexico was during the Justo and Ayotla sub-phases between 1150 and 975 B.C. Grove (1970a) feels that in Morelos at San Pablo, the Olmec were strongly present in La Juana (1100-900 B.C.), but gone in San Pablo (900-500 B.C.). At San Lorenzo, Olmec involvement with other regions appears strongest in San Lorenzo B times (Coe 1970: 27-28), with the possibility of strong highland contact around 800 B.C. as well (Coe, Diehl, and Stuver 1967: 1400). Moreover, it would appear from the sculptural stylistic evidence that Chalcatzingo had strong heartland connections throughout a long sequence from about 1150-600 B.C. These views are not so much contradictory as they appear; they do, however, imply that the relationship of heartland Olmec sites one to another, and extending to the highland areas, were very complex and not definable by evidence from any one site alone. Rather, it appears that these relationships will only be defined by careful site-by-site excavation particularly aimed at explicating the nature of the Olmec social universe through time.

THE PLACE OF MONUMENT ART IN OLMEC SOCIETY

Although it has not been the primary object of this study to discern the sociological relevance of the sculptures discussed, it would nevertheless seem appropriate to add a few brief remarks on what the place of monumental art in Olmec society may have been. Immediately such a discussion finds itself in controversy, due to the fact that the exact nature of Olmec society remains in dispute. One view, expressed by

Sanders and Price (1968) holds that Olmec society could be classed at the chiefdom level, and states that the art of La Venta need not have been done by more than a "small corps of full-time craftsmen" (Ibid.: 127). Coe, on the other hand, feels (1965c, 1968a, 1968b) that Olmec is at the state level of socio-economic integration. Whether or not we can decide this controversy over classification on the basis of present evidence (cf. Sanders 1970), we are still in possession of a great deal of solid information on the nature of Olmec society (Heizer 1959, 1960, 1961, 1962; Drucker 1961; Drucker and Heizer 1960) which allows us to make some statements about how monumental art fit into it. Heizer (1966: 827), for instance, inferring from the size of the stones moved, has stated:

"...that in those societies which engaged in transport of substantial numbers of stone monuments of colossal size there existed a developed system of superordinate authority, and that these tasks were performed through the exercise of control over the population by the ruling group."

Kubler has pointed out that Olmec sculptures like the colossal heads "can have been carved only by professional sculptors relieved from all other work, and maintained by the community" (1962: 71). If the sculptors constituted a separate occupational class in Olmec society, which I also believe they did, then no doubt the administrators and technical advisors involved in transport of the massive stones did also. Moreover, we can be assured that the movement and setting into place of the large San Lorenzo and La Venta sculptures (and, in some cases, their ritual destruction and burial as well) probably constituted major events in the lives of all witnesses to and participants in the spectacle. Heizer (1971: 59) has noted that:

"Hundreds of persons were necessarily involved in each of these long-range moving jobs, and there were enough of them carried out at both sites during their history for us to suppose that each generation of Olmecs had either seen or participated, or knew from direct report, of a particular stone-moving occurrence."

Many of these sculptures are doubtless direct representations of Olmec leaders (Ibid.; Grove 1970b: 31; Clewlow, Cowan, O'Connell, and Benemann 1967), and it is possible to view much of the social context of the large stones as personal expressions of power by the personages whom the carvings depicted and who had them moved and placed on the sites.

One important covert function which the incredible sculptural activity (manufacture-placement-mutilation-burial) of the Olmecs may have provided was the removal from circulation of valuable products (the finished sculptures) so that those which remained in view would retain their value, and so that sufficient pressure could be kept on the working population by the rulers for the generation and administration of adequate social energy to constantly replenish the sculptural supply and perform the other necessary mass tasks for the proper ritual care of the pieces. Flannery (1968: 108) has proposed such a model with respect to smaller luxury items:

"But the underlying function of burying such offerings may have been to take the materials themselves out of circulation. It was a way of consuming, or destroying in a sense, a whole series of otherwise imperishable materials, thereby necessitating the acquisition of more of the same.... Had such exotic materials continued to pile up at La Venta they would soon have lost whatever value derived from their rarity and foreignness, and the flow would have slowed down."

Unfortunately, not that many small foreign luxury items have been stored at La Venta, and none of the other large Olmec sites have produced jade or magnetite except in minute quantities. Flannery's notion, however, may be applied perfectly to the production and ultimate burial of monument sculptures. Such an hypothesis would seem to fit well with Heizer's characterization of La Venta as a "national treasury" (1971: 64). One important bit of information here relates to whether the sculptures were defaced and buried all at once or steadily over a long period. If it is the latter, then we have a strong argument for the "taking it out of circulation" theory. This seems to be the case at San Lorenzo and La Venta, but we need more data from other sites before the matter can be settled.

Another related problem is the role of trade in Olmec society. Some writers are convinced that trade was the prime mover of the culture (cf. Coe 1965c; Easby 1968; Grove 1968a, 1968c; Grove and Paradis 1971; Parsons and Price 1971; Willey 1971), while others, although acknowledging its importance, feel that other motivations should also be considered (Heizer 1971: 55; Tolstoy and Paradis 1970: 305). There is at least one good case of an early trade-based society in the Old World (Van Beek 1969), but no such clear examples exist yet for Mesoamerica. Although it is clear that small stones like obsidian nodules or blanks were traded over long distances by the Olmec (Stross et al. 1968: 61; Coe and Cobean 1970; Hester, Heizer, and Jack 1971; Hester, Jack, and Heizer 1971), evidence is lacking that any large stones, like the monumental sculptures, were traded between sites over wide areas. In fact, it has been suggested that instead of trading sculptures, the Olmecs may have a tradition of itinerant artisans (Heizer 1971: 54) or "migrant sculptors moving from site to site" (Kubler 1971: 161). If so, perhaps this helps explain the occurrence of curious "pairs" of Olmec sculptures, of which I have called attention to at least nine examples, that appear to have been carved by the same artist or group of artists. Three of these pairs (La Venta Mons. 5 and 70, La Venta Mons. 9 and 10, and San Lorenzo Mons. 12 and 47) occur within the same site. Two of them have one representative at each of the two major sites (La Venta Mon. 74 and San Lorenzo Mon. 52; La Venta Altar 4 and San Lorenzo Mon. 14). The other four pairs have one representative at a major site and the other at a minor one. These pairs are La Venta Monument 11 and the Proboscis Statue (La Venta Mon. 75 may actually make this pair a trio), La Venta Monument 44 and the *Idolo de San Martin*, San Lorenzo Monument 10 and *Potrero Nuevo Monument 2* (Atlantean altars), and finally, San Lorenzo Monument 37 and the *Las Choapas monument*. Here is evidence within the sculptural corpus which suggests the presence of itinerant sculptors and points as well to the possibility of interesting connections between the large Olmec centers and the minor ones. Only more archaeology can clarify this latter relationship.

ICONOGRAPHY

Olmec iconography is a topic which has been curiously neglected by many scholars through the years. (Drucker (1952) provided an excellent introduction to the subject, and Coe (1957a, 1962, 1963, 1965b, 1966, 1967c, 1968b) has been vigorous and persistent in isolating the main internal motifs and configurations and in hypothesizing as to its external relationships as well (cf. Coe 1962, 1963; Lanning 1963; Badner 1972). In recent years a number of fresh approaches to iconography in Mesoamerica have appeared, like Kubler's work (1967) on Teotihuacan and it is hoped that the potential of Olmec iconographic studies will attract more researchers. Joralemon (1971) has recently published a detailed dictionary of Olmec motifs, symbols and god forms, and Hatch (1971) has persuasively postulated that some of these derive from astronomical features and may actually be read as sky charts. Benson has demonstrated (1971) how much more data can be gleaned from a single piece if adequate attention is paid to iconographic detail. Essentially, then, the hard ground has been broken which could lead to major breakthroughs in our understanding of Olmec thought systems. What we need now is a three-way wedding in which style, chronology and iconography can link up to provide a more total understanding of all three. This is particularly important with Olmec sculpture because, iconographically, it was here that we had the creation of basic prototypes, many of which remained throughout the Mesoamerican sequence (Foncerrada de Molina n.d.). Coe, in fact, has hypothesized that the iconographic relationship between felines and the Olmec royal house is one which set up a symbolic system that was later used by Maya rulers as well as the Aztecs, who incorporated the myth in their Tezcatlipoca imagery (Coe 1972). Although iconography is beyond the scope of this study, it is nevertheless hoped that the comments on style and chronology contained herein will be of use not only to dirt archaeologists, culture and art historians, but to iconographers as well. Perhaps with joint efforts it will be possible to sweep away much of the mystery which has characterized the Olmec for so long.

TABLES

TABLE 1

Categories of Olmec Monuments and Monuments
in Each Category

Colossal Heads

La Venta Mons. 1, 2, 3, 4
 San Lorenzo Mons. 1, 2, 3, 4, 5, 17, 19, 22, 53, 61, 50
 Laguna de los Cerros Mons. 1, 1a

Seated Figures

Full round: La Venta Mons. 5, 8, 9, 10, 11, 21, 23, 30, 31, 38, 40, 48, 70, 72, 73, 74, 75
 San Lorenzo Mons. 10, 11, 12, 24, 26, 34, 47, 52, 54
 Laguna de los Cerros Mons. 3, 3a, 8, 11, Stone box with seated figure
 Miscellaneous Monuments - Proboscis statue, Wrestler, Cruz de Milagro, Las
 Limas, San Martin, Chalcatzingo

High relief: La Venta Altars 2, 3, 4, 5, 6
 San Lorenzo Mons. 14, 20
 Laguna de los Cerros Mon. 5, Small Altar Block

Low relief: La Venta Altars 3, 4, 5, Mons. 19, 61
 San Lorenzo Mon. 14
 Miscellaneous Mons. - Chalcatzingo Relief I, Alvarado Stela

Possible: Tres Zapotes Mons. I, M
 Estero Rabon Mons. 2, 3, 4

Standing Figures

Full round: La Venta Mons. 37, 57
 Miscellaneous Mons. - Laguna de los Cerros Mon. 19, small Pajapan torso,
 Ojo de Agua

High relief: La Venta Stela 1, San Lorenzo Mon. 18, Potrero Nuevo Mon. 2

Low relief: La Venta Stelae 2, 3, Altars 3, 7, Mons. 13, 63
 Miscellaneous Mons. - Viejon Stela, Alvarado Stela, Angel R. Cabada
 column, Chalcatzingo Relief II

Copulation Figures

Potrero Nuevo Mon. 3
 Laguna de los Cerros Mon. 20
 Rio Chiquito Mon. 1

Small Heads

La Venta Mons. 29, 44, *
 San Lorenzo Mon. 6, small metate
 Laguna de los Cerros Mon. 27; small head and small low relief face from Tres Zapotes;
 Estero Rabon Mon. 5; Catemaco face

* La Venta Mons. 64, 65 also

TABLE 1 (Continued)

Cats

La Venta Mons. 6, 15, 25, 26, 27, 28, 41, 58, 59, 60, 69, 71
 San Lorenzo Mons. 7, 30, 37, 41, 56
 Miscellaneous Mons. : Small laguna de los Cerros jaguar; Rio Chiquito Mon. 2; Las
 Choapas; Chalcatzingo Reliefs III, IV, IX

Other Animals

La Venta Stela 3, Altar 7, Mons. 12, 19, 56, 20, 63
 San Lorenzo Mons. 9, 21, 27, 43, 47, 58
 Miscellaneous Mons. : Laguna de los Cerros Mon. 13; Pilapan Mons. 1, 2; Potrero Nuevo
 Mons. 1, 4; Chalcatzingo Reliefs V, VIII

Boxes, Bowls, and Cylinders

La Venta Mons. 14, 32, 43, 45, 55
 San Lorenzo Mons. 9, 28, 39
 Matacapan Box

Altars

La Venta Altars 1, 2, 3, 4, 5, 6, 7
 San Lorenzo Mons. 14, 16, 18, 20, 29, 32, 33, 36, 38, 48, 51, 60
 Laguna de los Cerros Mon. 5, small altar block
 Potrero Nuevo Mon. 2

Low Relief Panels

La Venta Stelae 2, 3, Altars 3, 4, 5, 7, Mons. 6, 13, 15, 19, 22, 25, 26, 27, 33, 39, 42, 58, 61,
 63, 66, 69, 71
 San Lorenzo Mons. 16, 21, 30, 41, 42, 46, 56, 58, 64
 Laguna de los Cerros Mon. 26
 Miscellaneous Mons. : Alvarado stela, Viejon stela, Cerro Piedra panel, Angel R. Cabada,
 Pilapan 1, 2, Las Victorias panels, Padre Pedro, Pijijiapan, San Miguel Amuco stela,
 Chalcatzingo Reliefs I-II.

Miscellaneous Stone Monuments

La Venta Mons. 16, 17, 18, 24, 34, 35, 36a, 36b, 46, 47, 49, 50, 51, 52, 53, 54, 62, 67, 68
 San Lorenzo Mons. 8, 13, 15, 23, 31, 35, 40, 44, 45, 49, 55, 57, 59, 62, 63, 65
 Rio Chiquito Mons. 3, 4, 5

TABLE 2

Monuments by Site in Order and Categories Under
which They are Discussed

Site		Site	
La Venta Monuments	Categories	La Venta Monuments	Categories
No. 1*	Colossal heads	No. 35*	Miscellaneous
2*	Colossal heads	36a*	Miscellaneous
3*	Colossal heads	36b*	Miscellaneous
4*	Colossal heads	37*	Standing figures
5*	Seated figures	38*	Seated figures
6	Cats; low relief panels	39*	Low relief panels
7	Not considered	40*	Seated figures
8*	Seated figures	41*	Cats
9*	Seated figures	42*	Low relief panels
10*	Seated figures	43*	Boxes, bowls, and cylinders
11*	Seated figures	44*	Small heads
12*	Other animals	45*	Boxes, bowls, and cylinders
13*	Standing figures; low relief panels	46*	Miscellaneous
14	Boxes, bowls, and cylinders	47*	Miscellaneous
15	Cats; low relief panels	48*	Seated figures
16	Miscellaneous	49*	Miscellaneous
17	Miscellaneous	50*	Miscellaneous
18	Miscellaneous	51*	Miscellaneous
19*	Other animals; low relief panels; seated figures in low relief	52*	Miscellaneous
20*	Other animals	53*	Miscellaneous
21*	Seated figures	54*	Miscellaneous
22	Low relief panels	55*	Boxes, bowls, and cylinders
23*	Seated figures	56*	Other animals
24	Miscellaneous	57*	Standing figures
25	Cats; low relief panels	58*	Cats; low relief panels
26	Cats; low relief panels	59*	Cats
27	Cats; low relief panels	60*	Cats
28*	Cats	61*	Low relief panels; seated figures in low relief
29*	Small heads	62*	Miscellaneous
30*	Seated figures	63*	Standing figures in low relief; other animals; low relief panels
31*	Seated figures	64*	**
32*	Boxes, bowls, and cylinders	65*	Small heads
33*	Low relief panels	66*	Low relief panels
34*	Miscellaneous	67*	Miscellaneous

* Indicates those I observed personally.

** Small heads

TABLE 2 (Continued)

<u>Site</u>		<u>Site</u>	
<u>La Venta</u>		<u>San Lorenzo</u>	
<u>Monuments</u>	<u>Categories</u>	<u>Monuments</u>	<u>Categories</u>
No. 68*	Miscellaneous	No. 9*	Boxes, bowls, and cylinders; other animals
69*	Cats; low relief panels	10*	Seated figures
70*	Seated figures	11*	Seated figures
71*	Cats; low relief panels	12*	Seated figures
72*	Seated figures	13*	Miscellaneous
73*	Seated figures	14*	Seated figures in high and low relief; altars; low relief panels
74*	Seated figures	15	Miscellaneous
75*	Seated figures	16	Altars; low relief panels
Stela 1*	Standing figures in high relief	17*	Colossal heads
Stela 2*	Standing figures in low relief; low relief panels; other animals	18*	Standing figures in high relief; altars
Stela 3*	Standing figures in low relief; low relief panels	19	Colossal heads
Altar 1*	Altars	20*	Seated figures in high relief; altars
Altar 2*	Seated figures in high relief; altars	21*	Other animals; low relief panels
Altar 3*	Seated figures in high and low relief; standing figures in low relief; altars; low relief panels	22	Colossal heads
Altar 4*	Seated figures in high and low relief; altars; low relief panels	23	Miscellaneous
Altar 5*	Seated figures in high and low relief; altars; low relief panels	24*	Seated figures
Altar 6*	Seated figures in high relief; altars	25	Not considered
Altar 7*	Other animals; standing figures in high relief; altars; low relief panels	26*	Seated figures
		27	Other animals
		28	Boxes, bowls, and cylinders
		29	Altars
		30*	Cats; low relief panels
		31	Miscellaneous
		32	Altars
		33	Altars
		34*	Seated figures
		35	Miscellaneous
		36	Altars
		37*	Cats
		38	Altars
		39*	Boxes, bowls, and cylinders
		40	Miscellaneous
		41	Cats; low relief panels
		42	Low relief panels
		43*	Other animals
		44	Miscellaneous
		45	Miscellaneous
<u>San Lorenzo</u>			
<u>Monuments</u>			
No. 1*	Colossal heads		
2*	Colossal heads		
3*	Colossal heads		
4*	Colossal heads		
5*	Colossal heads		
6*	Small heads		
7*	Cats		
8	Miscellaneous		

TABLE 2 (Continued)

<u>Site</u>		<u>Site</u>	
San Lorenzo		Laguna de los	
Monuments	Categories	Monuments	Categories
No. 46	Low relief panels	No. 1a*	Colossal heads
47*	Seated figures; other animals	3*	Seated figures
48	Altars	3a*	Seated figures
49	Miscellaneous	5*	Seated figures in high relief; altars
50	Colossal heads	8*	Seated figures
51	Altars	11*	Seated figures
52*	Seated figures	13*	Other animals
53*	Colossal heads	19*	Standing figures
54	Seated figures	20	Copulation figures
55	Miscellaneous	26	Low relief panels
56	Cats; low relief panels	27*	Small heads
57	Miscellaneous	Altar block*	Seated figures in high relief; altars
58	Other animals	Box with seated figure*	Seated figures
59	Miscellaneous	Small jaguar*	Cats
60	Altars	<u>Tres Zapotes</u>	
61	Colossal heads	<u>Monuments</u>	
62	Miscellaneous	Colossal head*	Colossal heads
63	Miscellaneous	Mon. I	Possible seated figures
64	Low relief panels	M	Possible seated figures
65	Miscellaneous	Small head*	Small heads
Small Metate	Small heads	Small low relief face*	Small heads
<u>Rio Chiquito</u>		<u>Estero</u>	
<u>Monuments</u>		<u>Rabon</u>	
No. 1*	Copulation figures	<u>Monuments</u>	
2	Cats	No. 2	Possible seated figures
3	Miscellaneous	3	Possible seated figures
4	Miscellaneous	4	Possible seated figures
5	Miscellaneous	5*	Small heads
<u>Potrero Nuevo</u>		<u>Chalcatzingo</u>	
<u>Monuments</u>		<u>Reliefs</u>	
No. 1	Other animals	No. I	Seated figures in low relief; cats; low relief panels
2*	Standing figures in high relief; altars	II	Standing figures in low relief; low relief panels
3	Copulation figures	III	Cats; low relief panels
4	Other animals		
<u>Laguna de los</u>			
<u>Cerros</u>			
<u>Monuments</u>			
No. 1*	Colossal heads		

TABLE 2 (Continued)

Site		
Chalcatzingo Reliefs		Categories
No.	IV	Cats; low relief panels
	V	Other animals; low relief panels
	VI	Low relief panels
	VII	Low relief panels
	VIII	Other animals; low relief panels
	IX	Cats; low relief panels
	Chalcatzingo figure*	Seated figures
<u>Other Monuments</u>		
	Alvarado*	Seated figures in low relief; standing figures in low relief; low relief panels
	Viejon*	Standing figures in low relief; low relief panels
	Angel R. Cabada*	Standing figures in low relief; low relief panels
	Catemaco*	Small heads
	Las Choapas*	Cats
	Pilapan 1 and 2*	Other animals
	Matacapan*	Boxes, bowls, and cylinders
	Cerro Piedra	Low relief panels
	Las Victorias	Low relief panels
	Padre Piedra	Low relief panels
	Pijijiapan	Low relief panels
	San Miguel Amuco	Low relief panels
	Proboscis (Arroyo Sonso)*	Seated figures
	Wrestler*	Seated figures
	Las Limas*	Seated figures
	San Martin*	Seated figures
	Cruz de Milagro*	Seated figures
	Nestepe head*	Colossal heads

TABLE 3

Known Location of Protected Olmec Sculptures

Museo Nacional, Mexico City

La Venta Mons. 12, 19, 23; San Lorenzo Mons. 2, 34; Chalcatzingo figure; Alvarado stela; Arroyo Sonso Proboscis figure; The Olmec Wrestler

Museo de Antropologia, Xalapa, Veracruz

San Lorenzo Mons. 1, 3, 4, 5, 9, 10, 11, 14, 43; Laguna de los Cerros Mons. 1, 1a, 3, 3a, 5, 8, 11, 13, 19, 27, altar block, box with seated figure, small jaguar; Potrero Nuevo Mon. 2; Estero Rabon Mon. 5; Mons. from Viejon, Angel R. Cabada, Catemaco, Las Choapas, Pilapan, Maticapan, San Martin, Cruz de Milagro

Parque Museo de La Venta, Villahermosa, Tabasco

La Venta Mons. 1, 3, 4, 5, 13, 20, 28, 29, 30, 31, 32, 33, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68; 69, 74, 75; La Venta stelae 1, 2, 3; La Venta altars 1, 2, 3, 4, 5, 6, 7

Museo del Estado, Villahermosa, Tabasco

La Venta Mons. 2, 9, 10, 11, 21, 70, 71, 72, 73

Museo de Santiago Tuxtla, Veracruz

Nestepé 1; small head, small low relief face from Tres Zapotes

Tenochtitlan, Veracruz (school house)

San Lorenzo Mons. 6, 7, 12, 24, 26, 30, 39, 47, 52; Rio Chiquito Mon. 1

TABLE 4

Stylistic Groupings of Colossal Heads

Group A	Subgroup I---	LV 2, LV 3
	Subgroup II--	LV 1, LV 4
Group B	Subgroup III -	SL 1, SL 2, SL 5, SL 7
	Subgroup IV--	SL 3, SL 4, SL 6
Group C	Subgroup V--	TZ 1
	Subgroup VI -	NS 1
Group D	Subgroup VII-	LC 1
	Subgroup VIII	LC 1a
Not typeable	---	SL Mon. 19, SL Mon. 22, SL Mon. 50, SL Mon. 61

TABLE 5
Temporal Placement of Colossal Heads

San Lorenzo Phase B	
1000 B. C.	
San Lorenzo Phase A	LV 2, LV 3 LV 1, LV 4 SL 1, SL 2, SL 5, SL 7 SL 3, SL 4, SL 6 TZ 1 NS 1
1150 B. C.	
	LC 1 LC 1a
Chicharras Phase	
1250 B. C.	
Bajio Phase	

TABLE 6 (Continued)

Monuments	Neck		Posture					Object held										Apparel						Mouth		Nasion		Upper Lip		Lower Lip							
	Massive	Delicate	Kneeling	Cross-legged C	Cross-legged B	Cross-legged A	Squatting	Legs dangling	Bowl	Box	Metate	Palette	Crescents(?)	Bar	Baby	Cestus	Snake	Nude	Cod piece	Cape	Abdomen wrap	Plaque	Collar	Skirt	Headgear	Human	Jaguar god	Possible claws	Sub-rhomboidal	Double	Bow	Straight	Bow	Straight			
No. 70	x									x							x																				
72		x															x	x																			
73	x																																				
74	x										x																										
75	x																			x																	

TABLE 8

Trait Comparison of Laguna de los Cerros Seated Figures*

Laguna de los Cerros Monuments	Neck		Posture					Apparel												
	Head broken off	Ground fracture	Massive	Delicate	Body well modeled	Kneeling	Cross-legged C	Cross-legged B	Cross-legged A	Squatting	Legs dangling	Legs broken	Arms broken	Nude	Cod piece	Cape	Abdomen wrap	Plaque	Collar	Skirt
No. 3	x		x	x							x	x		x			x			
3a	x		x	x							x	x		x	x	x				
11	x	x	x	x			x				x			x	x	x				
<u>Llano de Jicaro</u>																				
No. 8, Figure seated on box																				
										x										

*x indicates trait presence; Cross-legged A = left leg crossed in front, right leg back along side; Cross-legged B = right leg crossed in front, left leg back along side; Cross-legged C = both legs crossed in front.

TABLE 9
 Trait Comparisons of Miscellaneous Seated Figures*

Miscellaneous Monuments	Neck		Posture			Object held					Apparel				Mouth		Upper Lip		Lower Lip																								
	Head broken off	Ground fracture	Massive	Delicate	Body well modeled	Kneeling	Cross-legged C	Cross-legged B	Cross-legged A	Squatting	Legs dangling	Bowl	Box	Metate	Palette	Crescents (?)	Bar	Baby	Cestus	Snake	Nude	Cod piece	Cape	Abdomen wrap	Plaque	Collar	Skirt	Headgear	Human	Jaguar god	Possible claws	Sub-rhomboidal	Double	Bow	Straight	Bow	Straight						
Proboscis Statue					x																																						
Minatitlan Wrestler			x	x			x															x																					
Cruz de Milagro Figure			x	x		x																					x	x															
Las Limas Figure				x	x	x												x																									
Idolo de San Martin			x	x					x								x																										
Chalcatzingo Figure	x		x																																								

* x indicates trait presence; Cross-legged A = left leg crossed in front, right leg back along side; Cross-legged B = right leg crossed in front, left leg back along side; Cross-legged C = both legs crossed in front.

TABLE 10

Schematic Seriation of Seated Figure Styles

La Venta	San Lorenzo	Laguna de los Cerros
Neck massive	Neck massive	Neck delicate
Arms present	Arms present	Arms broken off
Utilitarian objects held in hands	Ceremonial objects held in hands	Hands broken off--no evidence for holding objects
Plaques present	Plaques present	Plaques absent
Legs present--postures varied	Legs present--postures varied	Legs broken off
Standardization	Standardization	Experimentalism
Body poorly modeled	Body well modeled	Body well modeled
Much attention on neck break	Little attention on neck break	Little attention on neck break
Heads broken off in smaller figures, present in large	Heads usually broken off	Heads usually broken off
Some nudity	No nudity	No nudity
Cape scarce as article of attire	Cape common as article of attire	Cape common as article of attire
Claws present	No claws present	No claws present

TABLE 11

Temporal Placement of Seated Figure Styles

<u>Period</u>	<u>Style</u>	<u>Monuments</u> *
800 B. C.		
La Venta Phase II (?)	La Venta School	La Venta Monuments 5, 8, 9, 10, 11, 70, 72; Proboscis status La Venta Monuments 21, 30, 31, 40, 73, 74, 75; Chalcatzingo figure; Idolo de San Martin
900 B. C.		
San Lorenzo Phase B	San Lorenzo School	San Lorenzo Monuments 10, 11, 26, 47, 52; Cruz de Milagro figure
1000 B. C.		
San Lorenzo Phase A	Laguna de los Cerros School	Laguna de los Cerros Monuments 3, 3a, 11, figure on box La Venta Monuments 23, 73
1100 B. C.		
1150 B. C.		
Chicharras Phase		

*Note: Mon. 34 of San Lorenzo, Mon. 8 of Laguna de los Cerros, The Wrestler, and the Las Limas figure are too unique to assign to any "school" at present. Mons. 38 and 48 of La Venta, and Mons. 24 and 54 of San Lorenzo are too fragmentary to categorize.

TABLE 12
 Trait Comparisons of High Relief Seated Figures*

Monuments	Posture		Object held			Apparel					Nastón		Figure in niche	Body well modeled	Ears shown	Ear ornaments	
	Cross-legged C	Cross-legged B Squatting	Rope	Baby	Unknown	Nude	Cod piece	Cape	Abdomen wrap	Plaque	Collar	Headgear					Sub-rhomboidal
La Venta Altar 2	x		x								x	x			x	x	
La Venta Altar 3		x					x		x	x	x				x	x	x
La Venta Altar 4	x		x					x		x	x				x	x	
La Venta Altar 5	x			x			x			x	x				x	x	x
La Venta Altar 6	x										x						x
San Lorenzo Mon. 14			x				x	x	x						x	x	x
San Lorenzo Mon. 20	x			x							x				x		x
Laguna de los Cerros Mon. 5		x						x	x		x					x	
Small Laguna de los Cerros Altar	x				x						x	x			x		x

* x indicates trait presence; Cross-legged B = right leg crossed in front, left leg back along side; Cross-legged C = both legs crossed in front.

TABLE 13

Stylistic and Chronological Placement of
High Relief Seated Figures

<u>Period</u>	<u>Style</u>	<u>Monuments</u>
La Venta Phase III (?)		La Venta Altars 2 and 6
800 B. C.		
La Venta Phase II (?)	La Venta School	
900 B. C.		
San Lorenzo Phase B	San Lorenzo School	La Venta Altars 3, 4, 5 San Lorenzo Mons. 14, 20
1000 B. C.		
San Lorenzo Phase A	Laguna de los Cerros School	Laguna de los Cerros Mon. 5 Laguna de los Cerros small altar block
1100 B. C.		
1150 B. C.		

TABLE 14

Comparison of Treatment in Cats

Treatment	Chalcatzingo Relief				Las Choapas Monument	Laguna	Rio Chiquito Monument 2	San Lorenzo Monuments					La Venta Monuments									
	IX	V	IV	III		de los Cerros Cat		7	30	37	41	56	6	15	25	26	27	28	41	58	59	60
Naturalistic		x	x	x	x	x	x	x	x	x						x	x		x	x		
Abstract	x							x	x		x	x	x	x	x			x			x	x
Relief	x	x	x	x				x	x	x	x	x	x	x	x			x			x	x
Full Round					x	x	x	x	x							x	x		x	x		
Head broken off					x			x	x							x						

TABLE 15
Temporal Placement of Cats

600 B. C.	La Venta Phase IV	La Venta Mons. 6, 15, 25, 26, 27, 58, 69 Chalcatzingo Relief IX
700 B. C.	La Venta Phase III (?)	La Venta Mon. 71
800 B. C.	La Venta Phase II (?)	La Venta Mons. 28, 41, 59, and 60 Laguna de los Cerros Jaguar
900 B. C.	San Lorenzo Phase B	San Lorenzo Mon. 7, Las Choapas figure San Lorenzo Mons. 37, 56
1000 B. C.		Chalcatzingo Relief III
1100 B. C.	San Lorenzo Phase A	San Lorenzo Mons. 30 and 41 Chalcatzingo Relief IV
1150 B. C.		

TABLE 16

Temporal Placement of Other Animals

600 B. C.	La Venta Phase IV	La Venta Mon. 19, Altar 7, Stela 3 low relief
700 B. C.		
800 B. C.		La Venta Mon. 12
900 B. C.	San Lorenzo Phase B	San Lorenzo Mons. 9, 21, 43, 47 Potrero Nuevo Mons. 1, 4 Pilapan Mons. 1, 3
1000 B. C.		
1100 B. C.	San Lorenzo Phase A	
1150 B. C.		

TABLE 18
Temporal Placement of Altars

600 B. C.	La Venta Phase IV	La Venta Altars 1, 7 (Low relief added to La Venta Altars 3, 4, 5, San Lorenzo Mon. 14, Potrero Nuevo Mon. 2)
700 B. C.	La Venta Phase III (?)	La Venta Altars 2, 6
800 B. C.	La Venta Phase II (?)	
900 B. C.	San Lorenzo Phase B	La Venta Altars 3, 4, 5 San Lorenzo Mons. 14, 18, 20 Potrero Nuevo Mon. 2
1000 B. C.		Laguna de los Cerros Altar Block Laguna de los Cerros Mon. 5
1100 B. C.	San Lorenzo Phase A	
1150 B. C.		

TABLE 20

Temporal Placement of Low Relief Panels

500 B. C.	?
	Viejon, Cerro Piedra, Alvarado, Angel R. Cabada
600 B. C.	
La Venta Phase IV?	La Venta Mons. 13, 19, 61, 63; Altars 3, 4, 5, 7; Stelae 2, 3 Las Victorias, Padre Piedra, Pijijiapan, San Miguel Amuco
	Chalcatzingo Reliefs I, VIII, IX La Venta Mons. 6, 15, 22, 25, 26, 27, 58, 71
700 B. C.	
La Venta Phase III?	
800 B. C.	
La Venta Phase II?	
900 B. C.	
San Lorenzo Phase B	
1000 B. C.	Chalcatzingo Reliefs III, IV, V, VI Pilapan Mons. 1, 3 San Lorenzo Mons. 16, 30, 46, 56, 58, 64
1100 B. C.	San Lorenzo Phase A
1150 B. C.	San Lorenzo Mons. 21, 41, 42

FIGURES

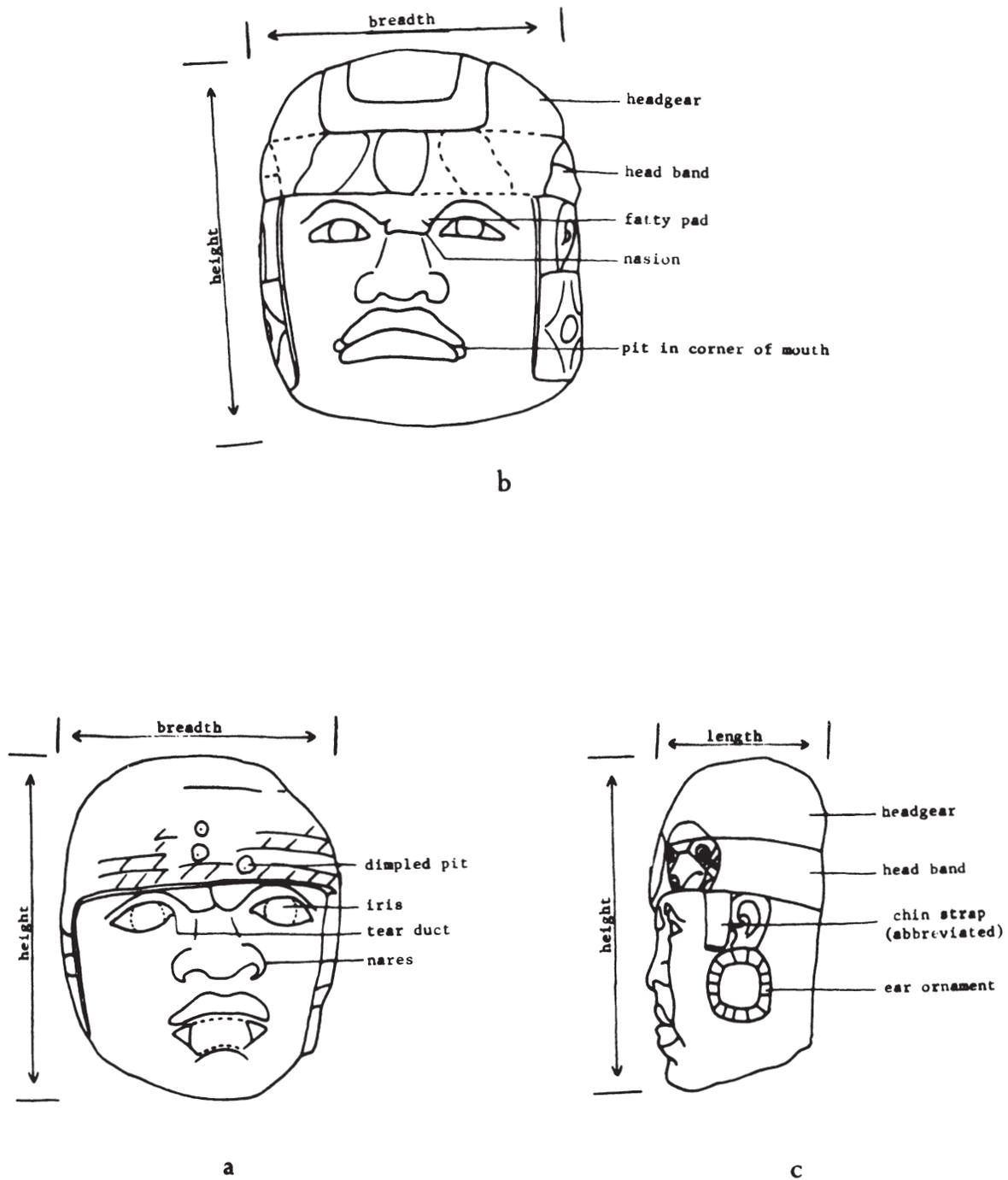


Fig. 1 Big Head Terminology (after Clewlow, et. al., 1967, Figure 1).

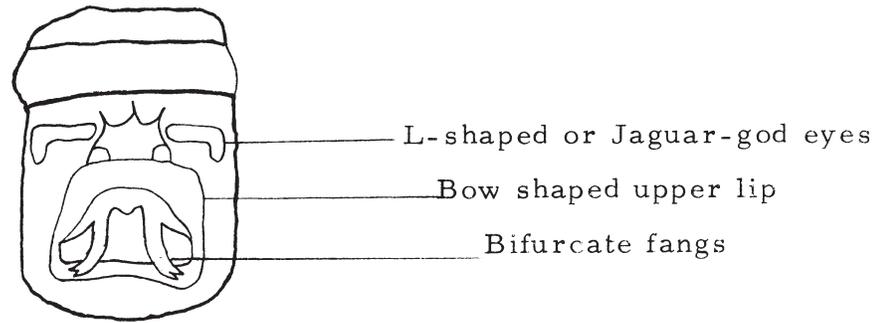


Fig. 2 Unusual Facial Terminology

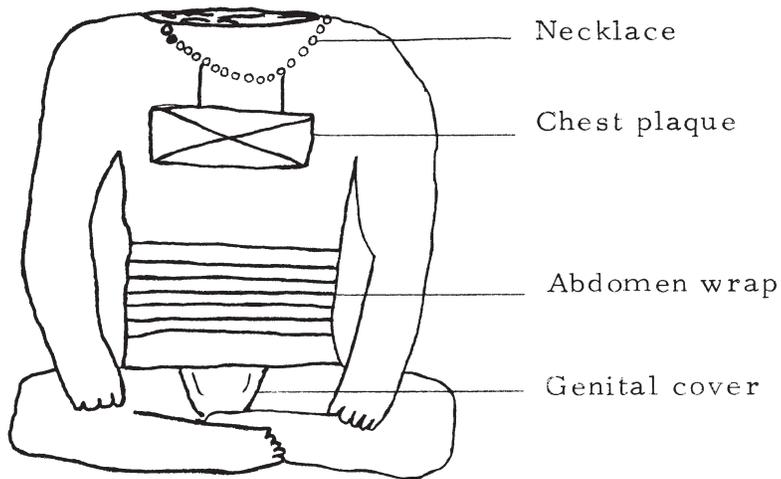


Fig. 3 Body Terminology

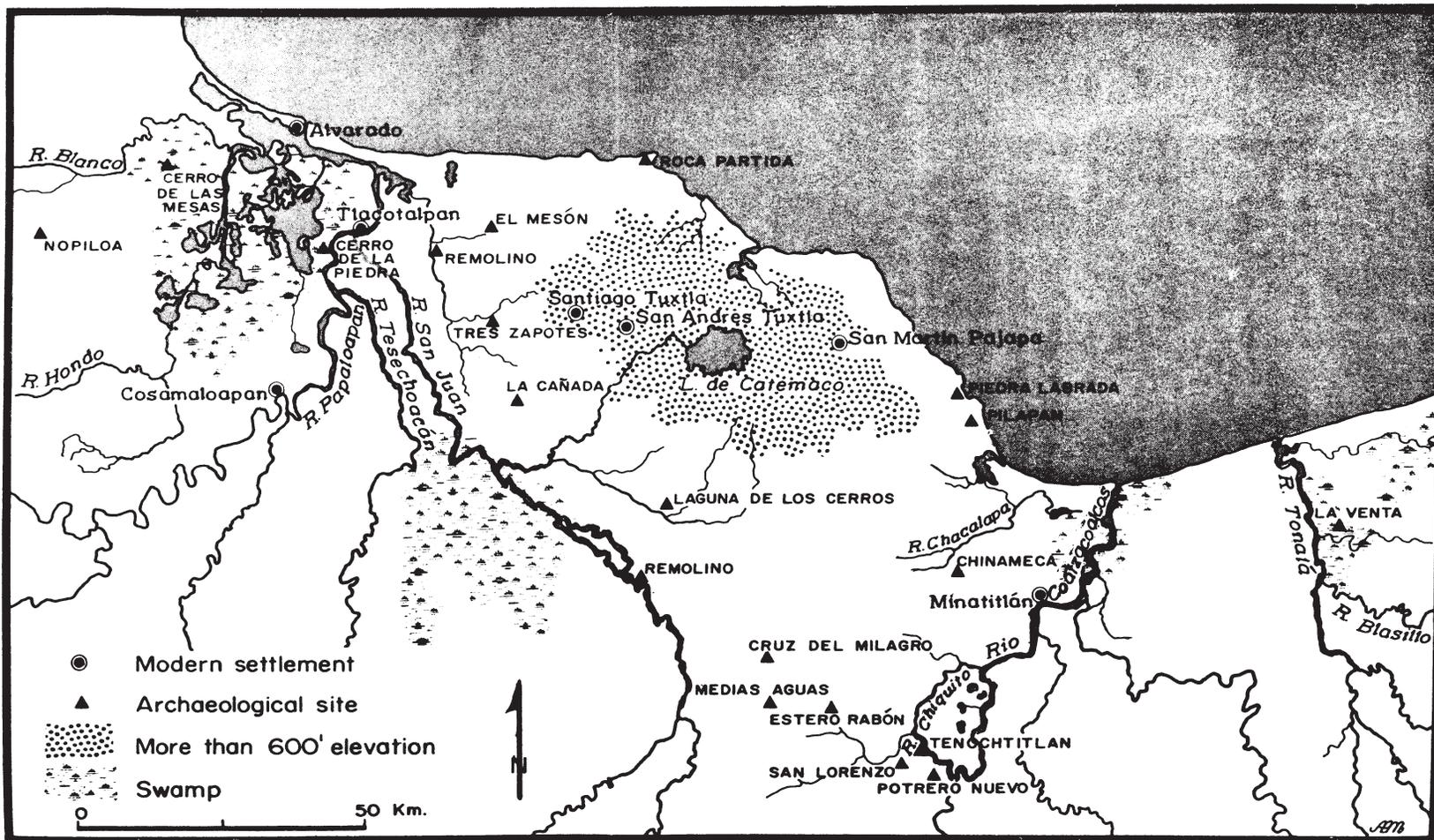


Fig. 4 Olmec Heartland and Major Sites (after Bernal, 1969, Figure 1).

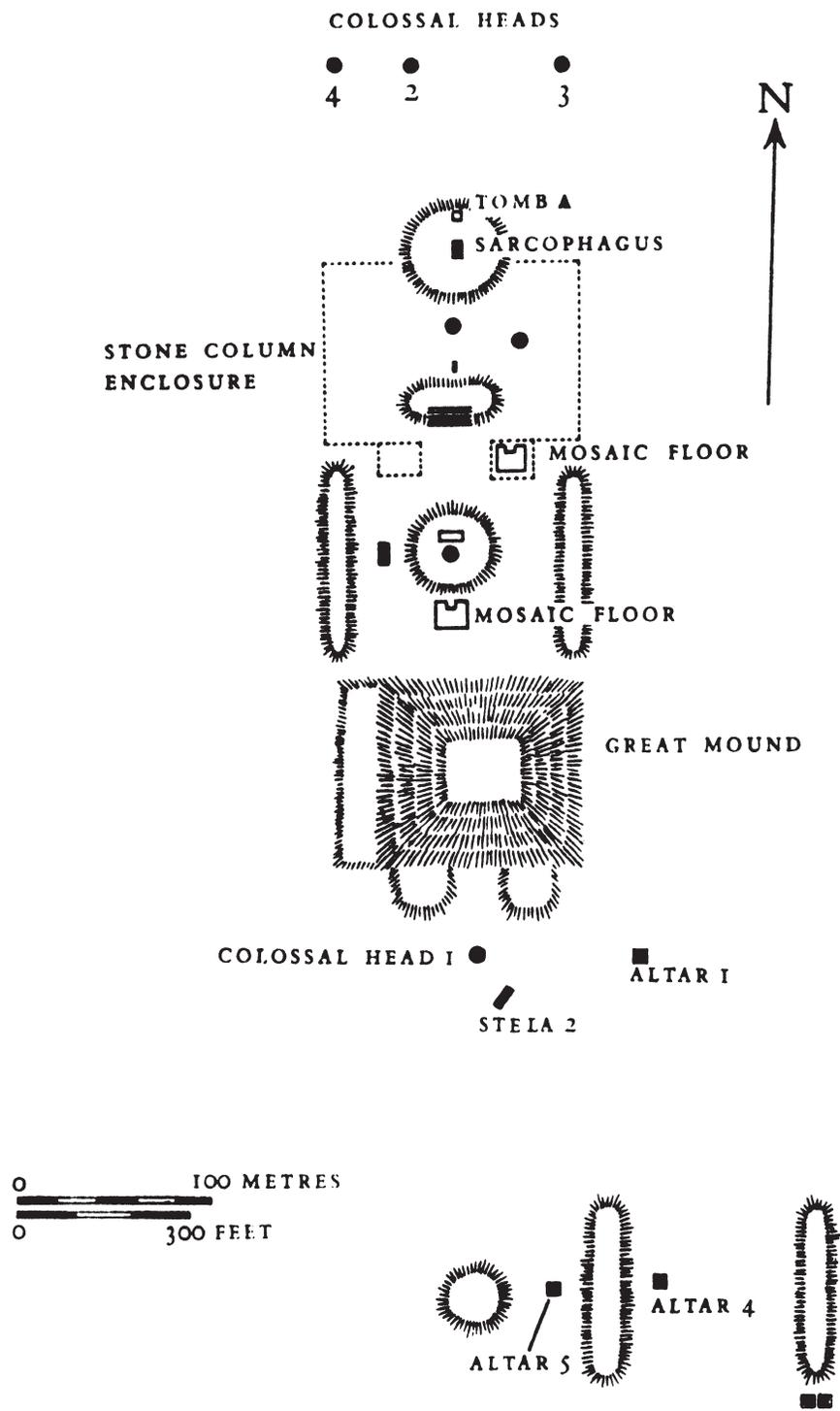


Fig. 5 Kubler's Figure 16 -- La Venta Plan Showing Positions of Colossal Heads and Altars 4 and 5 (after Kubler 1962, Figure 16).

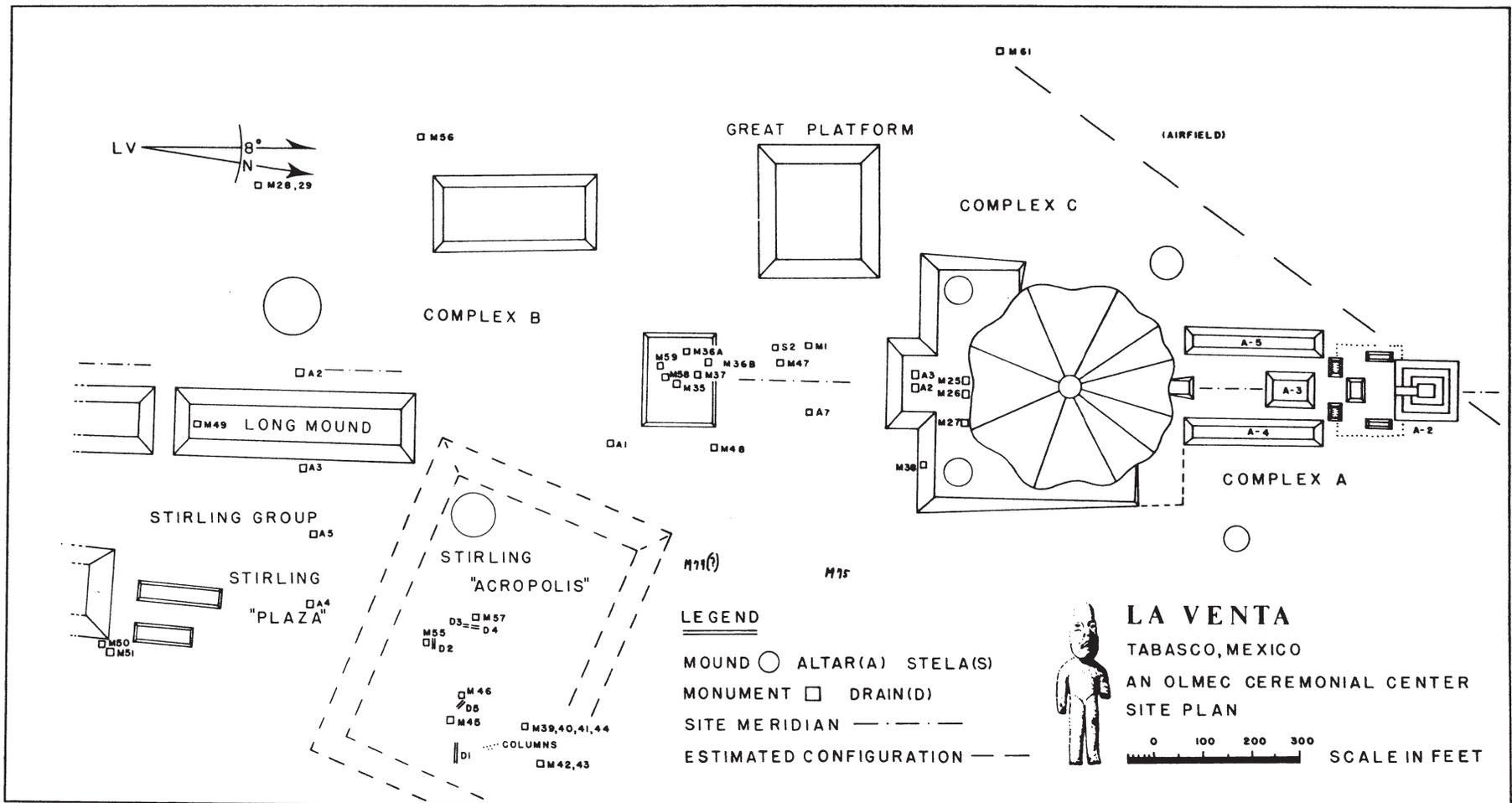


Fig. 6 1968 La Venta Map with Locations of Monuments Indicated (after Heizer, Graham and Napton 1968).

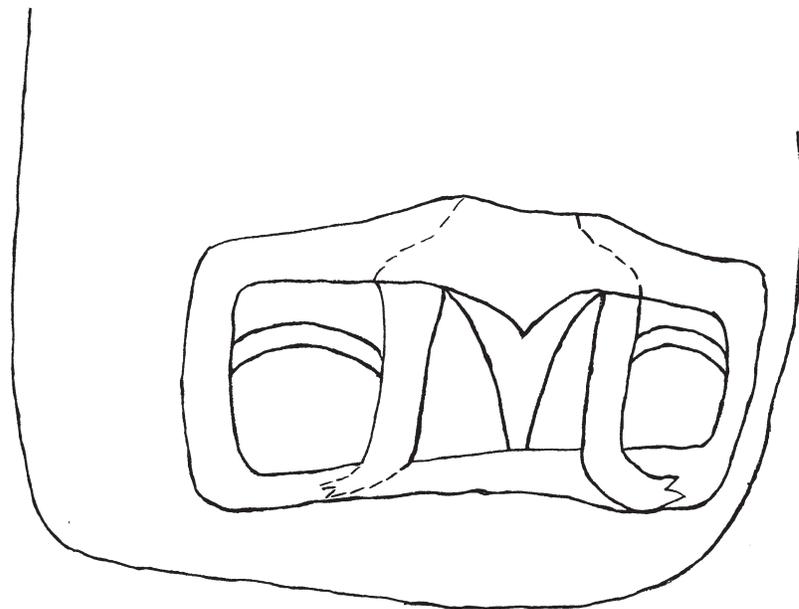


Fig. 7 Mouth Assembly of Monument 1, Laguna de los Cerros



Fig. 8 Diamond Element in Right Eye of Monument 1a, Laguna de los Cerros

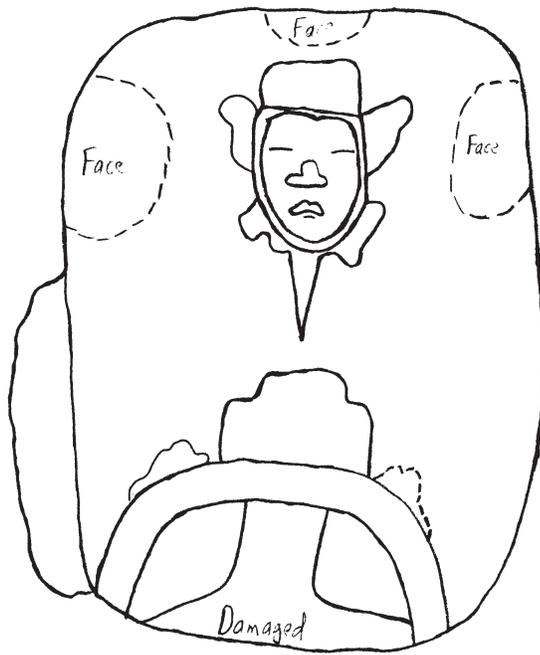


Fig. 9 Stylized Jaguar Mouth and Nose, Monument 71, La Venta

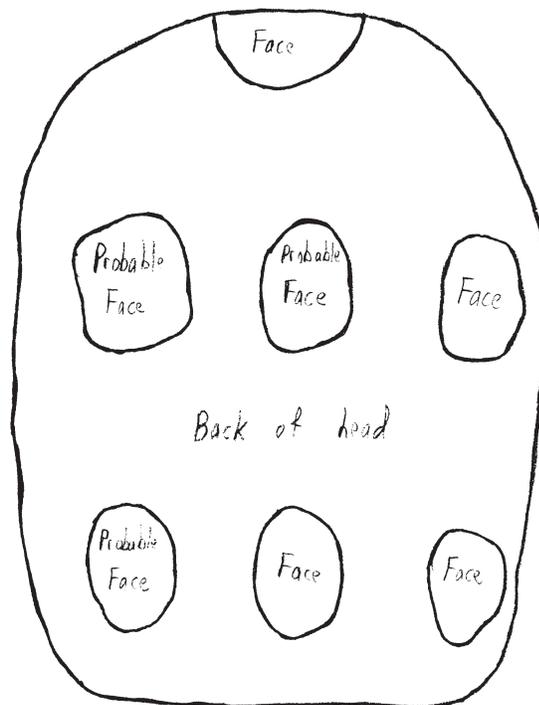


Fig. 10 Low Relief Small Faces on Monument 71, La Venta

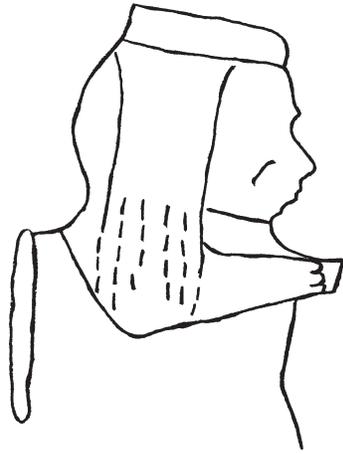


Fig. 11 Hanging Element from Head of Monument 5, La Venta;
Shown Schematically

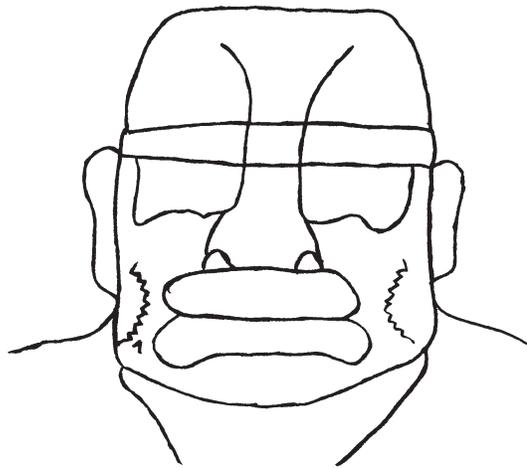
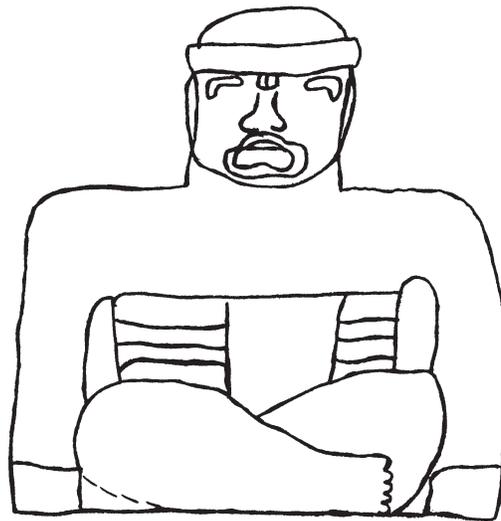


Fig. 12 Eyes of Monument 8, La Venta



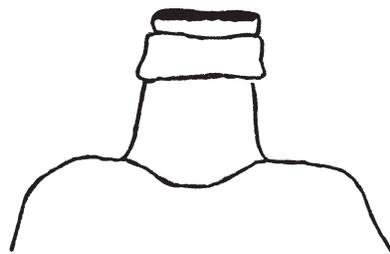
Fig. 13 Fangs of Monument 9, La Venta



Front



Right side



Back

Fig. 14 Detailed Drawings of Monument 9, La Venta

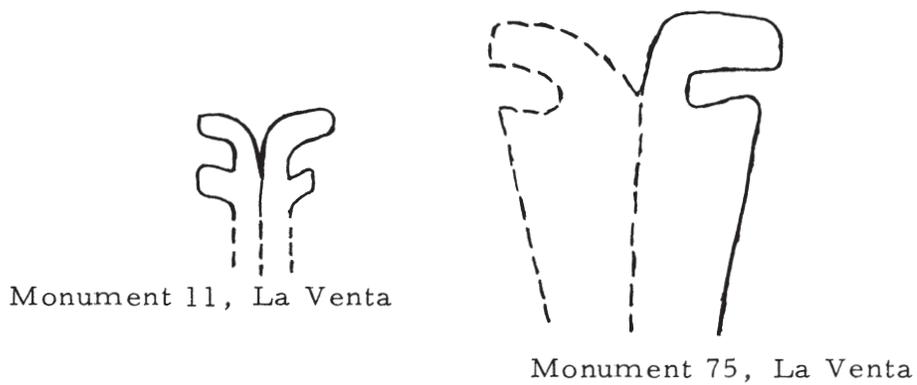


Fig. 15 Tail Element of Monument 11, La Venta, and Monument 75, La Venta

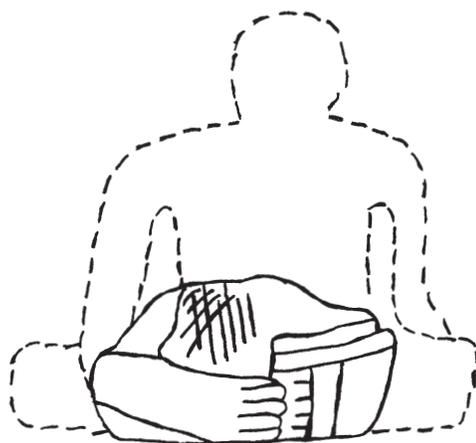


Fig. 16 Reconstruction of Monument 38, La Venta

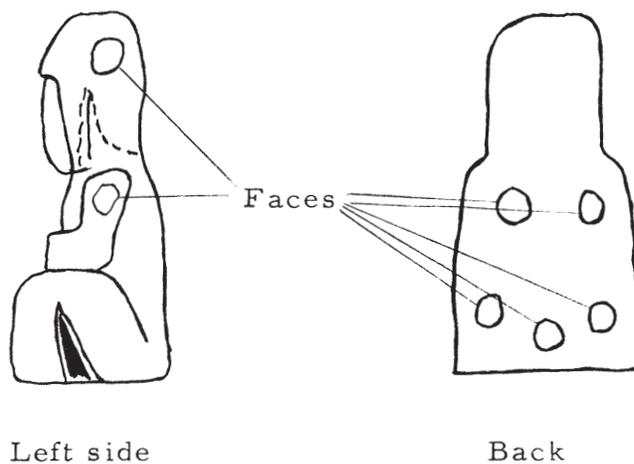
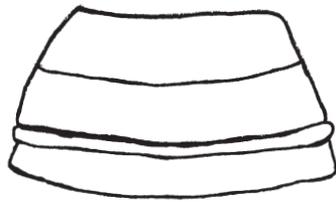


Fig. 17 Positioning of Small Faces in Monument 72, La Venta



Back of cape

Fig. 18 Cape Decoration, Monument 12, San Lorenzo

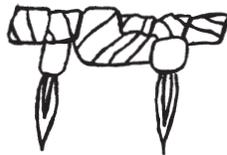


Fig. 19 Leg Bracelet, Monument 34, San Lorenzo

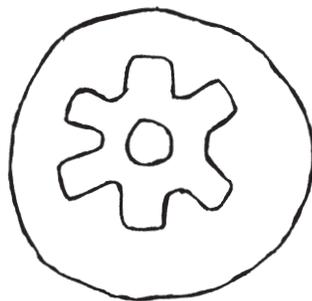


Fig. 20 Pectoral, Monument 34, San Lorenzo

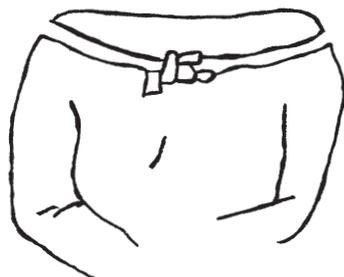


Fig. 21 Knot on Cape of Monument 47, San Lorenzo

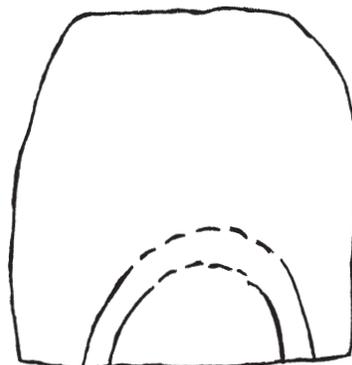


Fig. 22 Rear View of Monument 47, San Lorenzo

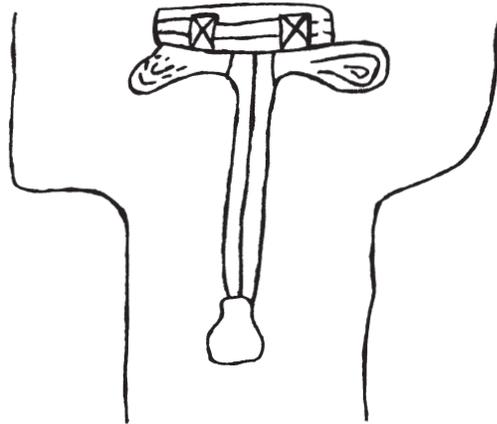


Fig. 23 Back of Cape with Tassels, Monument 3a, Laguna de los Cerros

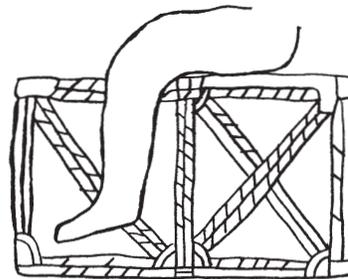


Fig. 24 Side of Stone Box from Laguna de los Cerros



Fig. 25 Seated Figure on Box from Laguna de los Cerros

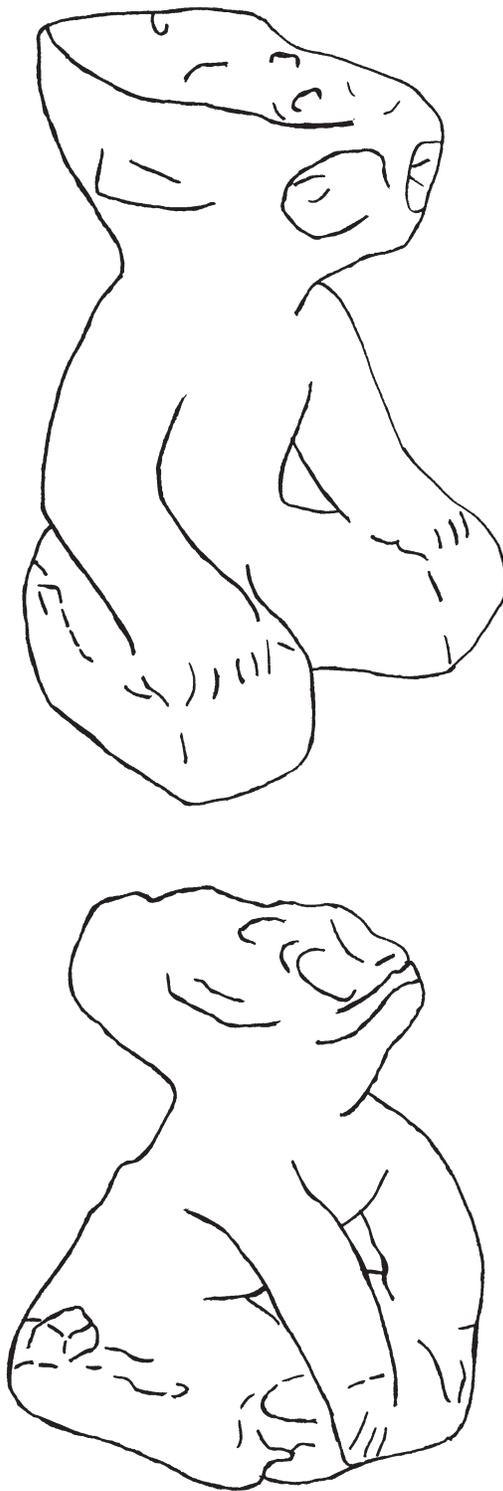


Fig. 26 Sketch Showing Similarities between Proboscis Statue and Monument 11, La Venta (after Cervantes, 1968)

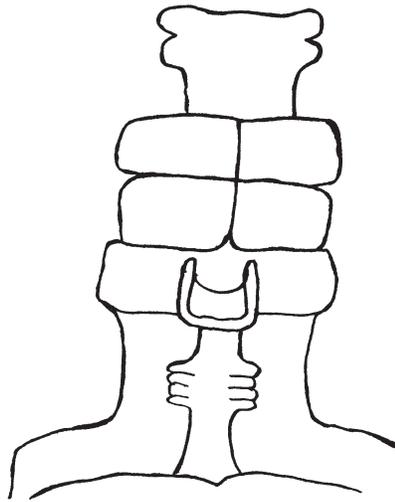


Fig. 27 Headdress Stringer, Idolo de San Martin

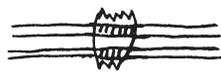


Fig. 28 Design on Abdomen wrap, Chalcatzingo Figure



Fig. 29 Chest Plaque on Seated Niche Figure, Altar 3, La Venta

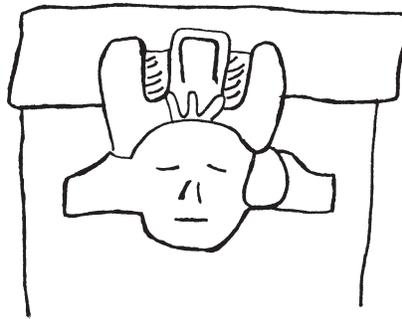


Fig. 30 Headdress of Seated Niche Figure, Altar 6, La Venta

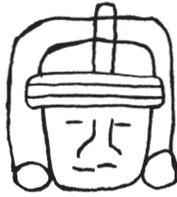


Fig. 31 Headdress of Seated Figure on Small Altar, Laguna de los Cerros



Fig. 32 Sketch of Low Relief Seated Figure, Monument 61, La Venta

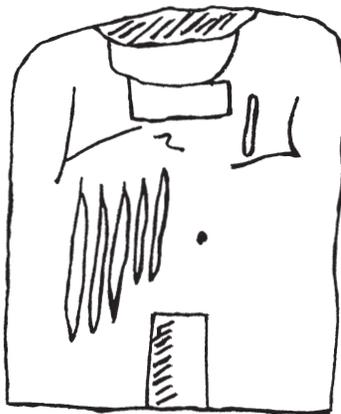


Fig. 33 Sketch of Monument 57, La Venta

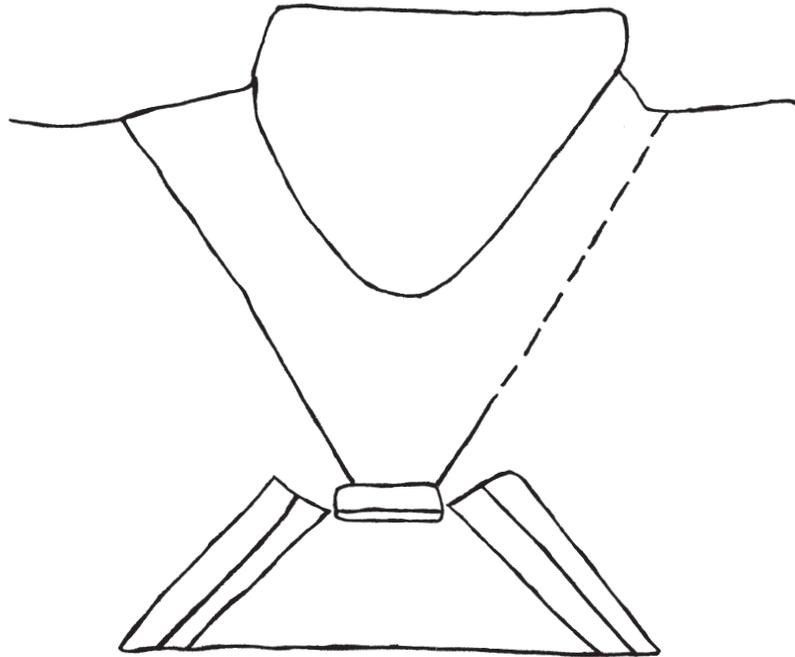


Fig. 34 Chest Ornament, Monument 19, Laguna de los Cerros

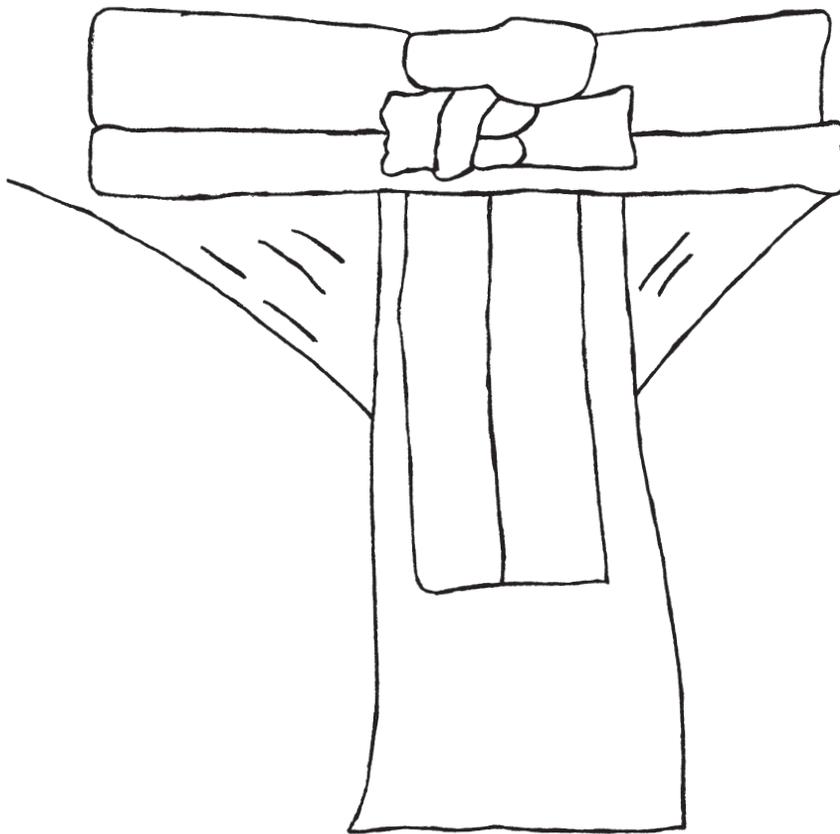


Fig. 35 Waist Band Knot, Monument 19, Laguna de los Cerros



Fig. 36 Flame Brow Mask, Monument 19, Laguna de los Cerros

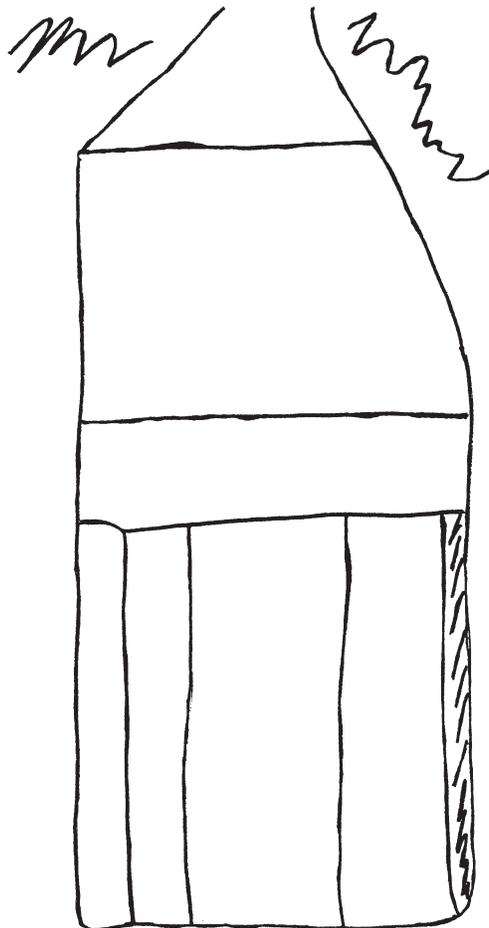


Fig. 37 Headdress Remnant, Monument 19, Laguna de los Cerros

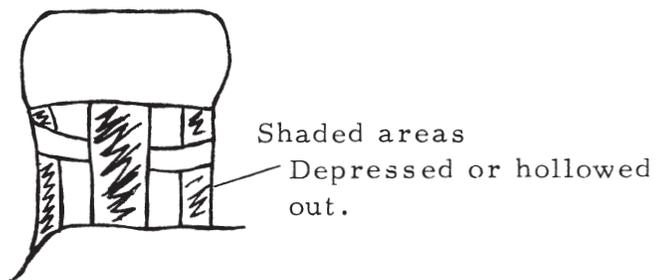


Fig. 38 Back of Monument 65, La Venta



Fig. 39 Face from Catemaco

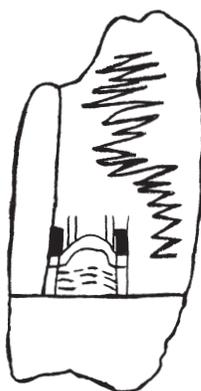


Fig. 40 Drawing of Monument 58, La Venta



Fig. 41 Incisions above Eyes on Monument 59, La Venta

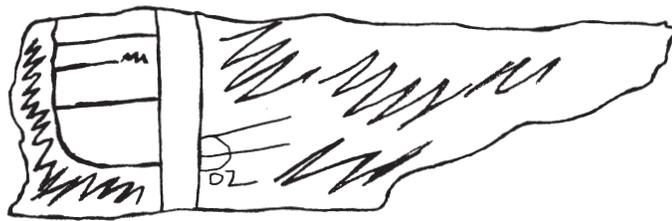


Fig. 42 Drawing of Monument 69, La Venta

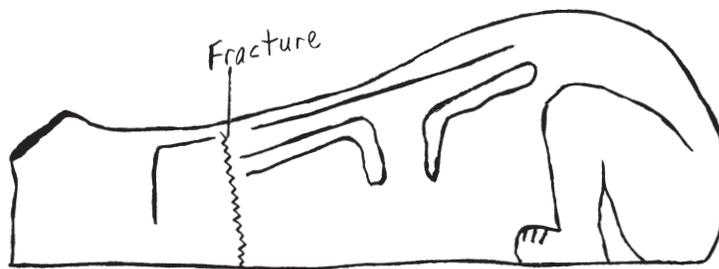


Fig. 43 Incised Design, Monument 7, San Lorenzo



Fig. 44 Monument 30, San Lorenzo (after Coe 1967: Fig. 2)



Fig. 45 Relief on Monument 56, San Lorenzo (after Beverido 1970a: Fig. 34)

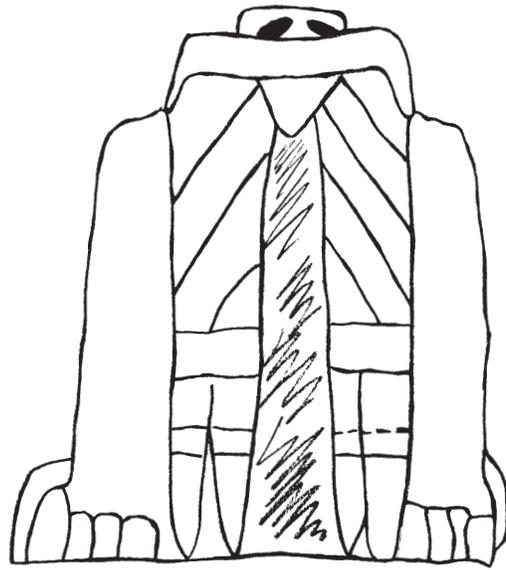


Fig. 46 Fangs on Las Choapas Jaguar

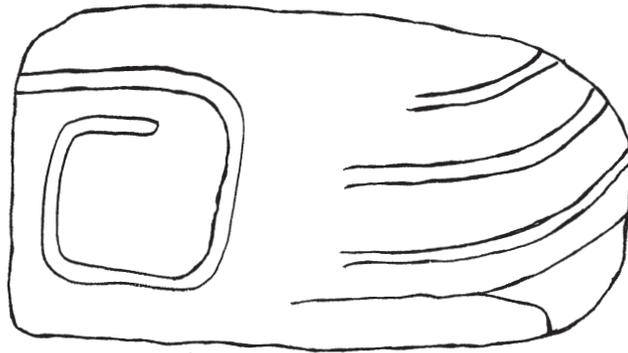


Fig. 47 Left Side Monument 13, Laguna de los Cerros

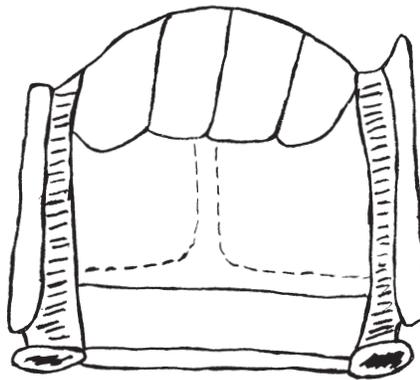


Fig. 48 Rear Monument 13, Laguna de los Cerros



Fig. 49 Monument 63, La Venta (after Williams and Heizer 1965)

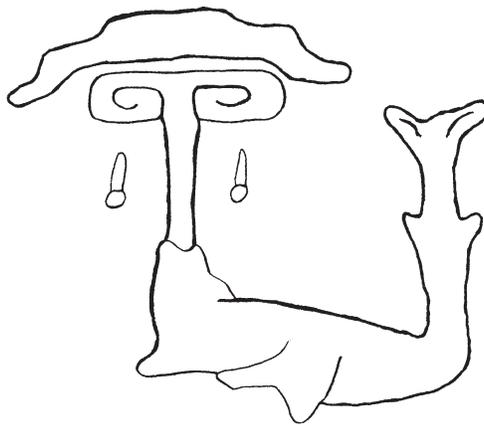


Fig. 50 Relief VIII, Chalcatzingo (after Joralemon 1971: Fig. 265)



Fig. 51 Relief V, Chalcatzingo (after Joralemon 1971: Fig. 262)

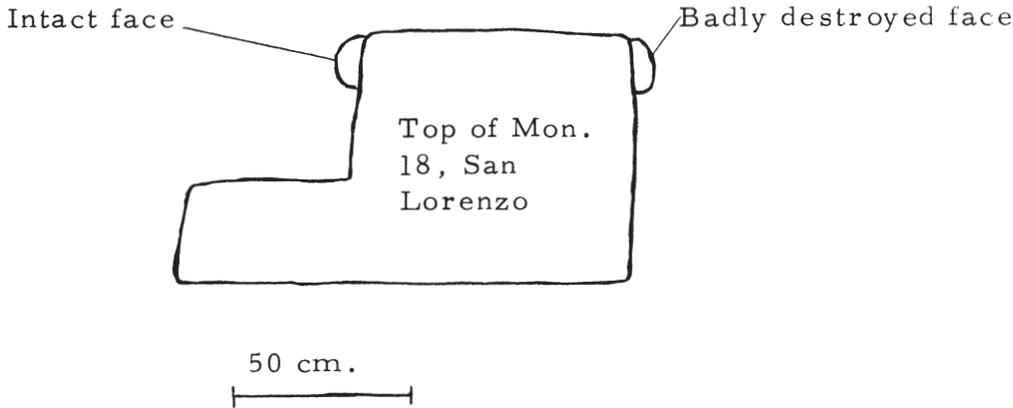


Fig. 52 Top View, Showing Shape of Monument 18, San Lorenzo

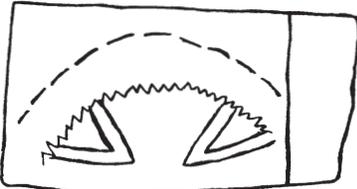


Fig. 53 Low Relief Design on Monument 46, San Lorenzo

PLATES



Plate 1

Monument 1a,
Laguna de
los Cerros



Plate 2

Monument 74,
La Venta



Plate 3

Monument 75,
La Venta



Plate 4

Monument 3a,
Laguna de los
Cerros

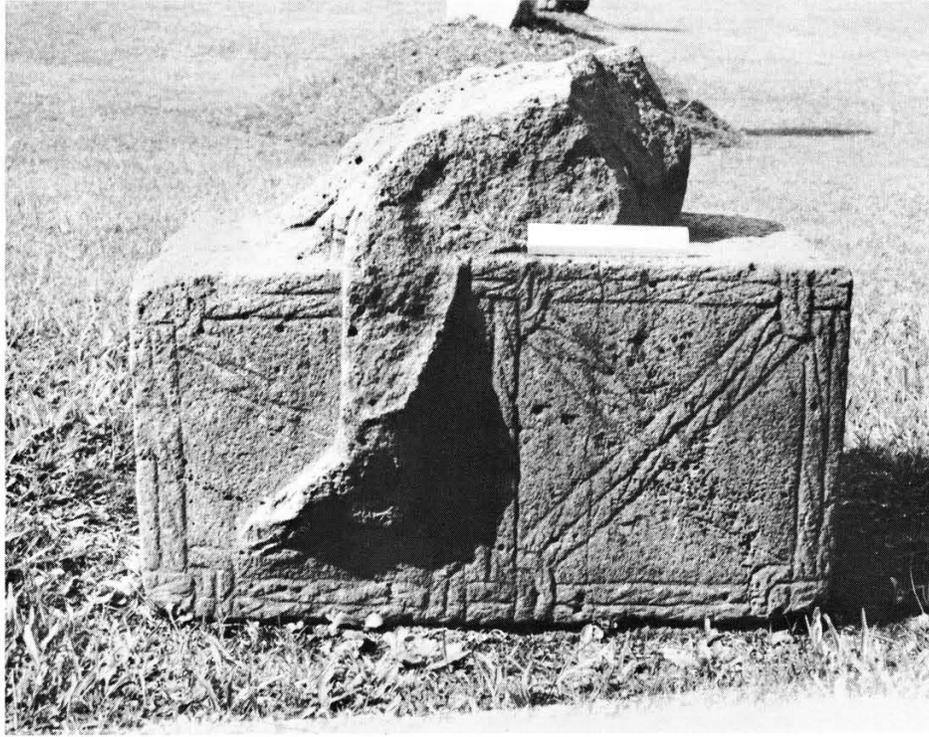


Plate 5. Box with figure atop it, Laguna de los Cerros.

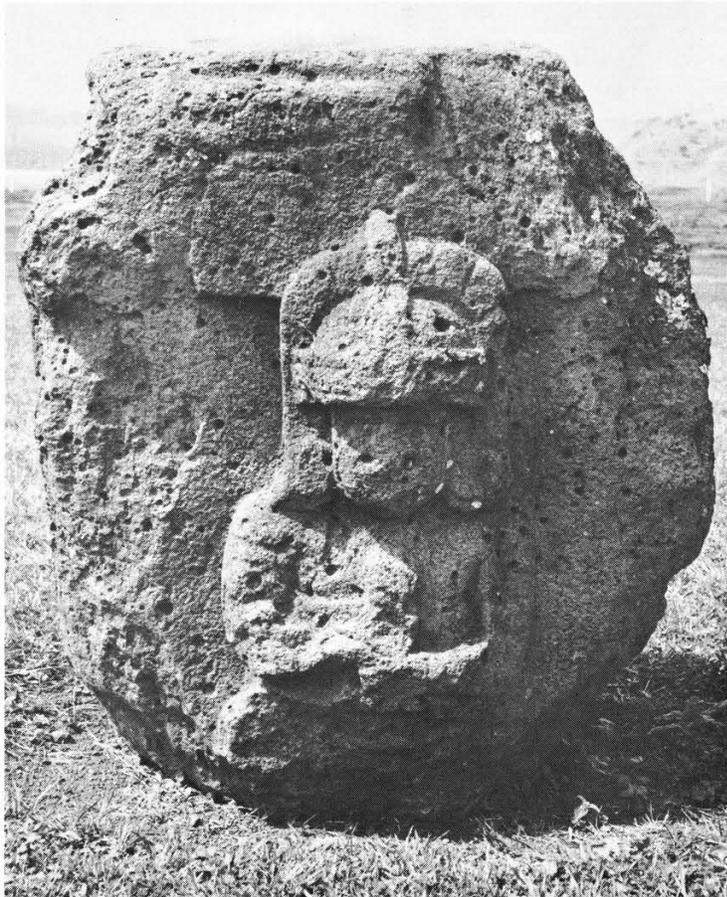


Plate 6. Small Altar-block, Laguna de los Cerros.

BIBLIOGRAPHY

ABBREVIATIONS USED

AA	American Anthropologist
AAnt	American Antiquity
ANT	Antiquity
BAE	Bureau of American Ethnology. Washington, D.C.
-B	Bulletin
CIW	Carnegie Institution of Washington. Washington, D.C.
-NMAAE	Notes on Middle American Archaeology and Ethnology
-TAP	Theoretical Approaches to Problems
Cuads. Ams.	Cuadernos Americanos. Mexico
DuO-CO	Dumbarton Oaks Conference on the Olmec. Edited by Elizabeth P. Benson. Dumbarton Oaks Research Library and Collection, Trustees for Harvard University, Washington, D.C.
HMAI	Handbook of Middle American Indians. Austin: University of Texas Press
INAH	Instituto Nacional de Antropología e Historia. Mexico
-A	Anales
-Boletin	Boletin
KAS-P	Kroeber Anthropological Society. Papers. Berkeley.
MAI	Museum of the American Indian. Heye Foundation. New York
-IN	Indian Notes
NGM	National Geographic Magazine. Washington, D.C.

- SI Smithsonian Institution. Washington, D.C.
- MC Smithsonian Miscellaneous Collection
- SMGE Sociedad Mexicana de Geografia y Estadistica. Mexico. Boletin
- SWJA Southwestern Journal of Anthropology. Albuquerque
- UCARF University of California Archaeological Research Facility. Berkeley
- C Contributions

REFERENCES CITED

- Aveleyra Arroyo de Anda, L.
1965 Una Nueva Cabeza Colosal Olmeca. INAH Boletin 1: 12-14.
- Badner, M.
1972 A Possible Focus of Andean Artistic Influence in Mesoamerica. *Studies in Pre-Columbian Art and Archaeology*, No. 9. Washington, D. C.: Dumbarton Oaks.
- Bateson, G.
1958 *Naven*. Palo Alto: Stanford University Press.
- Baudez, C. F.
1971 Commentary on: Inventory of Some Pre-Classic Traits in the Highlands and Pacific Guatemala and Adjacent Areas. UCARF-C 11: 78-84.
- Beltran, A.
1965 Reportaje grafico del hallazgo de Las Limas. INAH Boletin 21: 9-16.
- Benson, E. P.
1971 An Olmec Figure at Dumbarton Oaks. *Studies in Pre-Columbian Art and Archaeology*, No. 8. Washington, D. C.: Dumbarton Oaks.
- Berger, R., J. A. Graham and R. F. Heizer
1967 A Reconsideration of the Age of the La Venta Site. UCARF-C 3: 1-24.
- Bernal, I.
1968 Views of Olmec Culture. In DuO-CO: 135-142.
1969 *The Olmec World*. Translated by Doris Heyden and Fernando Horcasitas. Berkeley and Los Angeles: University of California Press.
1971 The Olmec Region--Oaxaca. UCARF-C 11: 29-50.
n.d. Los Olmecas en Oaxaca. Mimeographed lecture, Museo Nacional de Antropologia. Mexico, D. F.
n.d. Olmecas y Olmecoides. Mimeographed lectures, Museo Nacional de Antropologia. Mexico, D. F.
- Beverido, F.
1970a San Lorenzo Tenochtitlan y la Civilizacion Olmeca. Master's thesis. University of Veracruz, Xalapa.
1970b La Magnetometria en Auxilio de la Investigacion Arqueologica. *Anuario Antropologico* 1: 28-44. Universidad Veracruz, Xalapa.

Bliss, R. W. (Collection)

- 1957 Pre-Columbian Art. Text and Critical Analysis by S. F. Lothrop, W. F. Foshag and J. Mahler. New York: Phaidon Press.

Blom, F. F. and O. La Farge

- 1926-27 Tribes and Temples, a Record of the Expedition to Middle America conducted by the Tulane University of Louisiana in 1925. New Orleans: Tulane University Press.

Boggs, S. H.

- 1950 'Olmec' Pictographs in the Las Victorias Group, Chalchuapa Archaeological Zone, El Salvador. CIW-NMAAE 99: 85-92.

Breiner, S. and M. D. Coe

- 1972 Magnetic Exploration of the Olmec Civilization. American Scientist 60(5): 566-575.

Bruggemann, J. and M. Hers

- 1970 Exploraciones arqueologicas en San Lorenzo Tenochtitlan. INAH Boletin 39: 18-23.

Caso, A.

- 1942 Definicion y Extension del Complejo 'Olmeca'. In Mayas y Olmecas. Mexico: Sociedad Mexicana de Antropologia.

Cervantes, M. A.

- 1968 Revision de una escultura olmeca de Arroyo Sonso, Veracruz. INAH Boletin 33: 46-51.

Chavero, A.

- 1883 Historia Antigua de Mexico. In Mexico a Traves de los Siglos. Mexico, D. F.

Clewlow, C. W., Jr.

- 1968 Comparacion de dos Extraordinarios Monumentos Olmecas. INAH Boletin 34: 37-41.

- 1970 A Comparison of Two Unusual Olmec Monuments. UCARF-C 8: 35-40.

- 1972 A Stylistic and Chronological Study of Olmec Monumental Sculpture. Ph.D. dissertation. University of California, Berkeley.

Clewlow, C. W., Jr. and C. R. Corson

- 1968 New Stone Monuments from La Venta, 1968. Appendix II of the 1968 Investigations at La Venta. R. F. Heizer, J. H. Graham and L. K. Napton. UCARF-C 5: 171-182.

Clewlow, C. W., Jr., R. A. Cowan, J. F. O'Connell and C. Benemann
1967 Colossal Heads of the Olmec Culture. UCARF-C 4.

Coe, M. D.

1957a Cycle 7 Monuments in Middle America: A Reconsideration. AA 59: 597-611.

1957b Pre-Classic Cultures in Mesoamerica, a Comparative Survey. KAS-P
17: 7-37.

1962 An Olmec Design on an Early Peruvian Vessel. AAnt 27: 579-580.

1963 Olmec and Chavin: Rejoinder to Lanning. AAnt 29: 101-104.

1965a Archaeological Synthesis of Southern Veracruz and Tabasco. HMAI 3:
679-715.

1965b The Olmec Style and Its Distribution. HMAI 3: 739-775.

1965c The Jaguar's Children: Pre-Classic Central Mexico. New York: The
Museum of Primitive Art.

1966 An Early Stone Pectoral from Southeastern Mexico. Studies in Pre-
Columbian Art and Archaeology. Washington, D.C.: Dumbarton
Oaks.

1967a La Segunda Temporada en San Lorenzo Tenochtitlan, Veracruz. INAH
Boletín 28: 1-10.

1967b Solving a Monumental Mystery. Discovery 3: 21-26.

1967c An Olmec Serpentine Figure at Dumbarton Oaks. AAnt 32: 111-113.

1967d Map of San Lorenzo. New Haven: Yale University Press.

1968a San Lorenzo and the Olmec Civilization. Appendix I: Radiocarbon Dates
from San Lorenzo Tenochtitlan. Appendix II: Stone Monuments of San
Lorenzo. DuO-CO 41-78.

1968b America's First Civilization: Discovering the Olmec. New York: American
Heritage Publishing Company, Inc.

1969 Photogrammetry and the Ecology of Olmec Civilization. Paper read at
the Working Conference on Aerial Photography and Anthropology, Cam-
bridge, Massachusetts. Pl. 1-24.

- Coe, M. D.
1970 The Archaeological Sequence at San Lorenzo Tenochtitlan, Veracruz, Mexico. UCARF-C 8: 21-34.
- 1972 Olmec Jaguars and Olmec Kings. In *The Cult of the Feline* (ed. Benson): 1-18. Washington, D.C.: Dumbarton Oaks.
- Coe, M. D. and R. Cobean
1970 Obsidian Trade at San Lorenzo Tenochtitlan, Mexico. Paper presented at the XXV Annual Meeting of the Society for American Archaeology, Mexico, D. F.
- Coe, M. D., R. A. Diehl, F. P. Beverido, P. and R. Krotser
1966 Exploraciones Arqueologicas en San Lorenzo Tenochtitlan, Veracruz. INAH Boletin 24: 21-25.
- Coe, M. D., R. A. Diehl and M. Stuiver
1967 Olmec Civilization, Veracruz, Mexico: Dating of the San Lorenzo Phase. *Science* 155: 1399-1401.
- Coe, W. R. and R. Stuckenrath, Jr.
1964 A Review of La Venta, Tabasco and Its Relevance to the Olmec Problem. KAS-P 31: 1-43.
- Cook de Leonard, C.
1959 La Escultura. In *Esplendor del Mexico Antigua*, Vol II.: 519-606. Mexico.
- 1967 Sculptures and Rock Carvings at Chalcatzingo, Morelos. UCARF-C 3: 57-84.
- Corona, G.
1962 El Luchador Olmeca. INAH Boletin 10: 12-13.
- Covarrubias, M.
1942 Origen y Desarrollo del Estilo Artistico 'Olmeca'. *Mayas y Olmecas*: 46-49. Mexico: Sociedad Mexicana de Antropologia.
- 1946 The Jaguar and the Serpent. In *Mexico South: The Isthmus of Tehuantepec*. New York. Alfred A. Knopf.
- 1957 *Indian Art of Mexico and Central American*. New York: Alfred A. Knopf.
- Delgado, A.
1965 Infantile and Jaguar Traits in Olmec Sculpture. *Archaeology* 18: 55-62.

Drucker, P.

- 1943 Ceramic Sequences at Tres Zapotes, Veracruz, Mexico. BAE-B 140.
- 1947 Some Implications of the Ceramic Complex at La Venta. SI-MC 107.
- 1952 La Venta, Tabasco: A Study of Olmec Ceramics and Art. BAE-B 153.
- 1955 The Cerro de las Mesas Offering of Jade and Other Materials. BAE-B 157: 25-68.
- 1961 The La Venta Olmec Support Area. KAS-P 25: 59-72.

Drucker, P. and E. Contreras

- 1953 Site Patterns in the Eastern Part of Olmec Territory. Journal of the Washington Academy of Science 43: 389-396. Baltimore.

Drucker, P. and R. F. Heizer

- 1960 A Study of the Milpa System of La Venta Island and Its Archaeological Implications. SWJA 16: 36-45.
- 1965 Commentary of W. R. Coe and Robert Stuckenrath's Review of 'Excavations at La Venta, Tabasco, 1955'. KAS-P 33: 37-70.

Drucker, P., R. F. Heizer and R. J. Squier

- 1957 Radiocarbon Dates from La Venta, Tabasco. Science 126: 72-73.
- 1959 Excavations at La Venta, Tabasco, 1955. BAE-B 170.

Dumbarton Oaks Collection

- 1963 Handbook of the Robert Woods Bliss Collection of Pre-Columbian Art. Washington, D.C.: Dumbarton Oaks.

Easby, E. K.

- 1968 Pre-Columbian Jade from Costa Rica. New York: Andre Emmerich Inc.

Easby, E. K. and J. Scott

- 1970 Before Cortes: Sculpture of Middle America. New York: Metropolitan Museum of Art.

Ferdon, E. N., Jr.

- 1951 The Granite Ruin of Tonalá. Archaeology 4: 83-88. New York.
- 1953 Tonalá, Mexico, An Archaeological Survey. Monographs of the School of American Research, No. 16. Santa Fe.

- Fernandez, J.
 n.d. Arte Olmeca. Mimeographed lecture, Museo de Antropologia. Mexico, D. F. (April 1968).
- Flannery, K. V.
 1968 The Olmec and the Valley of Oaxaca: A Model for Inter-Regional Interaction in Formative Times. DuO-CO: 79-117.
- Foncerrada de Molina, M.
 n.d. Los Olmecas y Los Mayas En Sus Origenes. Mimeographed lecture, Museo Nacional de Antropologia. Mexico, D. F.
- Furst, P. T.
 1965 West Mexican Tomb Sculpture as Evidence for Shamanism in Prehispanic Mesoamerica. Antropologica 15: 29-80. Caracas.
 1968 The Olmec Were-Jaguar Motif in the Light of Ethnographic Reality. DuO-CO: 143-178.
- Gamboa, F.
 1963 Master Works of Mexican Art. Los Angeles: Los Angeles County Museum of Art.
- Gay, C. T. E.
 1966 Rock Carvings at Chalcatzingo. Natural History 75: 56-61.
 1967 Oldest Paintings of the New World. Natural History 76: 28-35.
- Greengo, R. E.
 1952 The Olmec Phase in Eastern Mexico. Texas Archaeological and Paleontological Society 23: 260-292. Austin.
- Grove, D. C.
 1968a The Morelos Preclassic and the Highland Olmec Problem: An Archaeological Study. Ph.D. dissertation. University of California, Los Angeles.
 1968b Chalcatzingo, Morelos, Mexico: A Reappraisal of the Olmec Rock Carvings. AAnt 33: 486-491.
 1968c The Pre-Classic Olmec in Central Mexico: Site Distribution and Inferences. DuO-CI 179-185.
 1969a Review of America's First Civilization: Discovering the Olmec, by M. D. Coe. AAnt 34: 495-496.
 1969b Olmec Cave Paintings: Discovery from Guerrero, Mexico. Science 164: 421-423.

Grove, D. C.

- 1970a The San Pablo Pantheon Mound: A Middle Preclassic Site in Morelos, Mexico. *AAnt* 35: 62-73.
- 1970b The Olmec Paintings of Oxtotitlan Cave Guerrero, Mexico. *Studies in Pre-Columbian Art and Archaeology*, No. 6. Washington, D.C.: Dumbarton Oaks.
- 1970c Los Murales de la Cueva de Oxtotitlan Acatlan Guerrero. *INAH Serie Investigaciones* 23. Mexico, D.F.
- 1972 Olmec Felines in Highland Central Mexico. In *The Cult of the Feline* (ed. Benson): 153-164. Washington, D.C.: Dumbarton Oaks.
- 1973 Olmec Altars and Myths. *Archaeology* 26(2): 128-135.

Grove, D. C. and L. I. Paradis

- 1971 An Olmec Stela from San Miguel Amuco, Guerrero. *AAnt* 36: 95-102.

Guzman, E.

- 1934 Los Relieves de las Rocas del Cerro de las Canterra, Jonacatpec, Mor. *INAH-A Epoca* 5, Vol. 1: 237-251. Mexico, D.F.

Hardoy, J.

- 1968 *Urban Planning in Pre-Columbian America*. New York: George Braziller.

Hatch, M. P.

- 1971 An Hypothesis on Olmec Astronomy, with Special Reference to the La Venta Site. *UCARF-C* 13: 1-64.

Heizer, R. F.

- 1959 Specific and General Characteristics of Olmec Culture. *Actos del XXXIII Congreso Internacional de Americanistas II*: 178-182. San Jose.
- 1960 Agriculture and the Theocratic State in Lowland Southeastern Mexico. *AAnt* 26: 215-222.
- 1961 Inferences on the Nature of Olmec Society Based upon Data from the La Venta Site. *KAS-P* 25: 43-57.
- 1962 The Possible Sociopolitical Structure of the La Venta Olmecs. *Acten des 34th Internationalen Amerikanistenkongresses*, Wien, 1960: 310-317.
- 1964 Some Interim Remarks on the Coe-Struckenrath Review. *KAS-P* 31: 45-50.
- 1966 Ancient Heavy Transport, Methods and Achievements. *Science* 153: 821-830.

- Heizer, R. F.
 1967 Analysis of Two Low Relief Sculptures from La Venta. UCARF-C 3: 25-55.
- 1968 New Observations on La Venta. Appendix: Post-Conference Investigations at La Venta. DuO-CO: 9-40.
- 1969 The Great 'Stela' of La Venta. Jahrbuch Fur Prahistorische und Ethnographische Kunst. Jahrgange 1966/1969: 48-52. Berlin.
- 1971 Commentary on: The Olmec Region and Oaxaca. UCARF-C 11: 55-69.
- Heizer, R. F. and P. Drucker
 1968 The Fluted Pyramid of the La Venta Site. ANT 42: 52-56.
- Heizer, R. F., P. Drucker and J. A. Graham
 1968 Investigations at La Venta, 1967. UCARF-C 5: 1-34.
- Heizer, R. F., J. A. Graham and L. K. Napton
 1968 The 1968 Investigations at La Venta. UCARF-C 5: 127-154.
- Heizer, R. F. and T. Smith
 1965 Olmec Sculpture and Stone Working: A Bibliography. UCARF-C 1: 71-88.
- Hester, T. R., R. F. Heizer and R. N. Jack
 1971 Technology and Geologic Sources of Obsidian from Cerro de las Mesas, Veracruz, Mexico, with Observations on Olmec Trade. UCARF-C 13: 133-142.
- Hester, T. R., R. N. Jack and R. F. Heizer
 1971 The Obsidian of Tres Zapotes. UCARF-C 13: 65-132.
- Holmes, W. H.
 1907 On a Nephrite Statuette from San Andres Tuxtla, Veracruz, Mexico. AA 9: 691-701.
- Jeffries, D. W.
 1953 Pre-Columbian Negroes in America. Scientia 88: 202-217. Bologna.
- Jimenez-Moreno, W.
 1942 El Enigma de los Olmecas. Cuads. Ams. V: 113-135.
- Jones, J.
 1962 An Introduction to Olmec Sculpture. Microfilm RR No. 150. New York: New York University Bound Books.
- 1963 A Bibliography for Olmec Sculpture. Primitive Art Bibliographies of the Library of the Museum of Primitive Art, No. 2. New York.

Joralemon, P. D.

- 1970 A Study of Olmec Iconography. *Studies in Pre-Columbian Art and Archaeology*, No. 7. Washington, D.C.: Dumbarton Oaks.

Kubler, G.

- 1961 *Rival Approaches to American Antiquity. Three Regions of Primitive Art.* Museum of Primitive Art, Lecture Series No. 2. New York.
- 1962 *The Art and Architecture of Ancient America.* Baltimore: Penguin Books.
- 1967 *The Iconography of the Art of Teotihuacan.* *Studies in Pre-Columbian Art and Archaeology* No. 4: 1-40. Washington, D.C.: Dumbarton Oaks.
- 1970 *Period, Style and Meaning in Ancient American Art.* *New Literary History* 1: 127-144. Charlottesville: University of Virginia Press.
- 1971 *Commentary on: Early Architecture and Sculpture in Mesoamerica.* UCARF-C 11: 157-168.

Lanning, E. P.

- 1963 *Olmec and Chavin: Reply to Michael D. Coe.* *AAnt* 29: 99-101.

Medellin Zenil, A.

- 1960 *Monolitos Ineditos Olmecas.* *La Palabra y el Hombre* 16: 75-97. *Revista de la Universidad Veracruzana*, Xalapa.
- 1960a *Ceramicas de Totonacapan.* Xalapa.
- 1963a *Monolito de Misantla, Ver.* *INAH Boletin* 11: 8-10.
- 1963b *The Olmec Culture.* In *The Olmec Tradition.* (ed. Sweeney). Houston: Museum of Fine Arts.
- 1965 *La Escultura de las Limas.* *INAH Boletin* 21: 5-8.
- 1968 *El Dios Jaguar de San Martin.* *INAH Boletin* 33: 9-16.
- n. d. *La Dispersion Olmeca en el Golfo de Mexico.* Mimeographed lecture, Museo de Antropologia, Mexico, D. F. (February 1968).

Melgar, J. M.

- 1869 *Antiguedades Mexicanas, Notable Escultura Antigua.* *SMGE-Boletin* I: 292-297.
- 1871 *Estudio sobre la Antiguedad y el Origin de la Cabeza Colosal de Tipo Etiopico que Existe en Hueyapan, del Canton de los Tuxtlas.* *SMGE-Boletin* III: 104-109.

- Miles, S. W.
1965 Sculpture of the Guatemala-Chiapas Highlands and Pacific Slopes, and Associated Hieroglyphs. HMAI 2(1): 237-275.
- Miyawaki, T.
1970 Multidimensional Scaling of the Twelve Olmec Heads. (Mimeographed)
- Morrison, F., J. Benavente, C. W. Clewlow, Jr. and R. F. Heizer
1970 Magnetometer Evidence of a Structure within the La Venta Pyramid. Science 167: 1488-1490.
- Morrison, F., C. W. Clewlow, Jr. and R. F. Heizer
1970 Magnetometer Survey of the La Venta Pyramid. UCARF-C 8: 1-20.
- Muhammad Speaks
1962 (Newspaper) 1(7): 23-28 (May). Mohammad's Mosque No. 2, Chicago.
- Navarrete, Carlos
1960 Archeological Explorations in the Region of the Frailesca, Chiapas, Mexico. Papers of the New World Archaeological Foundation, No. 7.

1969 Los Relieves Olmecas de Pijijiapan, Chis. Anales de Antropologia 6. Mexico, D. F.

1971 Algunas Piezas Olmecas de Chiapas y Guatemala. Anales de Antropologia 8: 69-82. Mexico, D. F.
- Nomland, Gladys A.
1932 Proboscis Statue from the Isthmus of Tehuantepec. AA 34: 591-593.
- Parsons, L. A.
1967 An Early Maya Stela on the Pacific Coast of Guatemala. Estudios de Cultura Maya 6: 171-198. Mexico, D. F.
- Parsons, L. A. and B. J. Price
1971 Mesoamerican Trade and Its Role in the Emergence of Civilization. UCARF-C 11: 169-195.
- Payon, J. G.
1966 Prehistoria de Mesoamerica. Cuadernos de la Facultad de Filosofia, Letras y Ciencias 31. Xalapa.
- Pellicer, C.
1959 Museos de Tabasco. Guia Oficial. INAH.

Peterson, Jeanette F.

n.d. The Olmec Colossal Heads. Masters thesis. Columbia University.

Pina Chan, R.

1955 Chalcatzingo, Morelos. INAH. Direccion de Monumentos Prehispanicos 4.

n.d. El Problema de los Olmecas. Mimeographed lecture, Museo Nacional de Antropologia. Mexico, D. F.

n.d. Los Olmecas en el Centro de Mexico. Mimeographed lecture, Museo Nacional de Antropologia. Mexico, D. F.

Proskouriakoff, T.

1960 Historical Implications of Patterns of Dates at Piedras Negras, Guatemala. AAnt 25: 454-475.

1968 Olmec and Maya Art: Problems of Their Stylistic Relation. DuO-CO: 119-134.

1971 Early Architecture and Sculptures in Mesoamerica. UCARF-C 11: 141-156.

Quirarte, J.

1970 Izapa: A Link Between Olmec and Maya. Paper Presented at the 25th Annual Meeting of the Society for American Archaeology. Mexico City.

Reinert, J.

1967 Secrets of the People of the Jaguar. Science Digest 62: 6-12.

Sanders, W. T.

1970 Review of Dumbarton Oaks Conference on the Olmec, E. P. Benson, ed. AA 72: 441-443.

Sanders, W. T. and B. J. Price

1968 Mesoamerica: the Evolution of a Civilization. New York: Random House.

Saville, M. H.

1900 A Votive Adze of Jadeite from Mexico. Monumental Records 1: 138-140. New York.

1929 Votive Axes from Ancient Mexico. MAI-IN VI: 266-299. Votive Axes from Ancient Mexico, II. MAI-IN VI: 335-342.

Schondube, O.

n.d. Los Olmecas en el Occidente. Mimeographed lecture, Museo Nacional de Antropologia. Mexico, D. F.

Seler-Sachs, C.

- 1922 Altertumer des Kanton Tuxtla im Staate Veracruz. Festschrift Eduard Seler, 543-556. Stuttgart: Strecker and Schroder.

Smith, T.

- 1963 The Main Themes of the 'Olmec' Art Tradition. KAS-P 28: 121-213.

Stevens, R. L.

- 1964 The Soils of Middle America and Their Relation to Indian Peoples and Cultures. HMAI 1: 265-315.

Stirling, M. W.

- 1939 Discovering the New World's Oldest Dated Work of Man. NGM LXXVI: 183-218.
- 1940 Great Stone Faces of the Mexican Jungle. NGM LXXVIII: 309-334.
- 1941 Expedition Unearths Buried Masterpieces. NGM LXXX: 277-302.
- 1943a La Venta's Green Stone Tigers. NGM LXXXIV: 321-332.
- 1943b Stone Monuments of Southern Mexico. BAE-B 138.
- 1947 On the Trail of La Venta Man. NGM XCI: 137-172.
- 1955 Stone Monuments of Rio Chiquito, Veracruz, Mexico. BAE-B 157: 5-24.
- 1957 An Archaeological Reconnaissance in Southeastern Mexico. BAE-B 164: 213-240.
- 1961 The Olmecs, Artists in Jade. Essays in Pre-Columbian Art and Archaeology: 43-59. Cambridge: Harvard University Press.
- 1965 Monumental Sculpture of Southern Veracruz and Tabasco. HMAI 3(2): 716-738.
- 1968a Three Sandstone Monuments from La Venta Island. UCARF-C 5: 1-34.
- 1968b Early History of the Olmec Problem. DuO-CO: 1-8.

Stirling, M.W. and M. Stirling

- 1942 Finding Jewels of Jade in the Mexican Swamp. NGM LXXXII: 635-551.

Stross, F. H., J. R. Weaver, G. E. A. Wyld, R. F. Heizer and J. A. Graham

- 1968 Analysis of American Obsidians by X-Ray Fluorescence and Neutron Activation Analysis. UCARF-C 5: 59-80.

- Thompson, J. E. S.
1941 Dating of Certain Inscriptions of Non-Maya Origin. CIW-TAP 1.

1943 Some Stone Sculptures from Southeastern Quetzaltenango, Guatemala.
CIW-NMAAE 17: 100-112.
- Tolstoy, P.
1972 Review of Olmec, An Early Art Style of Pre-Columbian Mexico by
Charles R. Wicke. American Journal of Archaeology 76(4): 457-459.
- Tolstoy, P. and L. I. Paradis
1970 Early and Middle Pre-Classic Culture in the Basin of Mexico. Science
167: 334-351.
- Vaillant, G. C.
1932 A Pre-Columbian Jade. Natural History 32: 512-520.

1947 Tiger Masks and Platyrhine and Bearded Figures from Middle America.
Vigesimoseptimo Congreso Internacional de Americanistas, Mexico
1939 II: 131-135. Mexico, D. F.
- Van Beek, G. W.
1969 The Rise and Fall of Arabia Felix. Scientific American 221: 36-46.
- Varion Associates, eds.
1968 San Lorenzo Tenochtitlan. Varion Associates Magazine, June. Palo Alto.
- Vivo, J. A.
1964 Weather and Climate of Mexico and Central America. HMAI 1: 187-215.
- Wagner, P. L.
1964 Natural Vegetation of Middle America. HMAI 1: 216-264.
- Wauchope, R.
1950 A Tentative Sequence of Pre-Classic Ceramics in Middle America. Middle
American Research Records 1: 211-250. New Orleans: Tulane University
Press.
- Weiant, C. W.
1943 An Introduction to the Ceramics of Tres Zapotes, Veracruz, Mexico.
BAE-B 139.

1952 Reply to 'Middle Tres Zapotes and the Pre-Classic Ceramic Sequence.'
AAnt 18: 57-59.

West, R. C.

- 1964 Surface Configuration and Associated Geology of Middle America. HMAI 1: 33-38.

Weyerstall, A.

- 1932 Some Observations on Indian Mounds, Idols and Pottery in the Lower Papaloapan Basin, State of Veracruz, Mexico. Middle American Research Series Publication 4: 27-69. New Orleans: Tulane University Press.

Wicke, C. R.

- 1965 Olmec: An Early Art Style of Pre-Columbian Mexico. University microfilms. Ph.D. dissertation. University of Arizona.

Willey, G. R.

- 1962 The Early Great Styles and the Rise of the Pre-Columbian Civilizations. AA LXIV: 1-14.

- 1971 Commentary on: The Emergence of Civilization in the Maya Lowlands. UCARF-C 11: 97-111.

Williams, H. and R. F. Heizer

- 1965 Sources of Rocks Used in Olmec Monuments. UCARF-C 1: 1-39.

After the typing of the present manuscript, I was made aware of a recent work by Beatriz de la Fuente entitled Escultura Monumental Olmeca: catalogo, published by the Instituto de Investigaciones Esteticas, in Mexico City. It is an extremely well done and useful resource which should be brought to the attention of Olmec scholars.