AN EARLY MAYA STELA ON THE PACIFIC COAST OF GUATEMALA

Por Lee A. Parsons
Milwaukee Public Museum

In 1963, during the second field season of a Milwaukee Public Museum excavation on the Pacific Coast of Guatemala, a very important stela fragment was discovered ("Monument" 42, Bilbao; *Figure 2*). It was carved in an art style which may be best described as "Proto-Maya" or "early Maya", and we have reason to believe that it is Protoclassic in age. Since a number of other comparable, though little-known, sculptures have been recovered in southern Guatemala and adjacent regions, the purpose of this paper is to assign Monument 42 to a typological position in the broader scheme of development of art styles in Southeastern Mesoamerica. We feel that the group of stone sculpture to be discussed here has important implications for the problem of the origin and development of Classic Maya art.

The 1962-63 Milwaukee Public Museum archaeological project, directed by Stephan F. de Borhegyi and sponsored by the National Science Foundation, concentrated on the site of Bilbao which is adjacent to the town of Santa Lucia Cotzumalhuapa, Escuintla, Guatemala. The major problem of this excavation was the tracing of the various sources of inspiration for the Classic period "Cotzumalhuapa" art style (primarily manifested in the monumental stone sculpture) for which the Santa Lucia Cotzumalhuapa region is so well known (see Thompson, 1948). The Cotzumalhuapa style demonstrates strong stylistic connections with the highlands of Mexico as well as the Gulf Coast and Yucatan. Our work showed that this art style had its inception in the 5th and 6th centuries A. D., probably due to the commercial, religious, and militaristic expansion of Teotihuacan. However, in the course of excavation it was soon determined that Bilbao also had an important occupation

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

during the Preclassic and Protoclassic periods. Radiocarbon dates, ceramic types, and stone sculptural styles supported this conclusion. Stela 1 (the Herrera stela) at the neighboring site of El Baul (*Figure 3*) is the best known example of a Protoclassic style monument in this region; it also bears a controversial 7th Baktun, bar-and-dot inscription. It seems reasonable

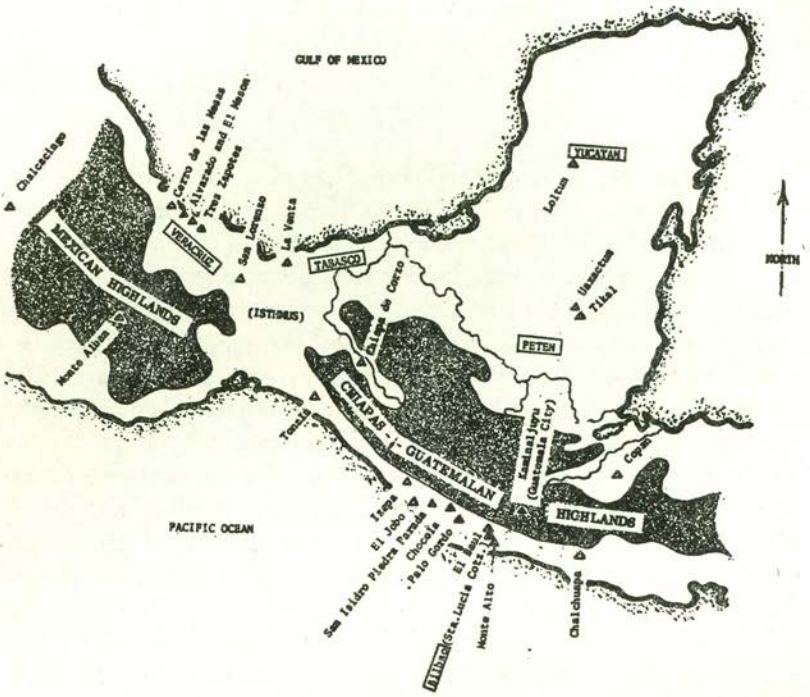

Fig. 1

to assume that Bilbao was essentially Maya, or "Proto-Maya", in cultural affiliation during most of this early period. [1] Maya occupation lasted until about 400 A. D., when the region was converted to religious and stylistic patterns which can be labeled "Mexican". This present paper is an outgrowth of the study of the early (Maya) period in the Cotzumalhuapa region. [2]

1 When using the term "Maya" for such a remote time period, I am referring more to elements of art style and material culture than I am to language, since linguistic affiliations cannot yet be traced to this Preclassic era with any certainty.

2 For a brief summary report on the complete history of Bilbao, see Parsons, *in press*. Also a detailed monograph on the Bilbao excavations is in preparation and is scheduled for publication by the Milwaukee Public Museum in 1967.

The Pacific Coast region of Guatemala seems to have been closely linked to the adjacent volcanic highlands, and even to the Gulf Coast of Mexico, during most of its history. If we examine a topographic map (see *Figure* 1), we see that there is a continuous lowland, coastal region extending from Veracruz and Tabasco in the north, to the Pacific Coast of Chiapas, Guatemala, and El Salvador in the south — the Atlantic and Pacific coasts being joined by the Isthmus of Tehuantepec. This entire region shares a tropical rainforest (generally located well inland or along rivers) and savannah (generally located just inland from the coastal lagoons and swamps) environment, and the flat, open savannah zone permitted easy passage for trade or migration. Coastal navigation was also feasible. One of the major Pre-Columbian crops of the coastal rainforest zone was cacao, and this was probably the most influential trade product since very ancient times. Various forms of cultural diffusion passed back and forth between the Gulf Coast and the southern Pacific Coast beginning at least as early as the Olmec period, or the Middle Preclassic. For this reason these coastal zones can be conceived of as one single, integrated region which might be called the Peripheral Coastal Lowlands. This region was probably the homeland of Olmec civilization and at all times it served as a channel for the transmission of people, ideas, and objects to adjoining regions of Mesoamerica. If this observation is valid, the Peripheral Coastal Lowlands should be a key region for investigating the interrelationships between the Mexican and Mayan areas throughout their development (Parsons, 1964).

During the Preclassic period the Peripheral Coastal Lowlands, and to some extent the Guatemalan highlands, were the center of significant stone sculptural styles which formed an unbroken tradition between Olmec and Classic Maya art. Monument 42 at Bilbao probably represents this long tradition at the stage when it was diffusing from the peripheral regions into the Peten. The latter region, of course, is where Maya art had its so-called classic development.

Description of Monument 42, Bilbao

Monument 42 (*Figure* 2) was assigned to the late Ilusiones phase (Protoclassic) at Bilbao on the basis of stylistic compa-

risons only, for it was found, displaced, in a dump of miscellaneous stone monuments (of both early and late styles) underneath the principal stairway of a "monument plaza". This cluster of stone sculpture was buried during the Late Classic period, and Monument 42 was broken before inclusion in the dump — perhaps intentionally. The top half was not found even though we thoroughly explored this feature. The stela was carved from a pink granitic rock, which is an atypical material for the region (all other stone monuments seem to be volcanic basalt).

The only other carved fragment of the same pink granite was excavated in the immediate vicinity of the stela. This was a slightly rounded corner piece broken from a larger monument (*Figure* 4). It differed from the stela itself in having an offset ledge around its sides. Also the upper surface was badly flaked, so it was impossible to determine whether it had a bas-relief carving. This fragment may actually have once formed the corner of a stone altar belonging to Monument 42. There is a comparable, undamaged, plain stone altar associated with a Late Preclassic or Protoclassic stela at another site on the Pacific Coast (San Isidro Piedra Parada; *Figure* 5). Though not now *in situ,* it is most probable that this altar and stela formed a functional relationship. The altar has an offset ledge and raised band around its base, homologous to the Monument 42 altar fragment at Bilbao.

The Bilbao stela has a front side carved in bas-relief, depicting a male priest figure standing on a symbolic basal panel. This monument was found in nearly pristine condition, having rested on its face in the ground and thus protecting its carved surface. The sides and back are pecked smooth though they were left perfectly plain. The rectangular shaft was broken at the level of the waist of the human figure. The extant portion of the stela is 182 cms. in length; the carved area covers 102 cms., leaving 80 cms., of undecorated surface at the base (not shown in the photograph) for setting the monument into a foundation. The width varies between 60 and 65 cm., (it is narrower at the base) and the thickness averages 43 cm.

Monument 42 was certainly carved by a mastercraftsman, and it must have been even more magnificent when new. Isolated

Fig. 2

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

Fig. 3

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

Fig. 4

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

Fig. 5

Fig. 6

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

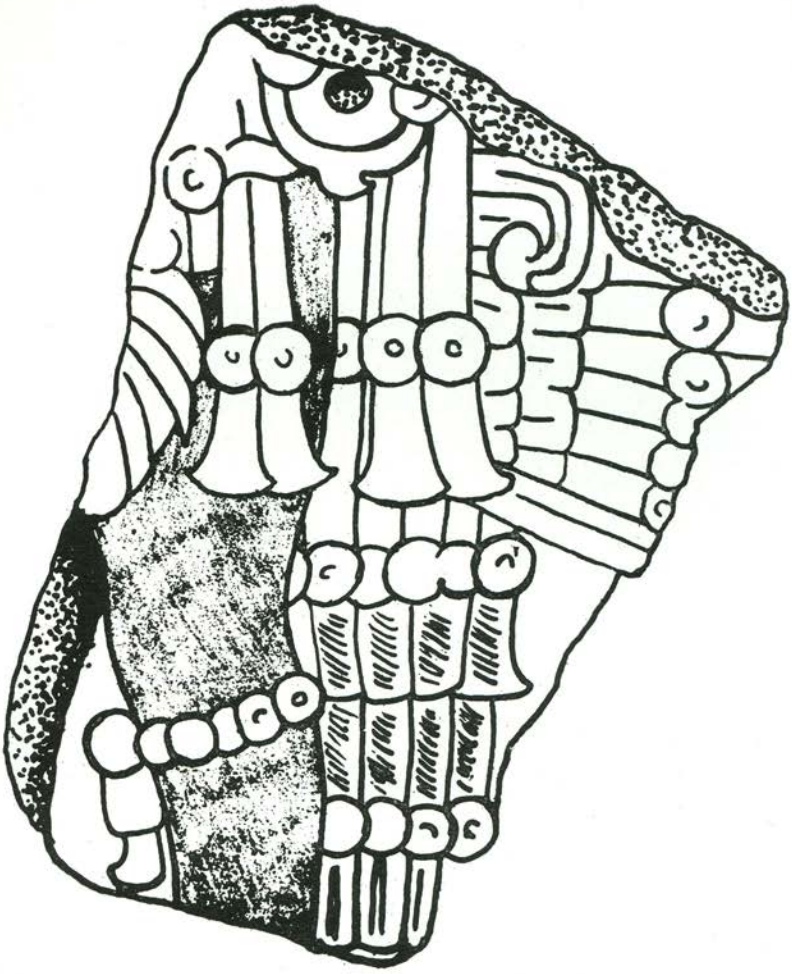

Fig. 7 *a*

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

Fig. 7 *b*

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

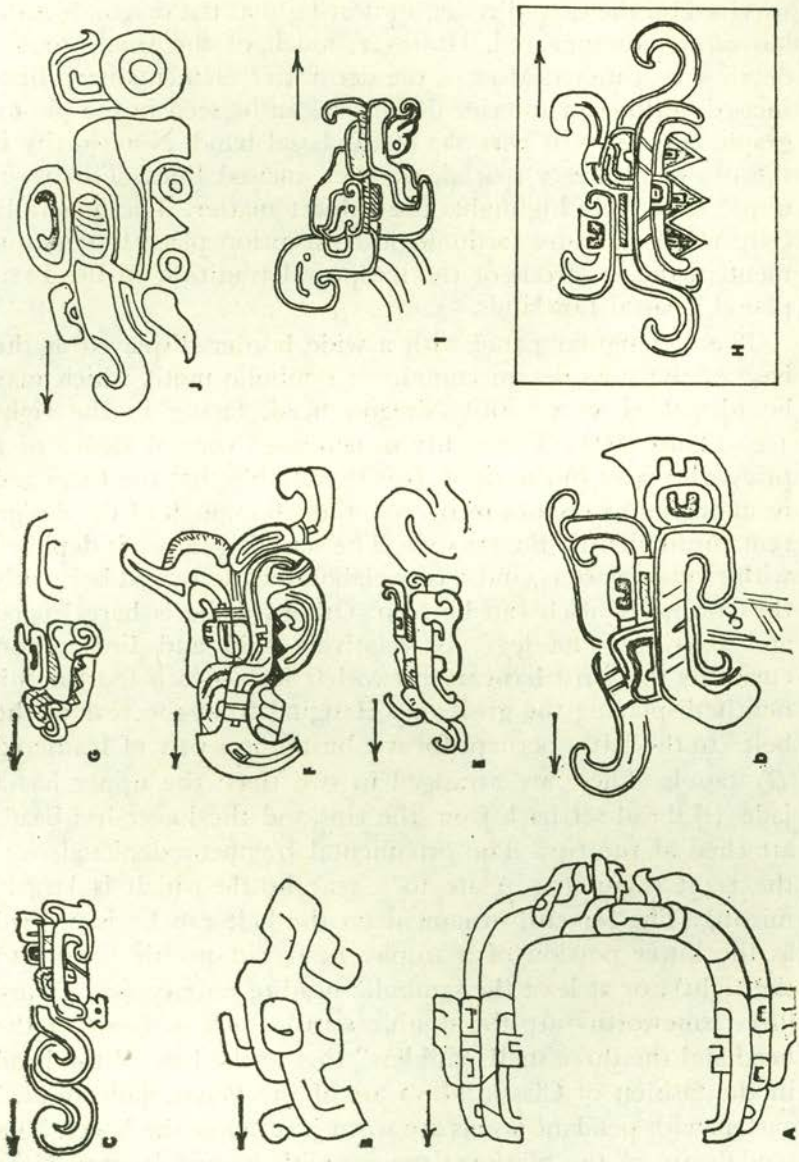

Fig. 8

Estudios de Cultura Maya. Vol. VI, 1967
Facultad de Filosofía y Letras, UNAM
https://revistas-filologicas.unam.mx/estudios-cultura-maya/

facets of an original highly polished granitic surface have survived on the carved relief, indicating that the original finish has mostly disappeared. However, much of the finely tooled detail is still intact. Most of the decorative elements have fine-incised outlines or interior designs as can be seen in the photograph, especially in portions of the basal band. Noteworthy is the use of narrowly spaced, parallel, incised lines. This technique effectively highlights the subject matter. The generally crisp relief and sure technological execution place this monument in the forefront of the sculptural tradition in the Peripheral Coastal Lowlands.

The rectangular panel with a wide border displayed at the base of the stela design contains a symbolic motif which may be identified as a profile dragon head, facing to the right (see *Figure* 8*H*). The richly ornamented central figure of a priest also faces to the right. It is regrettable that the torso and head portions were not recovered, though enough of the design remains to identify the art style. The standing figure is depicted with sandals, garters, and a very elaborately decorated belt, only the bottom of wich can be seen. Otherwise he is bare legged and skirtless. The legs are relatively thin and linear, and curiously the artist has carved two left feet — each foot prominently displaying the great toe. Hanging from the rear of the belt (to the left), perhaps form a bustle, is a pair of feathered (?) tassels. These are arranged in two tiers; the upper has a jade (?) bead set back from the tips and the lower has beads attached at the tips. The ornamental fragment depicted over the right thigh may relate to a rear bustle which is largely missing. The forward ornament on the belt can be identified as the lower portion of a trophy head (in profile, facing to the right), or at least the symbolic head of a deity (see *Figure* 9*E*). Noteworthy are the double scroll motif in front of the head and the three shell "tinklers" tied to the base of the head in the fashion of Classic Maya art of the Peten. Jade beaded garters with pendant tassels are worn just below the knees. The sandals are of the platform variety with looped lacings. Note how the platform bases are barely long enough for the size of the feet. Two loops are shown for each footpiece, one of which catches the great toe. Through these loops pass an ankle strap to which three beads seem to be attached.

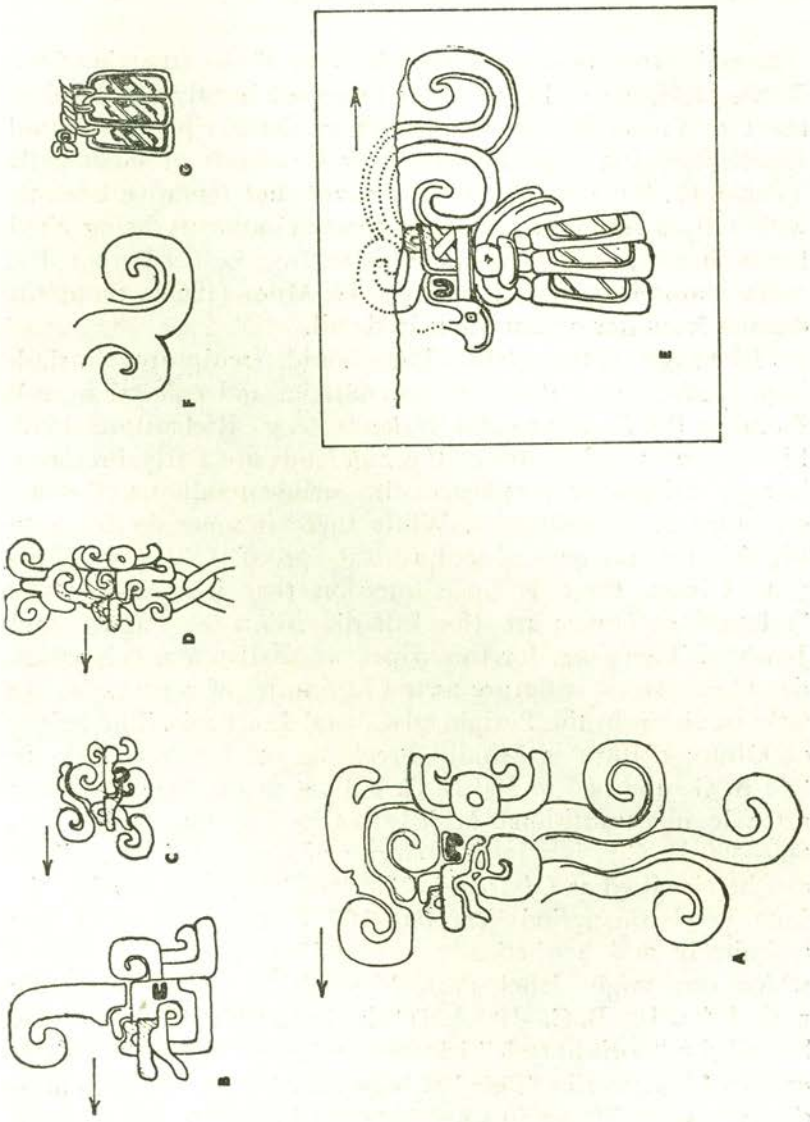

Fig. 9

Preclassic Sculptural Development in the Peripheral Coastal Lowlands

In order to appreciate the significance of the art style of the Bilbao stela, it will be necessary to review briefly the development of Preclassic stone sculpture in the Peripheral Coastal Lowland region and the adjoining highlands of Guatemala (Table 1). This will be a generalized and tentative outline, with only a few representative stone monuments being cited for each sculptural division. This outline is based upon the more comprehensive analysis by S. W. Miles (1965), though it departs from her organization in detail.

Miles suggests that certain large boulder sculptures (including "gordo" (corpulent) human effigies and colossal heads) found in the Pacific coastal lowlands (e. g., Richardson, 1940, Pl. 18) and nearby sites in the highlands are Early Preclassic in age, and probably represent the earliest monumental stone sculpture in Mesoamerica. While there is some doubt as to whether this category of sculpture is "proto" Olmec or "derived" Olmec, there is little question that it is stylistically "related" to Olmec art (for full discussion see Parsons and Jenson). Therefore, for this paper we shall tentatively consider *Olmec* stone sculpture as the beginning of a pervasive art style tradition in the Peripheral Coastal Lowlands. The height of Olmec culture is Middle Preclassic or, between 1000 to 800 B. C., and 600 to 500 B. C. Following the mature Olmec art style, in a transitional Middle to Late Preclassic period (*ca.* 600—300 B. C.), is a large quantity of stone sculpture which can be classified as *Olmecoid* ("derived" Olmec). During the Late Preclassic period (*ca.* 400—100 B. C.) is a small, but technically and aesthetically outstanding, class of sculpture which one might label *Proto-Maya.* The early Protoclassic period (*ca.* 100 B. C.—100 A. D.) is characterized by what may be called a "horizon style" in stone sculpture, at least in Southeastern Mesoamerica. This has been called the *Izapa* style after the type site of Izapa in southeastern Chiapas (Stirling, 1943; M. D. Coe, 1957), and the horizon is marked by great sculptural diversity. Also certain ceramic forms have been used as "horizon markers" (Parsons, 1957) for the same time period in Southeastern Mesoamerica, such as mammiform tetrapod supports

for vessels, pot-stands, bridged-spout vessels, horizontally resting doughnut-shaped vessels (Parsons, 1963), and mushroom-shaped pottery objects (Borhegyi, 1963), as well as a specialized form of incense burner called the "three looped or three handled" censer (Borhegyi, 1956). The late Protoclassic and initial Early Classic periods (*ca.* 100–400 A. D.) then witness the emergence of *Classic Maya* sculpture, centering in the tropical rainforest region of northern Guatemala. Finally, the fifth century A. D. saw the first intrusion of highland Mexican people, ideas and objects into most parts of Southeastern Mesoamerica due to the dominance and expansion of the great Central Mexican urban center, Teotihuacan. We shall conclude our survey just before the time of this momentous event. [3]

It is germane to our discussion of the stylistic derivation of the Bilbao stela to point out that the Preclassic period in the Peripheral Coastal Lowlands may well have been the time and source for the invention and development of the stela-altar complex with its attendant calendrical system. Though hieroglyphs are rare on Olmec monuments, there is some suggestion that glyphic writing was known to the ancient Olmecs (e. g., Monument 13, La Venta; Drucker, 1952, Pl. 63). However, if the corpus of Olmec monuments one day can be subdivided chronologically, this example may prove relatively late in the sequence. It is also possible, but not yet proven, that they had a recorded calendar (e. g., the bar-and-dot numeral, six, carved on bedrock at Tres Zapotes and associated with the earliest ceramic level at that site; Stirling, 1943, p. 22). The diffusion of an Olmec calendar to highland Oaxaca before the close of the Middle Preclassic is suggested by the existence of bar-and-dot numeration in phase I at Monte Alban; and it is widely accepted that Monte Alban I ceramics and sculpture display "Olmecoid" stylistic affiliations. There are several large, carved stone slabs at La Venta which have been classed as stelae, though they lack inscribed dates. The *Olmecoid* columnar ba-

3 Such a sequence, from Olmec to Maya, is not original with this author. Some of the more comprehensive presentations of this subject are: Covarrubias (1957), who pioneered in pointing out this stylistic continuum in Mesoamerica; Carmen Cook de Leonard (1959); Miles (1965), who outlined the complete sequence of early stone sculpture in southern Chiapas and Guatemala; Piña Chan and Covarrubias (1964); and Willey (1962). The Miles sequence was recently reviewed by Proskouriakoff (1964); also in her fundamental analysis of Classic Maya sculpture (1950, p. 183) Proskouriakoff was willing to consider the Izapa style as somehow transitional between Olmec and Maya. This approach is also championed by M. D. Coe (1957).

salt monument from Alvarado, Veracruz (Covarrubias, 1957, fig. 20), has a weathered glyph column on one side which gives the intriguing hint of calendrical content. And belonging to the Late Preclassic (Miraflores phase) is an incised text of Mayoid hieroglyphs on a stone slab at Kaminaljuyú in the Guatemalan highlands (Miles, 1965, p. 256; Fig. 13).

At that time stela-like carved slabs were quite common in the Peripheral Coastal Lowlands, though it was not until the Izapa horizon that there is good evidence for the association of stone altars with stelae (e. g., Stela C, Tres Zapotes; Stirling, 1943, p. 14). At the site of Izapa itself, the combination of stela with stone altar (either drum or effigy reptile shaped) is prevalent, and this combination could well be as old as the late Preclassic at Izapa. With over fifty stone monuments, Izapa was without any doubt an important center of the stela complex during several centuries *circa* the birth of Christ. [4] Significantly, during the early Protoclassic period a controversial group of late 7th Baktun (*ca.* 50 B. C.–50 A. D.) bar-and-dot dates appear on stelae at the sites of Tres Zapotes, Chiapa de Corzo, San Isidro Piedra Parada, and El Baul (M. D. Coe, 1957; and Lowe, 1962). At the present time the earliest undisputed stela inscribed in the Maya Initial Series system is at Tikal (Stela 29), with an equivalent Christian date of 292 A. D. Though the famous little Tuxtla statuette, with a possible inscribed date of 162 A. D., might be cited to fill an epigraphic gap between the Izapa horizon and the third century A. D., this gap in stela inscriptions remains enigmatic. However, Monument 42 at Bilbao, even though undated, contributes something to the stylistic continuum between Izapan and Classic Maya sculpture.

It seems that the stela and altar fragments at Bilbao are approximately contemporary with the dated stela at the neighboring site of El Baul (*Figure* 3) though the art style of the Bilbao example is closer to 8th Baktun Maya sculpture than is the El Baul example. It is proposed that the Bilbao stela represents the Peripheral Coastal stela-altar complex at the time when it was diffusing to the central Maya lowlands (100 B. C.–100 a. C. ?), perhaps by way of Kaminaljuyú, the Motagua river valley, Lake Izabal, and southeastern Peten. Recent

[4] The current excavation of the New World Archaeological Foundation at Izapa apparently supports the Late Preclassic–Early Protoclassic assignment of the majority of the stelae (Bruce Warren, personal communication, 1963).

evidence from Tikal (W. R. Coe, 1965, pp. 14-23) indicates that the earliest fragments of monumental stone sculpture at that Maya ceremonial center are indeed contemporary with this proposed period of diffusion. One very small stone fragment at Tikal may be no later than 100 a. C. (*ibid,* p. 14) though in my opinion it is doubtful that this miscellaneous carving fits the tradition of monumental stone sculpture. Miscellaneous stone 69 at Tikal (*ibid,* p. 22), however, apparently represents a broken stela of Protoclassic times. The scroll form at the end of the snout of a profile serpent on this fragment is not unlike the scroll style of Monument 42 at Bilbao. Furthermore, very early frescoes discovered at Tikal (25 a. C.; Structure 5 D-Sub. 10-lst; *op. cit.,* pp. 18-19) contain painted scrolls in opposing pairs stylistically identical to the double scrolls in the upper right corner of the Bilbao stela. It is also of interest to note that Willey and Gifford (1961, pp. 168-170) suggested diffusion from the Guatemalan highlands to the eastern Peten during the Protoclassic, as an explanation of the seemingly intrusive "Holmul I" ceramic style in the latter region. They further cautiously imply that this event could have triggered the emergence of the lowland Maya Classic Period. Another intriguing clue to the penetration of peripheral Maya culture into the lowlands during the Protoclassic is provided by the stone pectoral with inscribed hieroglyphs recently reported by M. D. Coe (1966).

We may now consider the Preclassic sculptural style sequence in somewhat more detail. The Middle Preclassic *Olmec* art style is well known (Drucker, 1952) and need not be defined here. However, it is not well known that monumental Olmec sculpture was not confined to the Gulf Coast; there is good evidence that the pure La Venta-Olmec art style was also evenly distributed along the southern Pacific Coast as far south as El Salvador, as manifested by petroglyphs on boulders (San Isidro Piedra Parada and Chalchuapa) and non-portable sculptures in-the-round (see Parsons and Jenson, 1965, figs. 18 & 19). Also, certain widely accepted examples of Olmec art might better be considered a very late subdivision of Olmec, that is, an "Olmecoid" category.

The derivative *Olmecoid* style of sculpture on the Peripheral Coastal Lowlands is less well recognized as a distinct entity. Be that as it may, there are a large number of probable Olmec-

oid monuments, carved in a style based directly upon symbolic motifs originating with Olmec civilization. These monuments are possibly contemporary with the last phase of La Venta occupation (*ca.* 600-400 B.C.), and in some instances persist even later (the stucco masks of E-VII-sub at Uaxactun are a good example; Ricketson and Ricketson, 1937, figs. 39-47). Olmecoid sculpture demonstrates a tremendous creative inventiveness ineluding a number of specialized deity images which have by this time radiated from the basic Olmec were-jaguar motif (Covarrubias, 1957, figs. 22, 36). The profile dragon monster and the "scroll-eyed demon" are two of the most important of these in the Peripheral Coastal Lowlands (*Figures 8 and 9*; and Miles, 1965, figs. 2, 3, 8). These religious symbols survived into subsequent periods as conservative iconography, and probably constituted the conceptual and graphic heritage for later Maya gods of rain and fertility. *Figures 8 C and 9 A*, along with the monuments on which these motifs are depicted (Stela D, Tres Zapotes; and Monument 4, Kaminaljuyu,[5] respectively), epitomize the Olmecoid art style in its earlier manifestations. One of the primary innovations of this period of stone sculpture was the scroll motif, which was destined to become a basic stylistic element of the Classic period in the central lowlands. However, scrolls may have appeared even earlier in ceramic art. Olmecoid scrolls are usually rendered in broad, concentric curves which tend to conform to a squared format, though a few examples are circular. It is probable that the tradition of trophy head collecting began at least as early as this period, as represented by the demon head in *Figure 9 A*, where trefoil, blood-like scrolls are "dripping" out of an isolated, anthropomorphic head. A few other significant examples of probable Olmecoid sculpture are (see map): the El Meson, Veracruz, stela (Covarrubias, 1957, fig. 68); the Alvarado, Veracruz, column (*ibid*, fig. 29); Stelae 7 and 9, Cerro de las Mesas (Stirling, 1943, Pl. 31 b, fig. 11 a); the carved stone box, Monument C, at Tres Zapotes (*ibid*, Pls. 17, 18); the large, seated demon sculpture at Palo Gordo, Suchitepequez (Termer, 1942, Pl. 2); the feline monster head at Monte Alto, Escuintla (Richardson, 1940, Pl. 18 c); and the recently excavated large, seated demon sculpture at Kaminaljuyu (Girard,

[5] All monument numbers cited for Kaminaljuyu in this paper refer to the new classification by Miles (1965, p. 246).

1962, Pls. 238, 239). One of the two famous Chalcacingo rock carvings (Covarrubias, 1957, Pl. 13) may also belong to the Olmecoid category rather than pure Olmec because of the quality of its scrollwork. The same comment applies to the little serpentine face mask with incised scroll motifs in the Peabody Museum at Harvard (Covarrubias, 1957, Plate 10, lower left). In summary, the Olmecoid style retains many stylistic features of Olmec art but diverges in the direction of greater diversity of postures, ceremonial accouterments, and symbolic representations.

The next division of stone sculpture, for which there are not many known examples in the Peripheral Lowlands, may be assigned to the Late Preclassic (400-100 B.C.), though the stlye continues into the Protoclassic in some localities. This style may be classified as *Proto-Maya*. Much Olmecoid symbolism persists into this period, but the art style now becomes specialized toward the early Maya style of the Peten. Subject matter includes elaborately costumed elite personages, deities peering from celestial regions, trophy heads, ball players, and even Mayoid hieroglyphic texts, permitting us to consider the style Proto-Maya. This sculpture is executed in a remarkably well controlled manner and usually in quite sharp relief, on hard granitic or basaltic stone. As a group it represents some of the finest and most eloquent bas-relief stone carving in all Mesoamerica. Outstanding examples of the Proto-Maya style are: the Tepatlaxco, Veracruz, ball player stela (Covarrubias, 1957, Pl. 17); the Chocola, Suchitepequez, stela fragments (Kidder and Samayoa, 1959, Pl. 91); and Stelae 10 and 11 at Kaminaljuyu [6] (Miles, 1965, figs. 13, 15 *a*). Izapa, in southeastern Chiapas, has a few stelae which are stylistically Proto-Maya (e.g., Stelae 3 and 4; Stirling, 1943, Pls. 50a, 51a) and possibly Late Preclassic in age, though the majority of stelae at that site probably should be assigned to the subsequent period when Izapa gave its name to a new art style variation which became very widespread. Before discussing this "Izapa horizon", two superb examples of sculpture in-the-round, which may be Proto-Maya in style, need to be pointed out. They are the heroic (164 cm., height), rampant jaguar sculpture at El Baul, Escuintla (Richardson, 1940, Pl. 19a); and the stylistically comparable, na-

6 The accompanying *Figure 8 D* is a detail from Stela 11. Stela 10 was excavated in a Miraflores phase ceramic context.

turalistic "sapo" (toad) effigies of monumental size which are assigned to the Miraflores phase at Kaminaljuyu.

The early Protoclassic period (*ca.* 100 B.C.-100 A.D.) of stone sculpture may be called the *Izapa* horizon in Southeastern Mesoamerica. This was a time of great proliferation of, and experimentation in, the stone sculptural craft. The Izapa style has been aptly labeled "narrative" by Miles (1965, p. 257). I believe, in addition, that the earlier Proto-Maya tradition persisted into this transitional Preclassic to Classic period, and that examples of the Proto-Maya style may be found contemporaneously with the more elaborate Izapa narrative style both at Izapa and at other localities in the Peripheral Coastal region. It is probable that Monument 42 at Bilbao (*Figure 2*) is an example of a survival of the Proto-Maya tradition into the Protoclassic period, while the inscribed 7th Baktun stelae at neighboring El Baul (*Figure 3*) is a synchronous example of the new Izapa narrative style. This narrative style is epitomized by stelae 1 and 5 at Izapa (the fisherman with net and basket, and the "tree of life", respectively; Stirling, 1943, Pls. 49a, 52). Customarily featured in this style is a complex, anecdotal scene which probably expresses mythological or cosmological events of symbolic value. The Izapa narrative style may be distinguished from the Proto-Maya style by these explicit features of style: relief with more rounded edges, relatively little undecorated space, scrolls which are more circular, and more stocky proportions to human figures. Also rather puffy facial features are common, with bulbous noses. (*Figures 3 and 5* illustrate the Izapa narrative style.) In contrast, the Proto-Maya tradition (*Figure 2*) is characterized by greater refinement; these monuments are typically carved in clear, sharp relief and with fine-incised detail or outlines (albeit in this example this is partly a matter of good preservation). The proportions of human figures are relatively linear and body outlines have graceful, smooth curves. There tends to be an equal distribution of plain ground to carved relief. Scrolls may be in unbalanced pairs, curving in opposite directions and they have a somewhat squared outline (*Figure 9 E*). These two styles are not mutually exclusive, for certain attributes of each may be found "mixed" on single monuments of this period. The Loltun, Yucatan, basrelief (Proskouriakoff, 1950, fig. 38b) is such an example. Also the unique "silhouetted-relief" sculptures of the Guatemalan

highlands (see Kidder, Jennings and Shook, 1946, figs. 141,[7] 142) represent mixtures of the sophisticated Proto-Maya style and the imaginative, but cruder, Izapa narrative style. Silhouetted sculpture may be cited also to emphasize the degree of innovation going on at this time. And in this regard one might recall the four 7th Baktun bar-and-dot calendrical dates associated with the Izapa horizon.

The extensive distribution of stone sculpture assigned to the Izapa horizon is best appreciated by a review of the known sites (see map, *Figure 1*). They are: Kaminaljuyu, Bilbao, El Baul, San Isidro Piedra Parada, El Jobo (Miles, 1965, fig. 15 *b*), Izapa, Tonala (e.g., Monument 3; Ferdon, 1953, Pl. 22 a-d), Chiapa de Corzo, Tres Zapotes (Stela C), Loltun, and possibly Tikal (the Protoclassic sculptural fragments). Since the greatest concentration of this sculpture is on the southern Pacific Coast, this must be regarded as the place of origin. The routes of diffusion of Protoclassic styles to the Peten may have been *both* via the Gulf of Mexico lowlands and the Motagua valley, though more excavation in the regions of the mounth of the Usumacinta and Lake Izabal is needed to clarify this problem.

Comparative Data for Monument 42

To better place the Bilbao stela (Monument 42) in its Proto-Maya setting, we shall refer to some little known, and possibly contemporary, stela fragments from Kaminaljuyu, 60 kilometers directly northeast of Bilbao. The above-mentioned silhouetted-relief sculptures (a large number of fragments of this classification have been excavated at Kaminaljuyu) frequently simulate the Monument 42 type of looped, platform sandal (Kidder, Jennings and Shook, 1946, fig. 141 b), and as such are of the Proto-Maya tradition. They also have the peculiarity of avoiding the artistic problem of correctly distinguishing the right from the left foot in a profile view. This may be an important stylistic clue to an early developmental stage of Maya art. In this connection, we may note that the Late Preclassic, "Proto-Maya", Stela 11 at Kaminaljuyu (Kidder and Samayoa,

[7] According to new information from the Museum of the American Indian, the silhouetted-relief depicted in Figure 141[8] was actually discovered in the Santa Lucia Cotzumalhuapa vicinity on the Pacific Coast.

1959, Pl. 7) exhibited this archaic feature; while the subsequent, Early Classic Maya Leyden Plate (320 A.D.), also with looped sandals, has the two profile feet drawn correctly.

Kaminaljuyu Stela 15 (*Figure 6*), excavated in 1953 under Calle Bethania in Guatemala City (between Mounds D-III-4 and D-III-15), may also belong to the early Protoclassic period. This stela fragment, like the next example to be discussed, was first brought to the author's attention in the "bodega" of the Guatemalan National Museum by Miles. Only the lower portion of Stela 15 is present, but enough of the relief shows to ascertain that two standing human figures faced one another; between them is a possible defaced glyph column. Looped, platform sandals are depicted, along with leg bindings or "gaiters" (a trait sometimes found in later Maya sculpture) tied below the knee with knotted tassels. The sandal type is quite similar to the Bilbao example (*Figure* 2), with the exception that the beaded anklets and the second loop around the great toes are absent. Also apparently there is a medallion shown in profile on the instep. The legs seem relatively thin but unlike Monument 42, the toe of one foot touches the heel of the other.

Another Kaminaljuyu stela fragment (Stela 2, *Figure 7a*) very nearly duplicates the style of the Bilbao stela, though it depicts a greater profusion of plumage in the posterior region, and the figure faces the opposite direction. Remarkably homologous in these two specimens is the beaded garter below the knee, especially in the form of the pendant tassel. The rather thin leg is again evident, along with the bare thigh. Both monuments depict feathered rear tassels arranged in tiers, and with jade beads affixed (a trait also found subsequently in the Peten). Also, in the upper right corner of Stela 2 a "squared" scroll element can be discerned. Miles has illustrated what she believes to be a fragment of the upper portion of the same monument (1965, fig. 17b). This piece is better preserved and compares very closely in its rendering to Monument 42. Stela 2, however, may be somewhat later than its Bilbao counterpart.

San Isidro Piedra Parada is the place of origin for a new stela fragment (Stela 3) which offers sufficiently strong parallels to Monument 42 at Bilbao that these two may well be contemporary (fig. 7b; and Miles, 1965, figs. 8g, 16g). The proportion and placement of the profile legs are like the Bilbao carving, though on this sculpture the figure faces the opposite direction

and the feet are without sandals. Miles (1965, p. 259) says that red paint and a pecked ankle line indicate socks. Again we encounter the depiction of great toes from a pair of right feet. The Stela 3 figure is adorned by knotted garters and hanging from the front (belt?) is an upside-down scroll-eyed demon with supplementary falling scrolls. The framed basal panel on Stela 3 is closely related to that on Monument 42, though it is partitioned into three units. The end sections contain stylized profile dragons while the central portion features a glyph-like symbol.

Let us now consider the two reliogiously symbolic motifs featured on Monument 42— the profile dragon head in the basal panel (*Figure* 8 *H*) and the trophy head on the front of the belt (*Figure 9 E*). Figure 8 illustrates the chronological development of the dragon monster motif in Mesoamerica and suggests an iconographic continuity from Olmec through Maya. [8] Certain graphic elements remain relatively constant throughout this development (with the exception of the simplified early forms, A and B); such as the projecting, downward-crooked upper lip; the exposed alveolum (occasionally with incisor or canine teeth); the attenuation or absence of a lower jaw; the slanting nose [9] perched upon the platform upper lip (often with attached scrolls); the rectangular eye; a supraorbital plate containing an "U" element and usually a trailing double volute; and sometimes an earplug with attached volutes (plumes?). The evolution of the profile dragon motif leads from the Olmec were-jaguar deity to the Classic Maya "Serpent X" and probably to the Maya long-nosed god. The strong possibility exists that the Olmecoid dragon conception also gave rise to the Mexican earth monster, Cipactli. Both Cipactli and Serpent X are often depicted as agnathous monsters, and both may have a row of triangular "molar" dentition (*Figure 8 F, G, H & J*). Also both may be symbolically located in a basal (terrestrial?) position on monuments.

Covarrubias perceptively made the suggestion (1957, fig. 36 a) that the stylized profile dragon motif, with its projecting upper lip, developed directly out of a *side view* of the Olmec

[8] Comparable evolutionary series have been illustrated previously by: Kidder, Jennings and Shook, 1946, fig. 97; Covarrubias, 1957, fig. 36; and Agrinier, 1960, fig. 6.

[9] This is identified as a "human" attribute of the monster by Miles (personal communication, 1963).

were-jaguar motif (just as the graphic form of the Oaxacan rain god, Cocijo, and the Central Mexican rain god, Tlaloc, may have developed from the *front view* of the Olmec were-jaguar motif, with its highly arched, "U" shaped, upper lip [Covarrubias, 1957, fig. 22]). As a possible prototype to the generally agnathous condition of the Olmecoid profile dragon, it may be noted that this trait is found in Olmec art (Delgado, 1965, figs. 10-12). It should also be pointed out that a somewhat naturalistic serpent motif already existed in Olmec iconography, as depicted on Monument 19 at La Venta (Covarrubias, 1957, Pl. 13, lower left; though we repeat the caution that this photo was incorrectly captioned, "Piedra Parada, Guatemala").

Some of these early dragons were double headed conceptions (also to become an important symbol in Classic Maya iconography), as may be seen on the incised jade earplug from La Venta (*Figure 8 A*). This specimen was assigned to the last part of the occupation of La Venta (Phase IV; Drucker, Heizer and Squier, 1959, p. 118), and therefore might more properly be classified as an *Olmecoid* motif. Form B and C in *Figure 8* (a late Las Charcas bowl from Kaminaljuyu, and Stela D from Tres Zapotes, respectively) likewise may be placed in the transitional Middle Preclassic-Late Preclassic period, and considered Olmecoid. [10] The dragon profile at Tres Zapotes (*Figure 8 C*) has the added embellishment of a pair of large, broad scrolls leading off the tip of the nose—the scroll being a typical Olmecoid motif (*cf. Figure 9 A*). This example also has an anomalous trefoil tab at the end of its downward-directed upper lip, as well as a solitary molar tooth. Otherwise this is a fully developed profile dragon monster as described above. Perhaps the scroll appendages symbolize water or clouds. *Figure 8 D* shows a Proto-Maya (Late Preclassic) dragon head of excellent draftsmanship from Kaminaljuyu. The diagonal band descending from its mouth may also symbolize water. A single scroll leads

[10] However, it seems that comparable profile dragons incised on ceramics from Tlatilco and other Middle Preclassic sites may antedate their appearance on Olmec stone sculpture. The hypothesis that Olmec symbolism has an earlier development in ceramic decoration has been emphasized by Piña Chan and Covarrubias (1964, p. 10).

Miguel Covarrubias (1957, fig. 9) identified this monster motif as a composite "jaguar-dragon profile". Possibly it represents the initial stage in a process of inconographic diversification stemming from the Olmec were-jaguar deity. It is also noteworthy that some of the ceramic manifestations were already highly simplified abstractions.

off the top of the nose. In substitution for an ear to the right of the mouth is the ubiquitious "U" symbol within a tabbed cartouche. A dragon representation from the site of Izapa (Late Preclassic?) is shown in *Figure 8 E*. This dragon appears at the base of a composition, has an ophidian body, and has a fruit tree growing from its head (not drawn here), perhaps symbolizing terrestrial fertility. *Figure 8 F* reproduces a dragon head motif from one of the carved human bones from a well-dated early Protoclassic tomb at Chiapa de Corzo. This expressive monster, in the larger composition on the bone, is swimming amidst a mass of water-scrolls. (The motif is thoroughly described by Agrinier, 1960). *Figure 8 G* is a detail from a silhouetted sculpture of the Izapa horizon and probably from Kaminaljuyu. Motif H is from the basal band on the stylistically contemporary Bilbao stela (compare with the photo, *Figure 2*). A peculiarity of the Bilbao dragon profile is the even row of three triangular teeth, though both the previously cited examples (Chiapa de Corzo and Kaminaljuyu) include this variation. This may be one of the best indications of the temporal equation of these three works of art. The Bilbao example is further disparate in that the mouth itself is nearly symmetrical fore and aft, and gives the impression of a front-view feline maxilla set in a profile dragon head (facing to the right). The mouth here may have special ritual meaning as an independent trident rain symbol (Pearson, 1964, fig. 5 a). The features of the upper portion of this dragon head (eye, supraorbital plate, nose, and two nose scrolls) otherwise closely duplicate earlier Proto-Maya forms (*cf. Figure 8 D*, which faces the opposite direction and has only a single nose scroll). Matching the forward nose scroll of the Bilbao dragon is a balancing scroll trailing from the eye possibly representing the body. The next illustration (*Figure 8 I*) is abstracted from a double headed serpent motif on a decorated turtle shell found at Cerro de las Mesas. This is perhaps "early" Early Classic in age and provides a stylistic transition from Preclassic dragons of the Peripheral Coastal Lowlands to the prevalent late Early Classic and Late Classic Serpent X motifs of the Guatemalan highlands and central Maya lowlands (see Kidder, Jennings and Shoock, 1946, figs. 97, 98).

The Maya profile Serpent X is clearly derived from the earlier profile dragons. The representation of the serpent in

profile is one of the most fundamental motifs in Maya sculpture, with endless degrees of conventionalized elaboration or simplification. The only example illustrated here is the variable element from the Initial Series Introducing glyph of Stela 26 at Uaxactun (*Figure* 8 *J*). This Classic Maya (dated 445 A. D.) profile serpent has all the essential features of our profile dragon, including the little slanting nose element located on top of the projecting upper lip and the "U" symbol above the eye. The Uaxactun profile even retains attributes homologous to the Olmec were-jaguar prototype (see Covarrubias, 1957, fig. 36a). The scroll-like upper lip in the Maya version is displaced upward on the face and has the peculiarity of a reverse curve at the tip — a feature which became commonplace in the related Chac mack panels on Yucatan-Maya architecture.

Chac, the most important Maya rain god (variously called God B, or the long-nosed god), completes this series, having homologous features to both Serpent X and Preclassic dragons. We have demonstrated that the "nose" of Chac actually has as its prototype the projecting, everted, lip motif. This is seen in an extreme form in the Yucatan mask panels. The tiny scroll that is usually found on top of the proboscis of God B in the Codices (and even on some of the architectural mask panels) may be the vestige of the nose itself. Finally, like its Preclassic precursors, God B may be jawless, it may have a reduced lower jaw, or it may add a fleshless mandible. Maya Gods D and G (Itzamna and the sun god) of the Codices share many iconographie elements with God B, and may possibly be considered further elaborations from the same origin.

In summary, through *Figure* 8 we have illustrated that the Peripheral Coastal Lowlands produced the graphic and conceptual forms of principal Maya deities; from the Olmec were-jaguar rain demon to the several Maya rain gods; or, from La Venta in the Middle Preclassic to Uaxactun in the late Early Classic.

The other Olmecoid motif to be reviewed is the scroll-eyed demon (*Figure* 9). Example A is a detail from a magnificent bas-relief slab from Kaminaljuyu preserved in the Guatemalan National Museum. This is carved in an art style classified here as Olmecoid, though there is yet no certain dating available. This profile deity has a scroll element in substitution for the

eye, and in this particular sculpture the deity seems to be depicted as a freshly severed head. The three descending scrolls apparently represent blood (the precious liquid) and, by extension, may symbolize water. Other fairly constant features of the scroll-eyed demon are the platform upper lip, the incisor or canine (bared alveolum?) element below, the slanting nose resting upon the lip, an occasional extra scroll originating in the nose region, an "U" symbol behind the mouth, and a rounded-square earplug with volutes attached. This demon conception, like the dragon, clearly stems from a Olmec were-jaguar profile motif. *Figure 9 B* is an example of the scroll-eyed demon on a Proto-Maya monument from Izapa. The next illustration is extracted from a basal water band on a stela belonging to the narrative style of the Izapa horizon. And *Figure 9 D* is a motif from the 7th Baktun stela at El Baul. This also is an isolated head, this time with supernumerary scrolls above and a trefoil "false beard" motif, plus braided cords, dangling below. Motif E is taken from the Bilbao stela (compare with the photo, *Figure* 2) and, as reconstructed with dotted lines, seems to be the scroll-eyed demon (facing to the right) in the trophy head position at the front of the belt. All the principal features are accounted for, though the upper portion of the demon head is missing; and this manifestation has the peculiarity of a St. Andrew's cross within the mouth (though such a cross is found within the mouth of a jaguar mask on a La Venta monolithic altar [Stirling, 1943, Pl. 37a]). Well developed scrollwork spring from the nose region, while tri-part shell pendants are tied to the base of the head. These two traits, in particular, closely align the Bilbao monument with Classic Maya sculpture of the central lowlands. It is also worth pointing out that the pendants incorporate a shell or water sign and that the whole trefoil motif here is graphically and symbolically analogous to the blood flowing from the trophy head in the ancestral from, *Figure 9 A*. Item G illustrates comparable shell pendants from a belt trophy head on the late Early Classic Stela 31 (445 A. D.) at Tikal. *Figure 9 F* is a double scroll motif from an 8th Baktun ("early" Early Classic) Maya stela at Uaxactun which demonstrates a stylistic rendering similar to the double scroll on the Bilbao stela. To return to the scroll-eyed demon motif, it may be significant that Maya

Gods B. D, and G are sometimes represented with scrolls in their eye orbits.

Conclusions

We have attempted to show that in a relative sequence of art styles expressed in stone sculpture, Monument 42 at Bilbao may be assigned to the last part of an Olmec—Olmecoid—Proto-Maya tradition in the Peripheral Coastal Lowlands and the adjoining highlands of Chiapas and Guatemala. This seems to correspond in time to the early Protoclassic (*ca.* 100 B.C.—100 A.D.), or the Izapa horizon. In addition, both the style and subject matter of the Bilbao stela foreshadow the earliest Classic Maya sculpture of the Peten; hence, the Bilbao sculpture may also be considered "early Maya". The Izapa horizon was characterized by widespread diffusion of the stela-altar complex (including bar-and-dot dates), recognizable art styles, and specific pottery types. We proposed that there were two substyles extant simultaneously during the Izapa horizon — a unique narrative style, and a more conservative Proto-Maya style (with Monument 42 belonging to the latter). Elements of both these style divisions may have reached the central lowlands during the early Protoclassic period and contributed to the style and content of 8th Baktun Maya stelae (in which, incidentally, considerable diversity is expressed). We have mentioned that the earliest known stela fragments in the Peten are Protoclassic. The Classic Maya art style did not really crystallize in the central lowlands until the first half of the 9th Baktun (435—635 A.D.), and of course its "great period" did not occur until the Late Classic (Proskouriakoff, 1950).

The various Izapa styles also persisted in the Peripheral Lowland regions through the Early Classic period, until they were absorbed or displaced by Teotihuacan forces in the fifth and sixth centuries. We shall return to this point below.

Several specific motifs used on Monument 42 unequivocally link it to the 8th Baktun Maya style of the central lowlands: the sandals, the scrolls, and the shell pendants. For example, the elaborately costumed priest figure on the Leyden Plate (320 A.D.) has similar looped sandals as well as the shell pendants. Proskouriakoff in her authoritative study of Classic Maya sculp-

ture illustrated that the earliest Maya sandal type has a strap at the instep with a loop at the side attaching to the sole (1950, fig. 30 a–c). It was observed that the double scroll style of the Bilbao stela matches the scrolls in Protoclassic frescoes at Tikal as well as on Uaxactun's Stela 10 (*Figure* 9 *E, F*). The latter monument is undated, but Proskouriakoff suggested that it was the earliest then-known monument in the Peten. This very early Maya scroll form, both in the peripheral region and in the central region, may be described as having two rounded components of unequal size, juxtaposed back to back, and curving in opposite directions. The scrolls tend to approach a squarish form rather than a circle (and thus recall an Olmecoid stylistic convention), and they lack the undulating elements and tapering outline of later Maya scrolls. The persistence of the group of three shell pendants below belt heads in Classic Maya art (*Figure* 9 *G*) needs no further discussion.

The tiered featherwork at the rear of the belt is also a feature of Classic Maya art (Stela 9, Tikal; Proskouriakoff, 1950, Fig. 39a). Other general qualities of style that Proskouriakoff ascribes to very early Peten stelae are: profile views of figures, legs which do not overlap at the level of the knees, feet that are placed one well behind the other, figures resting more heavily on the forward foot, and the lack of a loincloth apron or skirt. Relatively spindly legs may be added to this list also. All of these qualities are satisfied by the Bilbao bas-relief.

In addition to these purely stylistic attributes, stone sculpture of the Izapa horizon reveals many elements of subject matter which subsequently were incorporated into Classic Maya art. A list of these includes such major features as: richly adorned human figures in a central, standing position; celestial bands with downward peering deities; [11] basal bands with earth monsters; and the conceptualization and layout of similar cosmological themes. Some lesser features include: scrollwork, featherwork, jade beads, trefoil pendants, trophy heads, rain dragons (both single and double headed), "trees of life", parasols, litters, and specific symbols such as the St. Andrew's cross, the Kan cross, and the "U" motif. All of these traits are especially concentrated on stelae at Izapa. It is informative to look at late

[11] For example compare the downward peering deity of Stela 1, El Baul (fig. 3), with that on Stela 29, Tikal (W. R. Coe, 1962, fig. 5 *a*). The latter is the earliest known dated monument in the Peten (292 *d c*).

Early Classic Stela 31 at Tikal (W. R. Coe, 1962, fig. 7 b) which shows the continuation of many of the above traits (including a trophy head in the crook of the left arm that specifically recalls the Proto-Maya Chocola stela fragment on the southern Pacific Coast [Kidder and Samayoa, 1959, Pl. 91]).

Coeval with the emergence of Classic Maya sculpture in the Peten during the Protoclassic and Early Classic periods, was the uninterrupted development of stone sculpture in the Peripheral Coastal Lowlands and Guatemalan Highlands. Particularly prominent in this sculpture is a survival of conventions originating with the Izapan narrative style. (Even the narrative aspect of the Middle Classic Cotzumalhuapa art style of the Pacific Coast may have its roots in the Izapa style.) This trend may be seen especially in monuments at two important sites: Cerro de las Mesas and Kaminaljuyu. Early Classic stelae at the former site show such Izapa mannerisms as priest figures in profile pointing to a glyph column to the left (*cf. Figures 3 and 5*), and bar-and-dot dates unaccompanied by period glyphs. At Kaminaljuyu there is a group of as yet unpublished stelae which have been assigned to the late Arenal or Aurora phases at that site (*ca.* 0—400 A.D.). However, several published Kaminaljuyu monuments representing this period may be cited, such as Altar 1 (Lothrop, 1926, fig. 47 b), Altar 2, and Stela 6 (Kidder, Jennings and Shook, 1946, fig. 133 d, e, f). All of these sculptures are "Mayoid" in feeling though specific stylistic traits, such as the relatively stocky proportions to figures and the puffy facial features, can be traced to the Izapan narrative style of the early Protoclassic. Several of them also have hieroglyphic panels, though usually too eroded or fragmentary to be read. It is interesting to note that the symmetrical layout of the two Kaminaljuyu altars, with two figures facing a central glyph column, is also found on the 8th Baktun Altar 1 at Polol in the Peten (Proskouriakoff, 1950, fig. 36 d). The use of Altar 2 at Kaminaljuyu may have overlapped the late Early Classic phase, for it was excavated on a platform of Esperanza Mound B.

The Esperanza phase was the time of the influx of foreign stylistic and cultural features originating at Teotihuacan. This Mexican influence was also felt temporarily in the central Maya lowlands; but only in the highlands and coastal lowlands of southern Guatemala was the early Maya stone sculptural tradition successfully suppressed at the end of the Early Classic era.

The succeeding Late Classic period in the Peten was one of florescence of Maya civilization, whereas the same period in southern Guatemala witnessed the florescence of the unique Cotzumalhuapa art style, a style which owed more to outside Mexican traditions than to the local early Maya tradition.

On the basis of the above data, the hypothesis that the origins of Classic Maya sculptural art may be found in the Peripheral Coastal Lowlands and Guatemalan Highlands gains additional support. In addition to monumental stone sculpture, present evidence supports the hypothesis that the whole stela-altar complex, with associated calendar and hieroglyphics, had its roots in the same region. Though the basic pattern of calendrics seems to be earliest outside of the Peten, is still appears that the custom of joining bar-and-dot numerals to period glyphs originated within the Peten. The recently discovered stela at Bilbao apparently represents a Proto-Maya style on the Pacific Coast at about the time when that style was diffusing to the central lowlands; and this transfer may have taken place as early as the time of Christ. One cannot deny, however, that Maya traditions outside the sphere of stone sculpture and associated iconography and epigraphy, did indeed originate in the central lowlands. Certainly the realm of ceramics and architecture has a long history within the Peten; for example, polychrome painting on pottery, the corbeled vault, and stuccoed veneers to pyramids may be indigenous to the Peten, appearing there as early as the Late Preclassic. And pottery-making farmers must have occupied the Peten as early as the Middle Preclassic. It is hoped that the present study will help focus attention on the dynamic role of the Peripheral Lowland region in the formation of Classic Maya civilization.

TABLE 1

Stages:	Estimated Time Spans:	Sculpture Style Divisions:
.....	400 A.D.	.....
(Early) EARLY CLASSIC		(Early) CLASSIC MAYA
.....	100 A.D.	.....

PROTOCLASSIC		IZAPA ↑
	100 B.C.	
LATE PRECLASSIC		PROTO-MAYA
	350-400 B.C.	
—Transition—		OLMECOID
	550-600 B.C.	
MIDDLE PRECLASSIC		OLMEC
	800 B.C.	

BIBLIOGRAPHY

AGRINIER, Pierre. 1960. The carved human femurs from Tomb 1, Chiapa de Corzo, Chiapas, Mexico. *Papers of the New World Archaeological Foundation*, No. 6. Orinda.

BORHEGYI, S. F. de. 1956. El incensario de "Tres Asas" de Kaminaljuyu, Guatemala. *Instituto de Antropología e Historia de Guatemala*, vol. 8, No. 2, pp. 3-8. Guatemala.

————. 1963. Pre-Columbian Pottery Mushrooms from Mesoamerica. *American Antiquity*, vol. 28, No. 3, pp. 328-338. Salt Lake City.

COE, M. D. 1957. Cycle 7 Monuments in Middle America: A Reconsideration. *American Anthropologist*, vol. 59, No. 4, pp. 597-611. Menasha.

————. 1966. An Early Stone Pectoral from Southeastern Mexico. *Studies in Pre-Columbian Art and Archaeology*, No. 1, Dumbarton Oaks, Washington.

COE, W. R. 1962. A Summary of Excavation and Research at Tikal, Guatemala: 1956-61. *American Antiquity*, vol. 27, No. 4, pp. 479-507. Salt Lake City.

————. 1965. Ten Years of Study of a Maya Ruin in the Lowlands of Guatemala. *Expedition, Bulletin of the University Museum of the University of Pennsylvania*, vol. 8, No. 1, pp. 5-56. Philadelphia.

COOK DE LEONARD, Carmen. 1959. La Escultura. *Esplendor del México Antiguo*, edited by Raul Noriega and others, vol. 1, pp. 519-606. Centro de Investigaciones Antropológicas de México. México.

COVARRUBIAS, Miguel. 1946. *Mexico South*. Alfred A. Knopf. New York.

————. 1957. *Indian Art of Mexico and Central America.* Alfred A. Knopf. New York.

DELGADO, Agustin. 1965. Infantile and Jaguar Traits on Olmec Sculpture. *Archaeology,* vol. 18, No. 1, pp. 55-62. Brattleboro, Vermont.

DRUCKER, Philip. 1952. La Venta, Tabasco. A Study of Olmec Ceramics and Art. *Bureau of American Ethnology,* Bulletin 153. Washington.

————. R. F. Heizer, and R. J. Squier. 1959. Excavations at La Venta, Tabasco. 1955. *Bureau of American Ethnology,* Bulletin 170. Washington.

FERDON, E. N., Jr. 1953. Tonala, Mexico: An Archaeological Survey. *Monographs of the School of American Research,* No. 16. Santa Fe.

GIRARD, Rafel. 1962. *Los Mayas Eternos.* Antigua Librería Robredo. México.

KIDDER, A. V., J. D. JENNINGS, and E. M. SHOOK. 1946. Excavations at Kaminaljuyu, Guatemala. *Carnegie Institution of Washington,* Publ. 561, Washington.

KIDDER, Alfred II, and C. SAMAYOA CHINCHILLA. 1959. *The Art of the Ancient Maya.* Thomas Y. Crowell Co. New York.

LOTHROP, S. K. 1926. Stone sculptures from the Finca Arevalo, Guatemala. *Museum of the American Indian, Heye Foundation. Indian Notes,* No. 3, pp. 147-71. New York.

LOWE, G. W. 1962. Algunos Resultados de la Temporada 1961 en Chiapa de Corzo, Chiapas. *Estudios de Cultura Maya,* vol. 2, pp. 185-196. Seminario de Cultura Maya. Universidad Nacional Autónoma de México. México.

MILES, S. W. 1965. Sculpture of the Guatemala-Chiapas Highlands and Pacific Slopes, and Associated Hieroglyphs. *Handbook of Middle American Indians,* vol. 2, Article 10, pp. 237-275. University of Texas Press. Austin.

PARSONS, L. A. 1957. The Nature of Horizon Markers in Middle American Archaeology. *Anthropology Tomorrow,* vol. 5, No. 2, pp. 98-121. Chicago.

————. 1963. A Doughnut-shaped Vessel from Kaminaljuyu, with a Distributional Analysis of this Unusual Form. *American Antiquity,* vol. 28, No. 3, pp. 386-389. Salt Lake City.

————. 1964. The Middle American Co-Tradition. *MS,* Doctoral Dissertation, Peabody Museum and Widener Libraries, Harvard University. Cambridge.

————. *in press.* Report on the Radiocarbon Dates from Bilbao, Santa Lucia Cotzumalhuapa, Guatemala. *Instituto de Antropología e Historia de Guatemala.* Guatemala.

PARSONS, L. A. and P. S. Jenson. 1965. Boulder Sculpture on the Pacific Coast of Guatemala. *Archaeology,* vol. 18, No. 2. Brattleboro, Vermont.

PIÑA CHAN R. and L. COVARRUBIAS. 1964. *El Pueblo del Jaguar (Los Olmecas Arqueológicos).* Consejo para la Planeación e Instalación del Museo Nacional de Antropología. México.

PROSKOURIAKOFF, Tatiana. 1950. A Study of Classic Maya Sculpture. *Carnegie Institution of Washington,* Publ. 593. Washington.

————. 1964. El Arte Maya y el Modelo Genético de Cultura. *Desarrollo Cultural de Los Mayas,* edited by E. Z. Vogt and A. Ruz L., pp. 179-193. Universidad Nacional Autónoma de México. México.

RICHARDSON, F. B. 1940. Non-Maya monumental scupture of Central America. *The Maya and Their Neighbors,* edited by C. L. Hay and others, pp. 395-416. Appleton-Century. New York.

RICKETSON, O. G. and E. B. RICKETSON. 1937. Uaxactun, Guatemala. Group E. 1926-1931. *Carnegie Institution of Washington,* Publ. 477. Washington.

STIRLING, M. W. 1943. Stone Monuments of Southern Mexico. *Bureau of American Ethnology,* Bulletin 138. Washington.

TERMER, Franz. 1942. Auf den Spuren Ratselhafter Volker in Sudguatemala. *Die Umschau,* vol. 26. Frankfurt.

THOMPSON, J. E. S. 1948. An archaeological reconnaissance in the Cotzumalhuapa region, Escuintla, Guatemala. *Carnegie Institution of Washington,* Pub. 574, Contrib. 44. Washington.

WILLEY, G. R. 1962. The Early Great Styles and the Rise of the Pre-Columbian Civilizations. *American Anthropologist,* vol. 64, No. 1, Part 1, 1-14. Menasha.

————. and J. C. Gifford. 1961. Pottery of the Holmul I Style from Barton Ramie, British Honduras. *Essays in Pre-Columbian Art and Archaeology,* by S. K. Lothrop and others, pp. 152-170. Cambridge.