THE DWARF MOTIF IN CLASSIC MAYA MONUMENTAL ICONOGRAPHY: A SPATIAL ANALYSIS

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for my mother

Mary C. Bacon

1927-2005

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ABSTRACT

THE DWARF MOTIF IN CLASSIC MAYA MONUMENTAL ICONOGRAPHY: A SPATIAL ANALYSIS

Wendy J. Bacon

Robert J. Sharer

Although scholars of Classic Maya art have described certain short-statured figures as achondroplastic dwarves and endowed them with mystical significance, the motif has gone undefined biologically, iconographically, and ideologically. This contextual analysis of 45 short-statured individuals, depicted on archaeologically provenienced monuments, identifies the anatomical and cultural attributes that define the dwarf motif. Investigation at all levels of settlement, from small, dependent sites to regional superpowers, demonstrates how ancient Maya artists adapted broadly shared iconography to express local identity. While epigraphic, ethnohistoric, and ethnographic data support a variety of roles for dwarves, shifting over 300 years, monumental depictions of dwarves are consistently associated with symbols of liminality, implying that the motif represented the process of transition for the ancient Maya. This analysis of the dwarf motif grounds the interpretation of iconography not only firmly in archaeological context but within the ancient Maya conception of time and their ideological integration of the natural and supernatural as well.

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CHAPTER 1

THE DWARF MOTIF AND MAYA ICONOGRAPHY: A REVIEW

Introduction

"In probably no other culture have dwarfs been given a more visible role and apparently a chance to enjoy a normal life than in the Old Kingdom of ancient Egypt" (Sampsell 2001:71). That may be true, but in probably no other culture have dwarves been given a wider range of roles to play than in our reconstruction of the Classic period of the ancient Maya. For such small figures, the individuals on Maya monuments that researchers commonly label 'dwarves' had some big claims to live up to. "Those whose bodies were transformed by the gods into such shapes as hunchbacks and dwarfs were considered to be specially favored with supernatural powers" (Tate 1993:9). For example, "the Maya believed that dwarves were children of the Chacs (rain gods), and that they could bring rain" (M. Miller and Taube 1993:82; see also Wanyerka 1997:81). "Blue represented things divine, such as dwarves" (Greene Robertson 2004:247), "supernatural beings in human form" (Prager 2001:278). Apparently, their magic had a dark side: "dwarfs ... were related to the supernatural and the world of the dead" (Piña Chan 1997:10). They "were believed to be the messengers of the underworld" (Graña-Behrens and Grube 2001:430; see also A. Chase and D. Chase 1994:58; Prager 2001:278; Tate 1993:16).

Their magical powers and "high status derived from their special association with caves and entries into the Underworld" (Martin and Grube 2000:16) seem to have come at a cost. They "became servants of the king because they could tap into the supernatural" (Schele and Mathews 1998:77). Dwarves were associated with turtles and snails (Kurbjuhn 1985:160), the ball game (Mayer 1986:223; Piña Chan 1997:10; Prager 2002:50; G. Stuart 1981:235), bloodletting (V. Miller 1985:146), and even "were intended for sacrifice," though "possibly, as child surrogate, the dwarf was not always sacrificed" (Coggins 1994:33, 37).

Not all their perceived associations were negative. "Dwarfs must have been figures of fun" (Houston et al. 2006:196). They danced (Grube 1992a:201; Grube and Hammond 1998:129; Houston et al. 2006:267; V. Miller 1985:147; Prager 2002:50) and were shown with cacao and water lilies (Mayer 1986:223; Prager 2002:52) as well as "with women or with paired monuments of males and females that resemble family portraits" (V. Miller 1985:152). Furthermore, dwarves "lived at the royal court, where they entertained the rulers, and were also their preferred servants" (Graña-Behrens and Grube 2001:430; see also Wanyerka 1997:81). "Dwarves and hunchbacks often served as counselors to the highest

ranking lords" (M. Miller and Martin 2004:292). "From our knowledge of Maya iconography, they appear to be connected with celestial gods" (G. Stuart 1981:235). It seems that mystic roles for dwarves are not new:

P. T. Barnum made a fortune by presenting to Queen Victoria's court a pair of microcephalic dwarves he claimed were the last degenerate remains of a caste of high priests found, at great expense, in a lost Maya city [Morris and Foxx 1987:25-26].

This variety of roles ascribed to Classic Maya dwarves supports Adelson's (2003-2004:8) observation: "There is no disability that has served as such a fertile source of myths as dwarfism, also evoking complex beliefs."

As Villacorta asked in 1934: "Serán bufones, or serán representaciones informes de la humanidad ante la grandeza y perfeccíon de los dioses? Esta es otra interrogación para la ciencia" (1934:160). How, indeed, are we to test these claims for Classic Maya dwarves? Before we can know how the Maya interpreted the motif, we need to decide what defines it: which illustrations of short-statured people in Maya iconography are examples of the dwarf motif? What makes a short Maya person a dwarf, on a biological level or on a cultural level? Once we have decided which depictions constitute the body of evidence, what meaning can be derived from that evidence? The two-part goal of this work is to generate a definition of the dwarf motif that provides a common base of understanding for future discussion, then to begin such a discussion on what the meaning, for the Classic Maya, of the dwarf motif might include.

A review of the ways in which scholars have approached the derivation of meaning from iconographic data points to some appropriate methodological tools for such an analysis.

Archaeological Methods of Interpreting Iconography

One of the aspects of the dwarfism motif in Classic Maya art that attracts me to its study is the variety of scholarly disciplines it touches: archaeology, art history, biomedical anthropology, epigraphy, ethnography, ethnohistory, linguistics, paleopathology, and physical anthropology all contribute to its decoding. The challenge is to draw, from this wide variety of resources, the relevant data and integrate them to elucidate the meaning of the motif to the Classic Maya. How have anthropologists in general, and archaeologists in particular, addressed the question of the meaning of the iconographic record? As Geertz (1983:94) puts it, "Art is notoriously hard to talk about." The response of archaeologists to this problem has included three broad types of analyses of iconographic data: conjunctive, cognitive, and contextual, although these are not the only types of analyses and the types overlap. Conjunctive analyses integrate data of several types (iconographic, archaeological, ethnohistorical, epigraphic, and ethnographic) to decipher meaning. Cognitive analyses attempt to reveal underlying paradigms or

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structures by which iconographic and archaeological data can be interpreted. Contextual analyses apply the patterning detected in the archaeological record to the interpretation of iconographic meaning.

The Conjunctive Method

The use of a 'conjunctive approach' was first called for by that term in Walter Taylor's 1948 Study of Archeology (Taylor 1948:95-96, 152-154). Beginning in the early 1980s, scholars of anthropological archaeology began to alert their colleagues to the importance of cognitive systems, primarily ideology, in the interpretation of archaeological evidence (for example, Hodder 1982; Marcus 1983; Renfrew 1982; Willey 1980). In Maya studies, this call came when the decipherment of hieroglyphic writing was beginning to expand dramatically, responding to data recently available (the *Palengue Round Table Series* had begun publication in 1974, the Corpus of Maya Hieroglyphic Inscriptions in 1975). By the early 1990s, Mayanists were commenting on the schism developing between 'dirt' archaeologists and epigraphers, and were calling for an approach that recognized both the strengths and limitations of various classes of data and utilized various methods of analysis (Fash and Sharer 1991:166, 170; Fowler and Houston 1990:1; Hammond 1991:4; Harrison 1995:192; Marcus 1983:480-482, 1992:444-445, 1995:3; Sabloff and Henderson 1993:447). Examples of such analyses that attempted to reconstruct ancient cognitive systems by

employing this conjunctive approach include those by Carmack and Weeks (1981), Ashmore (1986, 1989, 1991), Grube (1992a), D. Chase and A. Chase (1996), Houston (1996), Haviland (1997), as well as Golden and Borgstede (2004).

The Cognitive Method

While Taylor (1948) was calling for a conjunctive approach,
Proskouriakoff, for her (1950) *Study of Classic Maya Sculpture*, was
matching visual patterns with hypothesized historical events in order to
document change through time and provide a chronology of style (Joyce
1993:xxiv; Proskouriakoff 1950:2-3). One methodological lesson learned
from that effort still applies: although most motifs were conservative,
changing little over long periods, their meanings likely changed not only
through time but from viewer to viewer as well (Proskouriakoff 1950:2,
182; see also Baudez 1994:3, 281; Clancy 1999:4; Tate 1992:xii). A
second is that images had emotive and decorative functions in addition
to semiotic ones. A third lesson is that symbolism is "difficult to classify,
much more to interpret" even "in its total cultural context"
(Proskouriakoff 1950:4, 182).

Between 30 and 40 years later, scholars endeavored to produce a body of archaeological theory that would allow archaeologists to interpret their data in such a way that their deeper meaning could be reconstructed. These attempts were variously known as symbolic,

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structural, cognitive, or contextual archaeology (such as Hodder 1982, 1987, 1989, 1991; Hodder et al. 1995; Leone 1982; Renfrew 1982; Shanks and Tilley 1988, 1992; Tilley 1990, 1993). Debate ensued as to whether meaning could be recovered archaeologically at all. Given the complexity of Maya art and ideology, the skepticism expressed by Renfrew (1993:249) that we can ever really fully reconstruct the meaning of some ancient symbols seems justified. Flannery (1976:331), Leone (1982:748), and Baudez (1994:3) discussed the problems that archaeologists, particularly Mayanists, have had in addressing the problem of meaning.

The Contextual Method

Although, according to Robb (1998:341), the efforts of the 1980s and early 1990s yielded "no specific methodology unique to the archaeology of symbols," they did underscore the importance of grounding the analysis of artifacts, including symbols, firmly in their archaeological context (see also Geertz 1983:97, 99, 118, 120; Leone 1982:743-745, 757). Context was defined as the totality of the relevant environment, where 'relevant' refers to a relationship with the object that contributes to discerning the object's meaning (Hodder 1987:4-5, 1991:143). In spite of the problems of recovering meaning from archaeological data, we can "elucidate more clearly how specific symbols were used in a particular context" (Renfrew 1993:249). According to Flannery and Marcus,

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The biggest challenge facing cognitive archaeology is to become anchored as firmly in the ethnographic, historic, ethnohistoric, and archaeological records as the more subsistence- and settlement-based aspects of archaeology [1993:267],

in other words, to retain the archaeological context of symbolic or iconographic data. If they hope to reconstruct the meaning of past symbols, "archaeologists have to carry out close contextual analysis," for example, "contextual analysis of artifact use, structural analysis of cultural principles, and iconographies" (Robb 1998:338, 342). Put another way, "Understanding of the object comes about through placing it in relation to the larger functioning whole. This type of context occurs at many spatial and temporal scales simultaneously" (Hodder 1987:2).

Although Mayanists such as Proskouriakoff (1950:182), A. Miller (1986:90), Marcus (1987:4-5; 1995:4), Tate (1992:xii, 116, 142-144), Houston (1993:9), Coggins (1995:378), and Robin (2001:213-214) emphasized the need to keep iconographic data firmly within their archaeological context, studies of Maya portrayals of dwarfism have considered examples of this artistic motif more or less decontextualized from their proveniences in both time and space. Baudez (1994:4) identifies this tendency of iconographic analysis: "such studies use data from different regions and from different periods of Maya history," failing to control for shifts in meaning over space and time. As Viel (1999:397) states for the reconstruction of past ideologies, "Epigraphy

and iconography are obviously powerful tools for the task, but spatial organization is another one, perhaps less subject to past political propaganda." Spatial analysis is an appropriate tool because it can integrate various types of data, can recover aspects of meaning or cognitive systems, and is sensitive to archaeological context at a variety of levels.

Spatial Analysis

The application of spatial analysis to various types of data in recovery of cognitive systems has a long history in American archaeology; an early example is the direct historical approach of the American Southwest illustrated by Strong (1935, 1936) and Steward (1937, 1938). Research during the 1950s and 60s demonstrated the potential of ethnographic analogy, teamed with spatially patterned archaeological data, to produce evidence of sociopolitical and ideological systems at both the site and regional levels (for example, Deetz 1965; Hill 1970; Longacre 1970; Phillips et al. 1951; Sanders 1965; Willey 1953, 1956; Willey et al. 1965). The methodological and theoretical debates waged during the late 1960s and early 70s (such as Chang 1968, 1972; Trigger 1967) gave way, during the 1980s, to the integration of ethnographic data and archaeological context to understand sociopolitical and cosmological aspects of behavior, from the level of the activity area to the region (as in collections such as those edited by Ashmore [1981], Hodder [1982], Vogt

and Leventhal [1983], and Kent [1987, 1990]). Spatial analysis has been applied to reconstruct ancient Maya ideological systems by Coggins (1980), Carmack and Weeks (1981), Ashmore (1986, 1989, 1991, 1992), Tate (1992), Clancy (1994), Harrison (1994), and Robin (2001).

An integration of symbolic and archaeological data is an especially appropriate method for the analysis of Maya iconography, as there is no evidence that the Classic producers of Maya art and artifacts ever separated the cosmological or ideological from the political or economic. As Arthur Miller recalls with reference to Tatiana Proskouriakoff,

When I suggested that a complex and esoteric religion based on the calendar was the primary motivation for most of Maya art, ... Tania would counter with the observation that the Maya never made anything of significance without political motivation. She believed that a more direct approach to understanding the Maya would be to reconstruct their sociopolitical world. ... I have gradually come around to her emphasis on a political interpretation of public art, although I still maintain that the ancient Maya were a deeply religious people and that their imagery is replete with sacred implications phrased in calendrical terms. In fact, there is no conflict for the separation of religion and rulership is fairly recent, responding to modern Western taxonomy. ... Not only stelae but also architecture and its study embody a Maya concern with a public proclamation of authority, couched in the calendrical terms of Maya religion [A. Miller 1986:13].

The dwarf motif is an excellent example of this combination of mystical, social, and political ideologies, integrating the perception that dwarves somehow represent the supernatural 'other,' the relationship of the dwarf to the ruler portrayed, and the association of the dwarf with monumental military propaganda. Can a spatial analysis of the dwarf motif help us to

"reconstruct their sociopolitical world" as well as to decode "their imagery ... replete with sacred implications" (A. Miller 1986:13)? It is instructive to review how scholars have addressed the dwarf motif in Maya art.

The Dwarf Motif in the Art of Other Societies

Art historians have long recognized the motif of short human stature in fine art; "dwarfism has even probably been the most commonly depicted human physical disorder, since earliest times" (Dasen 1988:254; see also Ablon 1984:3-4; Adelson 2005b:139; Maroteaux 1988:27; Tate and Bendersky 1999:303). A cursory survey finds three often-cited monographs: Tietze-Conrat's *Dwarfs and Jesters in Art*, translated from German and published in 1957, illustrating some 90 images; *Small People – Great Art* by Enderle, Meyerhofer, and Unverfehrt (Enderle et al. 1994), also translated from the German, but nearly impossible to lay hands on; and Dasen's (1993) *Dwarves in Ancient Egypt and Greece*, based on her dissertation. O'Bryan also wrote a thesis on *The Dwarf in Italian Renaissance Iconography* (1991). Although biomedical journals continually publish articles discussing artistic renderings of pathologically short stature (for example, Bartsocas 1982; Bleyer 1940; Dasen 1988; Dawson 1927; Emery and Emery 1994; Hughes Jones 1932;

Johnston 1963; Kozma 2006; Ravin and Fried 1974), these focus on Classical and European art. Pre-Columbian representations of dwarfism go almost unrecognized outside the discipline of anthropology (two exceptions are Ablon 1984:4 and Adelson 2005b:10, 100, 139, 143, 145).

Within the discipline, however, discussions of portrayals of short stature by pre-Columbian artists from outside the Maya culture area are legion (only a small fraction is cited here; though some combine dwarfism with kyphosis, or hunchback, the present work does not consider renderings of hunchbacks). As early as 1916, Spinden illustrated his argument for the presence of true portraiture in Central American art with a clay model from Mexico that he captioned "figurine representing a dwarf" (Spinden 1916:439-440, Plate VIIa). Many examples are known from the art styles of Tlatilco (M. Coe 1965:55; Covarrubias 1957:24-26; Taube 1988:28), Nayarit (Covarrubias 1957:89-90), Colima (Covarrubias 1957:92, Plate XXIII; Furst 1974:137; Taube 1988:59; von Winning 1974:32-34, Figures 6, 14-15; Westheim et al. 1972:441, Plate 270), Teotihuacan (Covarrubias 1957:140), and Monte Alban (Covarrubias 1957:148).

Most discussion of pre-Columbian short stature from outside the Maya area referred to the Olmec art style. In 1942, Caso and Covarrubias debated whether Olmec figurines depicted children or short adults (Caso 1942:44; Covarrubias 1942:46-47; see also Easby and Scott 1970:Nos. 20,

36). Covarrubias predicted Tate and Bendersky's (1999) identification of "dwarfed" figurines as human fetuses by describing them as "fetoid" and related the dwarf motif to themes known ethnographically from Veracruz (Covarrubias1957:57; see also Robicsek 1983:8; Solís 1998:28). He also postulated an "Olmec ancestry" for the dwarf motif on Maya stelae (Covarrubias 1957:230), as did Tate (1995:62). Proskouriakoff (1968:121) related the potbellied stone sculptures from Monte Alto, on the Guatemalan Pacific coast, to the Olmec baby motif, the atlanteans of Yucatan, and the "potbellied little dwarfs of the Classic Maya," while Robicsek (1983:14) referred to "the fascination shown by virtually all pre-Columbian cultures toward body deformities, especially toward inborn anomalies."

An early association of the dwarf motif in pre-Columbian art from outside the Maya area with a known biological condition was by M. Coe (1965:55), who characterized some female figurines from Tlatilco as depicting achondroplasia. Milton and Gonzalo (1974:33) identified the figurines called "dwarves" or "were-jaguar babies" as representations of children with Down syndrome. Wickler and Seibt (1986) suggested that their condition was achondroplasia instead (see also Tate 1995:60-61). These efforts corresponded to those in medical research: before the mid-1960s, all short-limbed conditions fell under the heading of 'achondroplasia,' until, during the 1970s and 80s, significant new

diagnostic tools led to refined classifications (Adelson 2005a:23-26; see Review of Short-Stature Classifications in Chapter 2).

The Dwarf Motif in Maya Art

Early Use of the Term 'Dwarf': 1895 to 1930

As early as 1895, Daniel Brinton drew a parallel between ethnographic and archaeological data in his discussion of "various divinities" of the ancient Maya:

Prominent among mythical beings were the dwarfs, known as *ppuz*, "bent over;" *ac uinic*, "turtle men;" *tzapa uinic*, "shortened men;" and *pputum*, "small of body." They are sometimes represented in the carvings, an interesting example being in the Peabody Museum [Brinton 1895:43].

Brinton (1895:43) was the first to connect the idea of "mythical ... dwarfs" with the representations of short-statured persons on stelae; it would be over half a century before the term 'dwarf' would again be applied in this way.

From the turn of the twentieth century to throughout the 1920s, the term 'dwarf' was applied to any human form of relatively small size in Maya art. In 1908, Maler described the scene sculpted on Cancuen Stela 1:

To one of the curves ... is clinging the figure of a dwarf Out of the wide-open jaws of the latter serpent protrudes a second dwarf, slightly

bending forward, and upon this one a third dwarf seems to be looking down ... [Maler 1908a:44].

In describing Naranjo Stela 5, Maler referred to a "small human figure," but on Naranjo Stela 32 "scrolls developed in all directions, in which probably nestled small grotesque faces, dwarfs, and perhaps even animal forms" (1908b:86, 118). In 1928, Villacorta described Yaxha Stela 6, "Frente al personaje yace de rodillas un enano [dwarf] que ase el asta del estandarte" (1928:174). All of these figures, though small, appear to have relatively average body proportions. Thus, for discussing Maya art between 1900 and 1930, 'dwarf' was a nontechnical term interchangeable with 'small human form' (see Naranjo Stela 5 and Yaxha Stela 6 under Monuments in Appendix C).

Functional Terms: 1930 to 1950

During the 1930s and 40s, the term 'dwarf' was replaced by language describing the subservient role that persons of short stature were thought to play in Maya society. In 1932, Merwin and Vaillant (1932:77) referred to the dwarf shown on each of two Holmul-style cylinder vases as "a diminutive suppliant." Joyce (1938:145) identified the dwarf on a Maya-style jade plaque found at Teotihuacan as "an attendant." The kneeling person on Yaxha Stela 6, described by Villacorta as a dwarf, was referred to by Morley as "a small secondary human figure (the first thus far encountered at Yaxha)" (1937-1938:III:474). Ruppert

and Denison (1943:103, 105) used "small standing subsidiary figure" and "subsidiary figure ... standing" for the dwarves on Calakmul Stelae 16 and 29. The dwarf on Stela 10 from Xultun was labeled "an attendant" by Kelemen (1946:120). Proskouriakoff (1950:5) proposed that some secondary forms "accompanying the main figure ... appear to be servants or acolytes." Terminology became at the same time more objective and more descriptive.

Yet some confusion is evident, during this period, regarding the posture of the very short. Gann (1936:38) identified a seated dwarf on a Maya-style jade plaque found at Teotihuacan as "a suppliant kneeling." Morley (1937-1938:I:415, 417-418) likewise referred to the standing dwarf on Xultun Stela 3 as a "small seated human figure" and to that on Xultun Stela 10 as a "subsidiary human figure [who] sits, or kneels." Ruppert and Denison (1943:121) used "subsidiary figure [who] sits" for the dwarf shown standing on Calakmul Stela 89. Morley (1970 [1941?-1942?]:177) notes "secondary human figures" on Uxmal Stela 14, some of which show average body proportions and some of which do not.

'Dwarves' Identified on Monuments: 1950 to 1970

After Brinton (1895:43), the first application of the term 'dwarf' to short-statured persons on Maya stele was by Proskouriakoff in 1950, who noted the presence on a carved wall panel at Santa Rosa Xtampak of "several minor figures, among them dwarves, like those which appear on

stelae" (1950:165). Satterthwaite (1951:28, 29) closely followed, pointing out the "dwarf at observer's left" on Caracol Stela 1 and the "dwarf ... above the glyph panel" on Stela 5. A. Smith and Kidder (1951:35, 36) reserved judgment somewhat by referring to "a small person whose size and whose bulging forehead suggest that the representation may be that of a dwarf" and "a small [form] with dwarf-like features" on a jade plaque found at Nebaj (see also Lothrop 1964:117). In 1954, Satterthwaite contrasted the "pint-sized figure at the lower left" of Caracol Stela 5 with "the one on the right, a dwarf" and suggested that his role was one of attendant (1954:12, 29).

During the 1950s and early 60s, 'dwarves' were also identified by that term on Maya painted cylinder vases (R. Smith 1955:Figure 2b), carved wooden lintels (W. Coe et al. 1961:29, 33, Figures 21a, 37c; Shook 1958:15), and carved jades; according to M. Coe (1966:114), the Nebaj plaque shows "a recurrent theme, a richly dressed noble seated upon a throne, leaning forward to chat with a dwarf, perhaps a court buffoon" (see also Lothrop 1964:117; Martínez Durán 1964:90). Pendergast (1966:157-160, 1969:44-46) described a small figure painted on a vase from Actun Balam as a dwarf, though there is no evidence of disproportionality. Medical specialists made some of the first surveys and classifications of stature-restricting conditions during this period (McKusick 1972:740-743).

Studies of Maya Dwarf Iconography: 1970 to 2005

It is interesting that archaeologists of the Maya and medical specialists began to focus analysis on limited stature at just about the same time. William Coe (self-described as "keen on Tikal dwarfs" [1990:III:855]) sparked my own interest in the dwarf motif by assigning me that topic for an undergraduate honor's thesis in 1978. At that time, Carl Beetz, also under W. Coe's supervision, was drawing and analyzing the Caracol monuments, raising questions about the identity and meaning of the several dwarves depicted there (Beetz 1981). My 1978 paper examined sixteen monumental examples and five portable examples; at that time, I had not yet recognized the dwarves on Tikal Structure 5C-4 (Temple IV) Lintel 3; the source of the 'Cleveland Stela' had not been discovered; and some monuments from Calakmul, Caracol, La Milpa, Oxpemul, and Xultun were yet to be available. In the 25 years since then, the Maya monuments known to feature short-statured persons have more than doubled (Bacon 2003-2004:40-41). As the corpus of Maya iconography and the technology for enhancing eroded relief is made more available, more dwarves will surely come to light.

Studies during the 1970s focused attention on the representation of dwarfism by figurines as well as by ethnohistoric documents. In 1971, Cook de Leonard published an article comparing the dwarf motif to that of the so-called 'fat god,' as modeled in figurine form. Corson's (1972)

dissertation research on Jaina figurines included a section on those that, in his judgment, depicted dwarves. In a summary article he concluded,

A considerable ambiguity persists regarding the roles played in Maya thought and culture by varieties of small or deformed individuals. ... The significance of dwarfs cannot adequately be reconstructed exclusively on the basis of internal evidence [Corson 1973:59-60].

In 1975, Sánchez Saldaña and Salas Cuesta briefly compiled mentions of dwarves by Spaniards in A.D. sixteenth-century Mexico and attempted to relate these ethnohistoric descriptions of dwarfism to types of dwarfism known medically today. The works of Cook de Leonard (1971), Corson (1972, 1973), and Sánchez Saldaña and Salas Cuesta (1975) are reviewed here because Jaina dwarf figurines and ethnohistoric descriptions are used to interpret the motif as it occurs in other media and societies.

The heightened awareness, during this period, of dwarves in Maya art is illustrated by two descriptions, by George Kubler, of the vase from Actun Balam (see Provenienced Ceramic Vessels in Appendix C). In 1969, Kubler identified the small figure as "a miniature human," but 15 years later, as "a dwarf" (1969:32, 1984:281).

Foncerrada de Molina (1976): "El Enano en la Plástica Maya." Other than Cook de Leonard's (1971) work, the earliest article of which Maya portrayals of dwarves was the primary subject was "El Enano en la Plástica Maya" by Marta Foncerrada de Molina in 1976. She focused on representations of decreased stature in monumental sculpture and

painting as well as on carved jade plaques, while noting that the motif is also found in clay figurines and painted ceramic vessels (Foncerrada de Molina 1976:45). Depictions of children in Maya art, for example at Piedras Negras, Bonampak, and Palenque, were contrasted with those of short-statured adults (Foncerrada de Molina 1976:45-47). Foncerrada de Molina then placed Maya illustrations of reduced stature within the context of those from outside the Maya area, such as in Olmec and Pacific coast art, in order to relate the dwarf motif to that of human sacrifice (1976:48). Drawing on ethnographic data, she suggested that the dwarves pictured in Maya art were real people of elite status but seen by the Maya as having supernatural qualities (Foncerrada de Molina 1976:49, 54).

V. Miller (1985): "The Dwarf Motif in Classic Maya Art." Virginia Miller, in a paper delivered in 1980 (published in 1985), identified achondroplasia as the type of dwarfism most often portrayed by the Maya (V. Miller 1985:141). Like Foncerrada de Molina, she noted the motif's distribution "throughout the Maya area in a wide range of media" (V. Miller 1985:141), then grouped representations of diminished stature into categories: figurines, best represented by those from Jaina; monuments from the Puuc region, usually columns; painted Holmul-style cylinder vessels; and sculpted stelae, lintels, and other architectural contexts. Miller compared Jaina figurines of dwarves to those carved of jade recovered from the Cenote of Sacrifice at Chichen Itza in order to

relate both to Maya conceptions of the underworld and afterlife (1985:142-146). Similarly, according to Miller, Puuc-style columns that show dwarves may relate to human sacrifice (1985:146-147). She suggested that Holmul-style cylinder vessels picture "a now lost myth with strong regional associations" but "the meaning of the scene, and the significance of the two types of dwarfs, remains obscure" (1985:148). Thus, illustrations of dwarves on figurines and vases were, in her judgment, likely more symbolic than historical (1985:153).

In contrast, Miller's analysis of dwarf iconography on stelae, lintels, and structural facades, and the relationships between the sites at which these are found, led her to propose a specialized role for dwarves in Maya court ritual and an association with lineage (1985:148-152). Her statement "some dwarfs may even have been emblematic of a ruling dynasty or of its connections with various sites" predicts my premise that the distribution of the dwarf motif follows closely the political relationships between certain Maya polities (discussed in Chapter 6; Bacon 2003-2004:12, 39; V. Miller 1985:153).

In a paper given in 1983 and published the same year as Miller's article, Kornelia Kurbjuhn analyzed the iconography of the turtle-shell and snail-shell motifs in Classic Maya art. According to linguistic evidence, "words for turtles, snails and dwarfs ... describe but one

complex motif. ... Turtle and snail ... can stand for dwarf" (Kurbjuhn 1985:160).

Mayer (1986): "Zwergendarstellungen bei den Präkolumbischen Maya." Following shortly on Miller's article is one by Karl Herbert Mayer, the title of which roughly translates "Dwarf Representations of the Pre-Columbian Maya." Like Miller, Mayer (1986:213-218) noted the display of dwarves on monuments, in architectural contexts including lintels, facades, and capstones, and on portable art such as carved jade and ceramic figurines. He also discussed the supernatural and underworld role of dwarves in modern Maya mythology as well as Spanish observations of dwarves during the Conquest of Central Mexico (Mayer 1986:218-219, 221-222; V. Miller 1985:143). Pointing to the iconographic association of the dwarf motif on stelae with the ball game, with cacao, and with aquatic flora and fauna. Mayer (1986:223) suggested that dwarfs played a specialized role in Maya ritual, perhaps having to do with hallucinogen use (see Other Associations under Cultural Attributes in Chapter 4). Finally, he pointed out that the dwarf motif is so widespread in time and space and appears in so many different manifestations that an explanation of its meaning is difficult (Mayer 1986:223; see also V. Miller 1985:152-153).

Houston (1989, 1992): Maya Glyphs, "A Name Glyph for Classic Maya Dwarves." In his 1989 book Maya Glyphs, Stephen Houston

proposed that dwarves in ancient Maya times were "courtly attendants ... who had a special relationship with rulers and their own name glyph" (1989:56). His 1992 article focused on the epigraphy and iconography of short persons on stelae and ceramic vessels. Houston examined what he termed "kilted dwarves," after the characteristic jaguar pelt that they wore draped over their hips (1992:526; see Attire under Cultural Attributes in Chapter 4). In addition to their distinctive garments, Houston noted their jade jewelry, their forward-sweeping, knotted headdresses, and their position to the primary figure's right. Houston hypothesized, based on iconographic clues worn by the primary figures in the scenes, that dwarves had a function in period-ending ritual (1992:527). Although he identified at least two hieroglyphic compounds associated with them, the texts are somewhat variable and only partially deciphered (Houston 1992:528-530; see Epigraphy in Chapter 7).

Coggins (1994): "Man, Woman, and Dwarf." Building on the work of Foncerrada de Molina (1976:45-48) and V. Miller (1985:148-152), Clemency Coggins (1994:28) also suggested a role for dwarves in ancient Maya ceremony, specifically "as substitutes or surrogates in ritual that involved both heir designation and the apotheosis of the dead ruler. Dwarves symbolized the ascent of the young future ruler through his personal rites of passage." Further, "dwarfs were shown on stelae only at times when the royal dynastic succession was unstable" (Coggins

1994:28, 33-45). While Foncerrada de Molina (1976:48) and V. Miller (1985:146-147) related dwarf imagery to sacrifice and Houston (1992:527) to period-ending ritual, according to Coggins (1994:33), dwarves were intended for sacrifice at those calendric ceremonies. Coggins (1994:45) concluded, "the chronological and geographical distribution of the dwarf motif remains unexplained," which I intend, with the present work, to resolve.

A. Chase and D. Chase (1994): "Maya Veneration of the Dead at Caracol, Belize." The same year that Coggins's work appeared, an article by Arlen Chase and Diane Chase (1994) included a section on the dwarf motif in the iconography of Caracol that well summarized the situation then:

Dwarfs were held in some kind of special stature by the Classic period Maya. On this latter point, most archaeologists and art historians concur, but little actual agreement has been reached as to the precise function that dwarfs held in Classic period society [A. Chase and D. Chase 1994:58].

A. Chase and D. Chase went on to speculate "that dwarves were viewed as individuals who could inhabit both the realm of the living and the dead" and functioned as middlemen between the two (1994:58; see also Cohodas 1991:269; Prager 2001:278; Tate 1995:60-61). While previous researchers had noted the association of dwarves with scepters and water birds, A. Chase and D. Chase analyzed these motifs in terms of

contrastive sets (1994:59). Perhaps their most original observation was that dwarves, "as a sort of sacred caste of morticians," would have been uniquely able to enter vaulted tombs and achieve the elaborate layout of grave goods within the confines of elite burials (A. Chase and D. Chase 1994:58, 59).

Grube and Hammond (1998): "Rediscovery of La Milpa Stela 4." Of their brief report on the location of a stela that had been lost for 50 years, Nikolai Grube and Norman Hammond devoted nearly half to a discussion of the dwarf motif, found on both sides of that stela. As the dwarves on the stela appear in a 'dancing' pose, wear ball-game equipment, and are accompanied by large birds, Grube and Hammond reviewed the literature on these images and noted their "still unknown meaning." They concluded, "the discovery of further examples of this motif will eventually shed more light onto this specific scene" (Grube and Hammond 1998:131).

Inomata (2001): "King's People: Classic Maya Courtiers in a Comparative Perspective." In an article from a volume attempting to 'people' the courts of the ancient Maya, Takeshi Inomata examined the relationship between the various members of the court, including women and those possibly from "nonoble classes," such as dwarves (2001:36, 38). He pointed out ways that dwarves and others "protect and enhance the power and authority of the sovereign" as well as "create and reify the

court as liminal space that transcends and detaches from the remainder of society" (Inomata 2001:36-40, 49; see also Ablon 1984:169-170). At the same time, Inomata, like Mayer (1986:223) and V. Miller (1985:152-153), wrote "There should have been emic explanations for the presence of physically deformed individuals in the court, although these are not easy to recover from available evidence" (Inomata 2001:40).

Prager (2001, 2002): "Court Dwarfs – the Companions of Rulers and Envoys of the Underworld," "Enanismo y Gibosidad: Las Personas

Afectadas y su Identidad en la Sociedad Maya del Tiempo Prehispánico."

A 2001 article by Christian Prager focused more on renderings of restricted stature on Maya painted ceramic vessels than on monuments, as well as on the relationship of dwarves to the rulers they attended. As

A. Chase and D. Chase had earlier speculated (1994:58), Prager (2001:278) proposed a dual role for dwarves in Maya elite courts: companions, entertainers, and administrators for the rulers as well as "supernatural beings ... messengers and contacts with the transcendental world of the gods."

Prager's second article (2002) dealt much more broadly with the portrayal of dwarves in pre-Columbian art. Based primarily on evidence from painted cylinder vases and other portable artifacts without provenience, Prager suggested that dwarves functioned as administrators in the collection of tribute, as servers and entertainers, as observers, and

as mediators between the natural world and the supernatural (2002:49-51, 53, 56, 61). Prager's article also presented linguistic and hieroglyphic data (2002:57-60). Like V. Miller (1985:142) and Mayer (1986:223), Prager (2002:47-48) noted the challenge of interpreting the dwarfism motif using first internal, iconographic analysis and then analogy from neighboring societies and modern Maya ideology. Like Foncerrada de Molina (1976:49, 54) and V. Miller (1985:153), he proposed two levels of interpretation: dwarves as actual, historical people and as supernatural, mythological icons (Prager 2002:53, 56-57).

As a result of these and other articles, dwarves form an entry in recent reference works such as those by M. Miller and Taube (1993:75-76, 82), Longhena (2000:60), Graña-Behrens and Grube (2001:430), Boot (2002c), Montgomery (1993, 2002:76), M. Miller and Martin (2004:292), as well as Mathews and Biró (2005). Other relatively recent references to dwarves as courtiers with supernatural qualities include those by Tate (1993:9, 16), Piña Chan (1997:10-11), M. Miller and Samayoa (1998:58-59, 64), as well as M. Miller and Martin (2004:20, 25, 40, 47). The articles reviewed above call for further study of the dwarf motif (for instance, Coggins 1994:45; Houston 1992:530; Mayer 1986:223; V. Miller 1985:153). It is time for representations of dwarves by Maya artists to take their place among the many well-studied examples from other cultures.

Methodology

As stated above, it is the goal of this study to generate a definition of the dwarf motif that provides a common base of understanding for future discussion and to begin such a discussion about what the meaning, for the Classic Maya, of the dwarf motif might include. A review of how anthropologists in general, and archaeologists in particular, have approached the derivation of meaning from the iconographic record underscores the importance of integrating data of varying types in their relevant contexts and of being sensitive to the cultural paradigms and structures that underlie those data as well as to changes through time and across space, suggesting that spatial analysis is an appropriate tool for such an analysis. A consideration of how researchers have interpreted the dwarf motif thus far reveals some of the challenges of illuminating the meaning of such a multifaceted motif.

Defining the Dwarf Motif

One such challenge is that the dwarf motif is defined in two ways: biologically and culturally. In order to define the dwarf motif physically, it is helpful to recognize the characteristics of the more common stature-limiting disorders. Although the biological definition of dwarfism would seem, at first glance, to be straightforward, a review of attempts to classify short-statured conditions medically reveals that this is not so.

Chapter 2 thus presents the process of diagnosing decreased stature, a review of classifications, and a discussion of the most common form of dwarfism, including the application of the single, well-documented risk factor to the social practices of the Classic Maya elite. On looking into the paleopathology of dwarfism, I discovered that a compilation of the skeletal evidence did not exist. On attempting such a compilation, I discovered why: the physical nature of stature-reducing conditions is that they grade seamlessly into each other, making it impossible to draw a hard line around a certain type, in other words, to decide where to stop! Nevertheless, convinced that such a compilation might serve other researchers, I have collected cases of short-limbed and other types of dwarfism (Appendix B). Chapter 2 presents the scant skeletal evidence from Central America and summarizes what has been recovered from the rest of the world.

At the interface of the biological and the cultural, the dwarf motif presents a challenge of understanding because we are dealing with an artistic representation, which adds a layer of variability between dwarves' true physiology and their appearance on a monument (see, for example, Greene Robertson's discussion of the carved personages on the East Court of the Palenque Palace [1985:III:61-65, Figures 289-297]). Weeks (1971:149-150, 188), Dasen (1988:254, 1993:40, 44-45), and Sampsell (2001:62-63) discuss this challenge in their studies of Egyptian art

featuring the human figure. As Dasen (1988:254) puts it, "no picture is innocent." Illustration of the human form by ancient Egyptian and Greek artists followed conventions of proportion; common pathologies, such as achondroplasia, came to be just as standardized as average bodies, including an exaggerated shortness of stature (Dasen 1988:260, 267-268, 272, 1993:1-2, 34-35, 165-166, 173; Sampsell 2001:63). These researchers of Classical depictions (Dasen 1988:265, 1993:36-37, 42-43; Sampsell 2001:62), as well as those studying pre-Columbian dwarfism (Caso 1942:44; Clancy 1999:29, 37; Corson 1973:61; Covarrubias 1942:46-47; Foncerrada de Molina 1976:45-47), point out the difficulty of distinguishing an artistic portrayal of a short-statured adult from that of a child without these conventions of representation. Tate (1992:51) comments on the same process of regularization and idealization of human forms in the art of Yaxchilan, and M. Miller and Martin (2004:25) of elite faces.

As discussed above, cultural processes, such as this conventionalization of the human figure, are uncovered by controlling the variables of time and space. Because of the necessity of archaeological context to spatial analysis, I have limited my data to renderings on monuments with known provenience. As noted above, the dwarf motif occurs in many media, but artifacts that lack provenience cannot contribute to detection of a spatiotemporal pattern. Chapter 3

includes examples of not only the clearly pathological, but some described by others as 'dwarves,' however undefined that term's usage (such as La Milpa Stela 12), as well as some that seem to have gone unrecognized till now (such as Tikal Structure 5C-4 Lintel 3). Indeed, analysis suggests that not all of these are truly cases of biological dwarfism.

Chapter 4 presents the analysis of these data at the level of the motif. According to Baudez (1994:281), "The first step of the analysis [is] to find out what the images represent. It is paramount correctly to identify and recognize the elements that compose the images and the way they are combined" (see also Hellmuth 1971:1-11; Kubler 1969:2-4; Kurbjuhn 1986). In the case of the dwarf motif, these are variables such as position, apparel, and accessories. Not all design elements may have had equal weight in terms of carrying meaning. Proskouriakoff (1950:18-19) observes that on Maya monuments, "smaller subsidiary figures ... are more freely designed and show greater variability" than primary figures. Viel finds that for certain individuals depicted at Copan, "posture and ornaments are thought to contain symbolic significance. However, the interpretation of posture involves a high degree of subjectivity, whereas ornaments perhaps allow more objectivity" (Viel 1999:381). Tate (1992:xii) points out "some items were copied from the repertoire of regalia at one city by another, but the exact use of the item tends to

differ." As addressed in Chapter 4, some attributes, both cultural and physical, emerge as more consistent, and evidently more meaningful, in their representation than others.

As observed above, one utility of spatial analysis is exploring data at varying levels. Chapter 5 examines the spatiotemporal distribution of the dwarf motif at sites with a sufficient quantity of cases. The number of dwarf-motif monuments at Caracol, Calakmul, Xultun, and Tikal allows the tracing of the dwarf motif through their historical narratives and across their cultural landscapes. Data from these sites, with between four and nine instances of the dwarf motif, address questions such as: do the monuments depicting dwarves tend to stand alone, or are they part of monument groups? Do they cluster in time, or do they distribute evenly throughout a site's monumental record? Can they be linked to ritual behavior? Coggins's (1994:41) observation that stelae illustrating dwarves tend toward the south and southeast can now be tested at sites. such as Caracol, Calakmul, and Xultun, with a significant percentage of dwarf-motif stelae among their monuments. Drawing on the work of Sanchez (1997, 2005) and Robin (2001), is the dwarf motif differentially distributed in terms of accessible contexts (broad, open plazas) versus restricted contexts (within palaces and temples)? Tikal is interesting in this regard when compared to sites with a similar number of dwarf-motif

monuments, such as Calakmul. Chapter 5 also asks, how does the representation of the dwarf motif differ from site to site?

Scholarship of the last 10 to 15 years (such as Boot 2002a, 2002b; Grube and Martin 2004; Martin and Grube 1994, 2000; Mathews and Willey 1991; Proskouriakoff 1993; Schele and Freidel 1990; Sharer and Traxler 2006) has produced new insights into the relationship between Lowland Maya sites, making possible the type of analysis foreseen by Tate (1992:xii): "tracing the adoption of ceremonial items from one city to another will provide dated evidence of interaction among sites." Chapter 6 places the distribution of the dwarf motif through time into an historical context that relates political interaction to iconographic display. The pattern that emerges — of local expressions of shared iconography — and the varying means by which that iconography was shared have implications for a broader understanding of the relationship between Maya art and Maya political structure.

The methodological discussion above points out the strengths of the conjunctive approach and the facility of spatial analysis to integrate various types of data. As will be discussed in Chapter 4, some proposed associations of dwarves with other iconographic and ideological elements of ancient Maya society depend on evidence from ethnography. Chapter 7 compiles epigraphic, ethnohistoric, and ethnographic data to address

the second part of this work's goal: to illuminate the meaning of the dwarf motif in Classic Maya society.

Terminology and Usage

As might be expected, various sectors of the short-statured community debate which words are appropriate. According to Adelson (2005a:216), "almost anything but *midget* has its advocates."

In the United States *dwarf* is commonly used merely as a descriptive, accurate medical term and, relieved of its mythological load, has increasingly gained acceptance. ... Many individuals dislike *little people* because it suggests fairies and children. ... The community accepts *LP* – the neologism carries no historic baggage – but the public is mostly unaware of it and does not use it. Some organizations have adopted *short statured* [Adelson 2005a:217; see also Adelson 2005a:3-4].

The Little People of America, Inc. (2006), an organization open to those under 147 cm tall, states on its website, "dwarf, little person, LP, and person of short stature are all acceptable," though there is a preference for 'person of short stature' over 'short-statured person' and some reservations about the use of 'little' (Adelson 2005a:3; see also Adelson 2003-2004:8; Snow 2003). In the interests of brevity and consistency, and because it is entrenched in the archaeological literature (reviewed above), I generally use 'dwarf' (or, less often 'short-statured') while recognizing that, in the past, the term has been poorly defined. I have also consistently used the male pronoun, though it is likely that some of the dwarves depicted by the Maya were female, as stature-diminishing

syndromes such as achondroplasia affect the sexes equally. See Chapter 4 for a discussion of the terms used to describe dwarves' attire.

Maya sites are increasingly being called by proposed readings of their original hieroglyphic names, such as Ox Te' Tuun for Calakmul, Mutul for Tikal, and Waka' for El Peru (Braswell et al. 2004:167; Freidel and Escobedo 2004:267; Martin 2000a:41; Martin and Grube 2000:30, 104; Sharer and Traxler 2006:1). Here the spelling of site names follows the Corpus of Maya Hieroglyphic Inscriptions (CMHI 6:187-188) and that of Mayan language groups, Sharer and Traxler (2006:xxxiii-xxxiv). Mechanics of style follow Latin American Antiquity. Dates were converted from Maya Long Count to Gregorian with Van Laningham's Mayan (sic) Calendar Tools program, which uses the 584285 conversion factor (Van Laningham 1996-2007). References to the nineteenth and twentieth centuries, as well as those in Chapter 7, are understood to be A.D. Other peculiarities of usage are noted in the introduction to Chapter 3. Illustrations have been digitally altered from the originals, usually by omitting the portions of stelae above and below the primary figures and some detail from maps.

CHAPTER 2

THE BIOLOGY OF SHORT-LIMBED DWARFISM

In Maya studies, researchers describing a scene on a monument occasionally identify one of the human forms as a 'dwarf.' With the exceptions noted in the literature review of Chapter 1, this term usually goes undefined. Medical specialists diagnose short stature by a process that can also be applied to two-dimensional, artistic portrayals of short stature as well. Identifying the various types of stature-decreasing disorders beyond this basic level, however, is anything but simple, as the review below of the history of classificatory schemes will show. The characteristics of the most common form of dwarfism are described; against these, the data compiled in Chapter 3 will be tested to address the first goal of this work: to generate a definition of the dwarf motif.

Diagnosis of Short-Statured Conditions

The most commonly accepted, arbitrary height, below which adult stature is considered pathologically short, is 152.5 cm for males and 147 cm for females (Adelson 2005a:287; Bailey 1973:9). Since the late nineteenth century, physicians have begun the diagnostic process by

separating proportionate reduced stature from disproportionate, by comparing measurements of standing (or statural) height, sitting height, and upper limb span, as well as, more recently, by radiography to detect skeletal dysplasias. Proportionate short stature is then divided into types such as constitutional or familial (the most prevalent), endocrine disorders, nonskeletal genetic disorders, and chronic conditions such as intrauterine growth retardation, systemic diseases, and malnutrition. Disproportionate stature is divided into the short-trunk versus short-limb types and the latter subdivided by the segment of the limb affected (proximal, medial, or distal; Adelson 2005a:17-20; Bailey 1973:9; Nehme et al. 1976:9, 13, 16-17; Rimoin 1975:3-4; Rimoin and Horton 1978a:523-525, 1978b:702). This is the procedure applied to the two-dimensional representations of diminished stature by the Maya listed in Chapter 3.

Review of Short-Stature Classifications

As one goal of the present study is an appropriate classification for human forms identified as 'dwarves,' it is instructive to review past attempts to classify human short stature. Two points emerge: that from the start, the biological description of dwarfism was related to its depiction by past societies and that biomedical attempts to sort out

various types of dwarfism ran into trouble almost at once, a cautionary tale for iconographers.

Specialists in pathologically short stature trace the history of their practice back to one Joseph Marie Jules Parrot, who earned an M.D. in Paris in 1857. A widely published pediatrician, Parrot was also a founding member and one-time president of the Society of Anthropology of Paris. In an 1878 presentation to the Society, Parrot discussed the case of a seven-year-old female patient at his children's hospital; conditions like hers, prior to that time, had sometimes been diagnosed as congenital rickets. Parrot demonstrated that the unique shape of her bones was caused by failure of cartilage to properly ossify and named this phenomenon achondroplasie (from the Greek, a- 'without,' chondro-'cartilage,' and *-plasia* 'formation'). He further compared her physical features with those of an Eighteenth-Dynasty figurine of the god Phtah in the Musée du Louvre, concluding that they also represented an achondroplast. His presentation was followed by discussion, among the members of the Paris Society of Anthropology, regarding ancient Egyptian depictions of physical conditions (Enerson 1994-2001; Parrot 1878).

It is interesting that the source to which most medical discussions of achondroplasia refer is an anthropological one. Although Parrot was not the first to distinguish disproportionate short stature from rickets, his contribution was a term that separated disproportionate dwarfism

from the proportionate forms by identifying its cause (Bailey 1973:59; McKusick 1972:741; Murdoch et al. 1970:227; Nehme et al. 1976:8). According to Bailey, however, "this subdivision of short stature into the disproportionate and proportionate types was the beginning of chaos in the terminology" (1973:3). The term 'chondrodystrophy' began to be used interchangeably with 'achondroplasia,' for example by Mørch's comprehensive study, in 1941, of disproportionate dwarfism (Bailey 1973:5; Mørch 1941). It is the disproportionate form of restricted stature that will concern us here, as it would be impossible to distinguish a representation of a proportionate dwarf from that of a child or of a human figure shown at reduced scale, as pointed out by Dasen (1988:265, 1993:36-37, 42-43) and Sampsell (2001:62) for Classical art as well as by Caso (1942:44), Covarrubias (1942:46-47), and Foncerrada de Molina (1976:45-47) for pre-Columbian art.

After Parrot (1878) divided disproportionate from proportionate dwarfism, the next step was the separation of the short-limb types from the short-trunk types of disproportionately limited stature. Parrot's term, achondroplasia, began to be reserved for the short-limbed forms, and as more and more of them were sorted out, it "gradually became less general in its meaning so that finally it applied to one specific condition" (Bailey 1973:59). V. Miller's article on the dwarf motif in Classic Maya art (1985:141) seems to have reflected this process in describing "the most

common type of dwarfism, usually called achondroplasia but more correctly described as short-limb dwarfism." Houston also referred to "a short limbed or achondroplastic dwarf" (1992:526; see also M. Miller and Taube 1993:82). V. Miller and Houston apparently used Parrot's term in its earlier, more general sense, meaning any of a number of disproportionate, short-limbed, decreased-stature conditions. Given the restricted meaning of the term currently, however, it is now inaccurate to identify every dwarf pictured by Maya art as an instance of achondroplasia.

In the 25 years between 1946 and 1971, 18 separate medical classifications of human short stature were proposed (Bailey 1973:6). Some were based on clinical observation, some on anatomical features visible radiographically, some on the specific site of cartilage underdevelopment or limb segment affected, and some on historical usage (Bailey 1973:7; Horton 1978:58; McKusick 1972:740-742; Rimoin 1975:1-2; Rubin 1964; Sillence et al. 1979:814-815). Conditions lumped together under some classification systems were split apart under others (for example, Langer et al. 1968:474, 482; McKusick 1972:740; Murdoch et al. 1970:227). The situation was so confused that a conference was convened in Paris in 1969 to standardize the terminology of disproportionate short stature, only to require revision in 1977. The result came to be known as the International Nomenclature of

Constitutional Diseases of Bone, which continues to be updated every two years (Adelson 2005a:25-26; McKusick 1972:750; Rimoin 1975:2, 1979; Sillence et al. 1979:814-815).

The relevance of this situation to prehistory and to the present work has three aspects. First, classification of prehistoric pathologies (as in Appendix B) depends largely on which system was being used when the skeletal material was analyzed. It is not at all unusual for a single syndrome to be known by two or three separate terms, depending on which classification scheme is used. Second, the prevalence of reduced stature in any given population depends on how individual cases are classified for counting (Adelson 2005a:21-22, 26; Bailey 1973:81-82; Bergsma 1973:34; Camera and Mastroiacovo 1982:448; Murdoch et al. 1970:227; Rimoin 1975:1, 11; Wynne-Davies and Fairbank 1976:20). As classificatory schemes have changed, so have the estimates for how many persons with, say, achondroplasia could have been expected in a prehistoric population, as will be discussed more fully below. Third, because the present study deals with two-dimensional displays of short stature, it depends on observation alone and so will differ from the biomedical classificatory schemes now in use.

Progress in genetic research soon generated an entirely new way to classify stature-diminishing syndromes. In 1994, researchers mapped the gene for achondroplasia to a specific locus on a chromosome and then to

a specific gene (Bonaventure et al. 1996:148; Gilbert-Barness 1997:1427-1428; McKusick 1994:13). The precise nature of the mutation, a substitution of one amino acid for another, was discovered soon after (Gilbert 1997:357). Between 95% and 98% of those diagnosed with achondroplasia, as currently defined, have this mutation (Bonaventure et al. 1996:148; Gilbert 1997:357; Nemours 2003-2006). By far the most common stature-restricting disorder, achondroplasia is thought to account for between a fifth and a half of the incidences of disproportionate shortness, or more than the next two most common conditions combined (Adelson 2005a:287; Camera and Mastroiacovo 1982:443; Little People of America, Inc. 2006; Maroteaux 1988:27).

Achondroplasia

If any biomedical term is used in discussions of short stature in Maya iconography, it is 'short-limbed dwarfism' or 'achondroplasia,' though, as its definition has narrowed through time, the sense in which it is being used is not always clear. As achondroplasia, even in its current, restricted sense, accounts for the great majority of cases medically diagnosed today, as well as those recovered archaeologically (see the Summary of Appendix B), it is reasonable to consider that condition in some detail, particularly given the applicability of the single, well-

documented risk factor to the known practice of polygyny by the Classic Maya elite. As the diagnostic procedure described above is followed for the monuments described in Chapter 3, however, we will discover that not every portrayal of short stature by the Classic Maya matches the characteristics of achondroplasia.

Etiology, Risk Factors, and Frequency

It has long been known that achondroplasia is an autosomal dominant trait: either parent can pass the gene on, and only one gene is necessary for the trait to be expressed. Mature individuals with achondroplasia are heterozygous; homozygous offspring usually die in infancy. Furthermore, the anatomical effects of achondroplasia make fertility low and the risk of childbearing high. These factors combine to reduce the number of inherited cases of achondroplasia to between 15% and 25%; in these, specific familial features tend to be passed on.

Notwithstanding the suggestion by V. Miller (1985:149, 153), there is no evidence that consanguinity raises the rate of achondroplasia (see also A. Chase and D. Chase 1994:58; Inomata 2001:38). The other 75% to 85% of achondroplasia cases are caused by spontaneous mutations, born to parents without the achondroplastic gene (Bailey 1973:81-82; Marshall 1977:140; McKusick 1994:12; Nemours 2003-2006; Opitz 1988:17-18; Rimoin 1975:11-12; Sillence et al. 1979:829; Wiedemann et al. 1992:234).

The current rate of achondroplasia is thus a balance between natural selection and random mutation.

Like Joseph Parrot, who originated the term for achondroplasia in a French anthropological journal, W. Weinberg, of Hardy-Weinberg Law fame, first remarked upon the only documented risk factor for achondroplasia in a German journal in 1912 (McKusick 1994:13; Opitz 1988:17; Penrose 1957:167). Bleyer (1939) correlated a rising frequency in achondroplastic births with rising maternal age but was unable to show the cause. Penrose (1957), confirmed by Murdoch et al. (1970) and Stoll et al. (1982), was able to demonstrate a statistically significant link between advanced paternal age and achondroplastic births (Bailey 1973:82; Bergsma 1973:34; McKusick 1972:756-757, 1994:12; Nehme et al. 1976:13; Opitz 1988:17-18; Rimoin 1975:11; Sillence et al. 1979:829; Wiedemann et al. 1992:234). Some have suggested that the spontaneous mutation occurs in the sperm, perhaps because of a cumulative exposure to radiation or chemical mutagens (Nemours 2003-2006; Stoll et al. 1982:424-425; Wynne-Davies and Fairbank 1976:20).

During prehistory, the forces of natural selection driving the incidence of achondroplasia down would have been greater, together with fewer social opportunities for persons so affected to find mates as well as lower chances of successful childbirth. It is also possible that the number of spontaneous mutations would be lower in nonindustrial

societies, particularly if an accumulation of radioactive or chemical mutagens in sperm is the cause. For these reasons, "the frequency of living achondroplastics in prehistoric times would obviously be much lower" (Hoffman 1976:83; see also Ortner and Putschar 1985:330; Sampsell 2001:71, 73 Note 43). On the other hand, the Classic Maya practiced polygyny, especially among the elite, to secure political alliances (Houston 1989:55; Martin and Grube 2000:131; Schele and Freidel 1990:59, 181, 183, 320; Sharer and Traxler 2006:387, 407, 425-426, 440, 676). One effect of an older man fathering children might be to increase the rate of the mutation that produces achondroplasia, perhaps balancing the factors decreasing the rate. Another effect would be that the rate of achondroplasia among the Maya elite would be higher than that among commoners.

As discussed above, the proliferation of competing classification systems led to a lack of agreement on the prevalence of stature-limiting conditions. Between 35 and 25 years ago, the tightened definition of achondroplasia resulted in a downward revision of its occurrence to between 1.5 and 3.7 per 100,000 births (Bergsma 1973:34; Camera and Mastroiacovo 1982:448; Nehme et al. 1976:8; Stoll et al. 1982:419; Wynne-Davies and Fairbank 1976:20). Between 25 and 15 years ago, estimates ranged from 2 to 5 achondroplastics per 100,000 births (Francomano et al. 1988:53; Opitz 1988:17; Wiedemann et al. 1992:234). Little People of

America, Inc. (2006) uses the range of 2.5 to 3.85 persons with achondroplasia per 100,000 people, while the Nemours Foundation (2003-2006) uses the range of 3.85 to 6.7 persons with achondroplasia per 100,000 people (see also Adelson 2005a:287). Taking even the lowest estimate of the frequency of achondroplasia would lead us to expect at least one case per 50,000 people. The Classic polity capitals of Calakmul, Caracol, and Tikal are each estimated to have had Late Classic populations of that size, twice that amount when their outlying populations are included (Braswell et al. 2004:166, 170-171; A. Chase and D. Chase 1996:67, 68; Folan et al. 1995:310, 313, 330; Harrison 1999:9. 180; Haviland 2003:129; Sharer and Traxler 2006:356, 364, 688). Therefore, at least one, probably two persons with achondroplasia in each of the larger polity capitals at any one time would have been quite usual. This contrasts with the reconstructed population size of 4,000 to 10,000 people occupying the settlement of Sayil, perhaps 15,000 to 17,000 including the hinterland, from which only one case of achondroplasia, at most, would be expected (Carmean 1990:16; Nemours 2003-2006; Sharer and Traxler 2006:545, 688; Tourtellot and Sabloff 1994:77). Perhaps the unconventional appearance of the secondary figures on the columns of Structure 4B1 there is due to the lack of an actual person with achondroplasia for a model (see Nonachondroplastic Forms of Dwarfism

under Summary [of Physical Attributes] in Chapter 4 for an alternative suggestion).

Anthropometrical surveys of the Maya, largely done during the 1930s by medical doctors and physical anthropologists, make no mention of pathologically short stature (Comas 1960; Faulhaber 1970; Gann 1928; Shattuck 1933; Starr 1902; Steggerda 1932) with an exception:

The population of Huehuetenango presented a considerable number of readily recognized developmental anomalies. ... Scoliosis with or without kyphosis together with developmental disturbances such as achondroplasia and dwarfism were seen infrequently. The incidence, however, did not appear to be any greater than in the United States [Goff 1953:293].

Pathogenesis

In order to decide whether a human figure depicted by a Classic Maya artist can be classified as an achondroplastic dwarf, it is necessary to understand what characteristics are significant. The cause and mechanism of achondroplasia are now reasonably well understood. Basically, bone is usually formed *in utero* by two processes: endochondral, which involves cartilage cells, and intramembranous, which involves bone cells. The achondroplastic mutation increases the effects of a protein that slows endochondral ossification at the growth plate, while intramembranous bone forms unimpeded. Achondroplastic bones thus owe their shape to endochondral underdevelopment, those with the fewest growth plates being the most affected. Long bones, for

example, have only two growth plates and in general depend on endochondral development for their length, but on intramembranous development for their shaft diameter. Achondroplasia affects the proximal segments of the long bones more than the medial or distal segments, resulting in very short but thick humeri and femora. Similarly, the base of the skull and the nose grow endochondrally, so people with achondroplasia have flat mid-faces and depressed nasal bridges; the skull vault, which forms intramembranously, grows disproportionately high and round. The spine, with relatively short bones and many growth plates, grows to average height, while rib length is reduced. (A small sample of the many texts discussing this process includes Bailey 1973:81; Bergsma 1973:34; Gilbert 1997:357; Horton 1978:58-60; McKusick 1972:753-756; Nemours 2003-2006; Ortner and Putschar 1985:8, 329; Sillence et al. 1979:829.)

Diagnosis

In spite of a century of the term's use, it has only been within the last 35 years "that the true classical type of achondroplasia has been delineated" (Wynne-Davies and Fairbank 1976:20). The remarkably consistent phenotype is recognizable even in a neonate (Figures 1, 2b; Bailey 1973:83; McKusick 1972:750; Rimoin 1975:5). As mentioned above, the head appears relatively large for the body; the skull is high and round, with a bulging forehead. The middle of the face is flat, with a

depressed nasal bridge, short, upturned nose, small features, and prominent chin. The shoulders are broad and the chest is flat, with a torso of average length, or nearly so. Both the upper and lower parts of the arms and legs are short, the upper more so than the lower. Elbows have incomplete extension, the fingertips reaching only as far as the hips. Hands are short and broad with stubby, splayed fingers, especially in childhood. The posture of a person with achondroplasia is the result of an outward curve of the upper spine (thoracic kyphosis) and an inward curve of the lower spine (lumbar lordosis), tilting the sacrum forward at the top as well as causing the abdomen and buttocks to protrude. Sometimes there is a lateral curvature to the spine (scoliosis) as well as a longer fibula, relative to the tibia, which curves the knees and lower legs outward. Adult stature is 131 cm to 132 cm for males and 123 cm to 124 cm for females (Bailey 1973:15-18, 63, 87; Bergsma 1973:34; Langer et al. 1993:778; Marshall 1977:139-140; McKusick 1972:753, 756-757, 1994:12; Murdoch et al. 1970:227-229; Nehme et al. 1976:9-10; Nemours 2003-2006; Rimoin 1975:5, 9; Rubin 1964:181; Spranger et al. 1974:55; Wiedemann et al. 1992:234; Wynne-Davies and Fairbank 1976:20-21, among many others).

Other disproportionate forms of dwarfism, related to achondroplasia, might have affected some of the short-statured persons shown on Maya monuments (Figure 2b, c). Hypochondroplasia, for

example, appears as though it were a milder form of achondroplasia, with a less distinctive shape of head and hands and a more variable stature: 115 cm to 152 cm. Pseudoachondroplasia is a rhizomelic form of disproportionate dwarfism, affecting the hips and shoulders but not the skull. Stature can be more dramatically restricted than in cases of achondroplasia and more variable than hypochondroplasia: 90 cm to 140 cm. A nonachondroplastic form of disproportionate dwarfism is spondyloepiphyseal dysplasia (SED), which produces a short neck, barrelshaped chest, and short torso without greatly affecting the skull, hands, or feet. Spinal curvature is common, but the extent to which SED affects the limbs is variable (Figure 2d; Skämsta Graves 33124 and 41850, Sweden in Appendix B; Adelson 2005a:288, 291; Aufderheide and Rodríguez-Martín 1998:361; Bailey 1973:83, 117-123, 438-439, 455-456; Langer et al. 1993:780; Nemours 2003-2006; Rimoin 1975:13-15, 53; Sillence et al. 1979:835, 838-839; Wiedemann et al. 1992:260, 268; Wynne-Davies and Fairbank 1976:24).

The Paleopathology of Short Stature

With the exception of the paleopathology of short stature from Central America, only a brief summary of the data and minimal references are presented here. For the full description of the skeletal

evidence for reduced stature in prehistory, with explanations of the conditions, reconstructions of height, and full citations, see Appendix B.

The Classical World

For all that is known about the role of dwarves in ancient Egyptian society (for example, Dasen 1993; Dawson 1927, 1938; Filer 1996:53-61; Johnston 1963; Kozma 2006; Sampsell 2001), what skeletal evidence once existed is now almost completely unverifiable, untraceable, or unavailable, a casualty of the imprecise field methods at the turn of the twentieth century and the paucity of published paleopathological studies. The earliest human remains of pathologically short stature date from the Neolithic or Predynastic period (approximately 5,000 B.C. to 4,500 B.C.) and the latest from the Twenty-first Dynasty (approximately 1,070 B.C. to 945 B.C.). Both proportionate and disproportionate forms of dwarfism are represented, as well as development-delaying conditions such as mucopolysaccharidosis, osteogenesis imperfecta, and cleidocranial dysplasia.

Egypt's earliest cases of pathologically short stature survive only on paper. A male skull and upper postcrania of unusual form, from a cemetery dated to Neolithic or Predynastic Egypt (approximately 5,000 B.C. to 4,500 B.C.), were tentatively diagnosed as a case of pseudoachondroplasia or multiple epiphyseal dysplasia (Figure 2c; Dasen 1993:17; Hughes Jones 1932). A second early case of possible dwarfism

dates to the Protodynastic period (before 3,000 B.C.; Quibell and Green 1902:26).

The site of Abydos is unique for producing three separate pairs of First-Dynasty burials possibly of dwarves. From the First Dynasty (3,000 B.C. to 2,650 B.C.), however, only three sets of remains characteristic of achondroplasia have survived, two of which are incomplete (Figure 3). An isolated, unprovenienced pair of humeri from this period shows evidence of mucopolysaccharidosis (Emery 1954:36, Plate XXV, 1961:Plate 23; Ortner and Putschar 1985:331-332, 335-337, Figures 518-521, 526-527; Petrie 1900:13).

In the early 1990s, a skeleton that had been excavated in 1911 or 1912 from the Giza Necropolis turned up in the Lowie Museum of Anthropology at the University of California, Berkeley. Dated to the Fifth or Sixth Dynasty (about 2,465 B.C. to 2,150 B.C.), it is likely a case of hypochondroplasia or pseudoachondroplasia (Figure 2c; Watrous and Richards 1992). At about the same time, a mastaba containing a basalt stature of a dwarf and the disarticulated remains of an individual with achondroplasia were discovered in a Giza cemetery. The mastaba dates to between the Fourth and Sixth Dynasties of the Old Kingdom (circa 2,575 B.C. to 2,150 B.C.) and is inscribed with a name reconstructed to be Perenankh, Perniankh, Pereniankh, or Perniankhu (Hussien et al. 1990).

The use of coffins contributed to the better preservation of skeletal evidence from the Middle and New Kingdoms. A coffin, perhaps overlooked by looters because of its size, contained the well-proportioned body of a woman named Senb, 140 to 145 cm tall. Dated to between 2,040 B.C. and 1,640 B.C., her tomb included jewelry, toiletries, and cosmetics (Garstang 2002 [1907]:41, 113-114, 226). The bones of an infant with osteogenesis imperfecta were protected by a coffin just 73 cm long from the Twenty-first Dynasty (1,070 B.C. to 945 B.C.; Dawson and Gray 1968:14).

Finally, only a single example of reduced stature is known from the archaeological record of the Mediterranean: a female skeleton with cleidocranial dysplasia dated to the sixteenth century B.C. (Bartsocas 1982:11).

Viewed from the perspective of the archaeological evidence for the lives of pathologically short individuals, Egyptian culture was remarkably homogeneous throughout the dynasties and along the length of the Nile, from a Neolithic cemetery in Upper Egypt to a Twenty-first Dynasty coffin just below the border between Upper and Lower Egypt, as well as from Giza, on the Nile Delta, to near the Nubian border. While Classical paleopathological studies lag far behind epigraphic and iconographic studies, they reinforce the interpretation of dwarves participating fully in

ancient Egyptian society, both in this world and in their expectations of the afterlife to come.

The Old World

Unlike the relatively consistent evidence from Egypt, European cases of pathologically short stature are widely distributed in both time and space, from the Italian Paleolithic to historic periods, from Sweden in the north to the southern tip of Italy, as well as from Serbia in Eastern Europe to western England. Skeletal remains are more thoroughly studied than those from the Classical world as well as better preserved and provenienced than those from the New World.

Western Europe is the source of the oldest case, by far, of diminished stature: a skeleton apparently affected by a disproportionate dwarfism called acromesomelic dysplasia, recovered from a Paleolithic rockshelter in southwestern Italy (11,150 yBP ± 150 years; Frayer et al. 1987, 1988). Achondroplastic bones were found in a Neolithic cairn in France (3,950 B.C. to 3,190 B.C.; Bortuzzo 1992, 1995) as well as in medieval burial sites in Netherlands (Uytterschaut 1990), Belgium (Susanne 1970), and northeastern Italy (Baggieri 2000a, 2000b). From an A.D. sixth-century site in Switzerland came a skeleton with a disproportionate dwarfism called dyschondrosteosis (Aufderheide and Rodríguez-Martín 1998:362; see also Sillence et al. 1979:835). Evidence of well-developed musculature, and inclusion of all these remains in

community burial grounds, indicate some level of acceptance of, and support for, disabled individuals by their social groups.

Skeletal evidence for stature-limiting conditions is known from at least four sites from across England, dating from possibly as early as the Neolithic to the Middle Ages. Three of the instances are of young adult women: a case of mesomelic dwarfism from Dorchester's late Iron Age/Romano-British period (Rogers 1986), a proportionate or pituitary dwarf from a Roman cemetery in Gloucester (Roberts 1987), and bones with acromesomelic dysplasia from Jarrow Monastery, consecrated in A.D. 685 (C. Wells 1979). A male skeleton from a medieval site in Norwich may be a rare form of disproportionate dwarfism called metaphyseal chondrodysplasia (Stirland 1994). Thus, the finds from England vary substantially temporally, spatially, and physically.

Three different types of dwarfism have been discovered from burials in Eastern Europe, two from Poland and one from Serbia. A skeleton with proportionate or pituitary dwarfism was excavated from an A.D. second- to third-century site on the Baltic Sea, and some fragmentary remains morphologically consistent with achondroplasia were salvaged from a castle in southwestern Poland, dating to the A.D. eleventh and twelfth centuries (Gladykowska-Rzeczycka 1980). An A.D. fifteenth-century site in Serbia yielded a well-preserved skeleton probably with chondrodystrophia hyperplastica (Farkas and Lengyel 1971). All three

Eastern European dwarves attained adulthood though under 140 cm tall, including one man who lived nearly 70 years.

A funereal tradition in southern Sweden between the A.D. sixth and twelfth centuries has produced four cases of disproportionate dwarfism. Of a group of six burials at a site on Sweden's eastern coast, dating to between A.D. 550 and A.D. 1050, four revealed evidence of disability. Two were those of a mature male and female, just 1 m apart. both typical of spondyloepiphyseal dysplasia and likely related (Figure 2d; Arcini and Frölund 1996; see Nonachondroplastic Forms of Dwarfism under Summary [of Physical Attributes] in Chapter 4). A male skeleton, possibly characteristic of achondroplasia, was excavated from a graveyard on the island of Gotland in use during the A.D. ninth and tenth centuries (Larje 1985). Poorly preserved bone fragments from an early medieval churchyard in southwestern Sweden are consistent with dysostosis cleidocranialis, a congenital developmental disorder (Persson and Persson 1984). All four examples from Sweden show physically active people, having reached maturity, interred with grave goods in community cemeteries.

From the Upper Paleolithic on Italy's southwestern coast to the A.D. fifteenth century on Serbia's Hungarian border, the skeletal evidence for dwarves from across prehistoric Europe tells an interesting story. The well-developed musculature that most of the cases exhibit indicates that

these individuals, with both proportionate and disproportionate dwarfism of varied kinds, were physically active, while the ages at death – from the Paleolithic adolescent to a Swiss female and Serbian male who lived into their 60s – suggest support for them by their families or societies. Though two burials in Sweden might be from a separate interment area for the physically challenged, most other European burials indicate the acceptance of these people as part of their communities.

The New World: North and South America

The skeletal evidence for stature-reducing conditions from the pre-Columbian New World ranges in date from perhaps 3,000 years ago to the period of European contact. Over three-quarters of the cases of pathologically short stature are from North America. Although North America has been known to be the source of dwarfed remains at least as long as the sites of Egypt and Europe, as well as the source of the only conclusively identified cases of prehistoric dwarfism in the New World found thus far, in a third of the instances that material has been lost. The skeletal evidence from South America is even more impoverished in both preservation and provenience.

Two of the best-documented cases of achondroplasia are from the Middle Mississippi Phase (A.D. 1000 to A.D. 1500) of Moundville, Alabama. Snow (1943) analyzed the bones of an adult male and female, buried near a mound, both face down without grave goods. Other

reduced-stature skeletal material from Eastern North America includes an isolated skull from a Late Woodland ossuary in southwestern Maryland, probably an example of achondroplasia (Ortner and Putschar 1985:334); a "skeleton of peculiar form" from an Adena site in Ohio (Fowke 1902); and two sets of remains from Florida, one the fragmentary bones of a proportionate dwarf from a shell mound (Wyman 1875). The latter three are now lost.

Hoffman (1975, 1976) reported another well-documented instance of achondroplasia rediscovered in the Lowie Museum of Anthropology at the University of California, Berkeley. Excavated from a Late Horizon Phase II (A.D. 1500 to A.D. 1800) site in Sacramento County, California in 1938, the nearly complete skeleton belonged to a female adult with achondroplasia. Two smaller-than-average skeletons came from Carter Ranch, dated to Pueblo III (A.D. 1100 to A.D. 1225; Danforth et al. 1994), and from New Mexico, dated to the time of European contact (Ortner and Putschar 1985:302-304).

Skeletal evidence for dwarfism in pre-Columbian South America is equivocal, both physically and temporally, being limited to only three disassociated finds from coastal Peru: an isolated subadult cranium of unusually small size (Hrdlicka 1943; Ortner and Putschar 1985:304) and two unrelated humeri, typical of achondroplasia, in the Hrdlicka

Paleopathology Collection at the San Diego Museum of Man (Tyson and Alcauskas 1980:180-183).

The New World: Central America

More then one author has commented on the relatively small amount of skeletal material recovered from an area of the world so archaeologically rich (for example, D. Chase 1997:17-18; Danforth 1994:207, 1999:107; Sánchez Saldaña and Salas Cuesta 1975:41; Wright 2004:211). A single individual within a tomb at Tikal, Guatemala is the only proposed case from Central America; the evidence for diminished stature is inconclusive. A "very small" adult was also found at the site of Cuello, Belize. A. Chase and D. Chase (1994:59) speculated that fused vertebrae from a tomb at Caracol might have been those of a hunchback. Although Pendergast (1983-1984, 1984-1985) excavated a rich tomb at Lamanai, Belize, containing a ceramic incensario in the form of a seated hunchback, there is no evidence that the bones from the tomb were pathological. Tate (1995:61, 1996:434-435) suggested that a tomb at La Venta may have been that of a dwarf, but no skeletal remains survive.

Tikal Burial 24 (Guatemala). Some of the skeletal material from Tikal, Guatemala shows potentially stature-restricting pathologies, but the poor preservation of bone in that tropical climate reduces the reliability of the evidence. Burial 24, a tomb with a capstone ceiling, was centered on bedrock beneath the axis of Structure 5D-33-1st, the central

building along the Great Plaza's northern edge. Its placement followed that of an earlier vaulted tomb, Burial 23, so closely in both time and space that the shaft for Burial 24 re-excavated some of the fill that had recently covered Burial 23 (W. Coe 1967:41, 47-48, 1990:II:540-541, 543, 1990:III:844, 1990:V:Figure 177, 1990:VI:Figure 9). Burial 24 dates to the late A.D. seventh century (Coggins 1975:382-383; Culbert 1993:Figure 41; Jones 2003:224).

On the floor of the tomb, which was T-shaped, about 5 m² in size, rested a single individual, probably on a cloth-covered litter, as well as six pottery vessels. Although the body does not seem to have been buried wearing jewelry, the incisors and canines were inlaid with tiny jade and amazonite disks; jade pendants, jade and shell beads, and a pearl were scattered over the upper part of it; and a shell bead lay under the left hand, a jade bead under the right. The body was draped with textile and surrounded by large worked shells. Grave goods also included stingray spines and 300 bits of unworked jade, together with the possible remains of a headdress, a loincloth, and perhaps a wristband (Figure 4; W. Coe 1990:II:540-543, 1990:III:921-926, 1990:V:Figure 177). Coggins first pointed out the stylistic similarities between Burial 24, Burial 23, and those at Caracol, one of the few Maya sites to portray dwarves on monuments during this period (1975:371, 374, 377-379, 385, 387, 446, followed by A. Chase and D. Chase [1987:61, 1994:59], Jones [1991:118],

and Haviland [1992:78, 1994:269] among others). While the remains of costume are entirely consistent with the iconographic record of dwarfism (see, for example, Tikal Structure 5D-1 Lintel 3, proximal in both time and space, in Chapter 5), nothing about them points specifically to a dwarf.

Due to postmortem damage and poor preservation, sex is uncertain and age can only be estimated at over 30 years. Coe calculated the stature, from the field plan by Trik, at 115 cm (W. Coe 1990:II:543). Haviland, however, relied on the result of a crown-to-heel measurement of 125 cm (1967:318). During excavation, the length of the legs was observed to be nearly twice that of the trunk and the spine to be considerably curved. Though the individual is described as "obviously most dysplastic" and "severely hunchbacked," these impressions cannot be confirmed, as the bones were not recoverable (W. Coe 1990:II:543, 1990:III:844; William A. Haviland 1967:322, personal communication November 2001). Christopher Jones (2003:220-221) has cast doubt on the identification of Burial 24 as pathologically short.

Much speculation has centered on the identities of the occupants of Burials 23 and 24, from "dead master and fatally bereaved, monstrous jester" (W. Coe 1990:II:543) to the twenty-third, twenty-fourth, or twenty-fifth rulers of Tikal (for example, W. Coe 1990:II:540, 1990:III:846; Coggins 1975:383; Freidel 1998:192-193; Harris 2001:62; Harrison 1999:126-127; William A. Haviland, personal communication June 2007;

Inomata 2001:38-39; Jones 1991:118; Jones and Satterthwaite 1982:129; V. Miller 1985:141, 150; Montgomery 2001:134-135; Prager 2002:56; Sabloff 2003; Schele and Freidel 1990:196-197, 461-462; Sharer and Traxler 2006:379). According to Coggins (1975:383), "a number of unusual objects in this tomb ... suggest a specialized role for the dead man." It is unfortunate that the data are inconclusive, as the burial of an unusually formed individual at this location on the North Acropolis would be significant.

Cuello Burial 30 (Belize). In their analysis of the skeletal population from the site of Cuello, Belize, Saul and Saul (1991:157) noted "the fragmentary, eroded remains (including both femora and an unsided radius) of an unusually small adult – either a very small female or abnormally small male (nothing to support dwarfism is apparent)." The bones were found in a mass burial dating to between 400 B.C. and 300 B.C. (Saul and Saul 1991:140, 154, 157).

The paucity of short-statured remains from Central America reflects the lack of large skeletal populations recovered from that area. According to A.D. sixteenth-century Spanish documents, upon the death of elite Mexica, the persons with physical deformities who had served them were sacrificed and their bodies burned, preventing the archaeological recovery of pathological human remains (Heyden 1994:295-296; Sánchez Saldaña and Salas Cuesta 1975:45). It is to be

hoped that the many iconographic representations of dwarves in Maya art, both monumental and portable, will soon be complemented by the finding of a dwarf's tomb.

Although the skeletal evidence for pre-Columbian dwarfism is sparse, three virtually complete and well-studied skeletons from North America, two from Alabama and one from California, indicate that these people, although short, were robust, having the musculature of productive citizens, living well into middle age, and being interred in a manner typical of their societies (Hoffman 1976:89-90; Snow 1943:26).

Summary

As noted in Chapter 1, Appendix B compiles the paleopathological evidence for stature-reducing conditions. In summary, of the nearly 50 cases of pathologically short stature known from the archaeological record, achondroplasia accounts for about 30 cases, though only a dozen or so are definitive. A few are probably hypochondroplastic or pseudoachondroplastic forms; five more examples of short-limbed dwarfism are nonachondroplastic types (Figure 2). Other disproportionately dwarfing conditions account for at least seven cases, and seven more might be proportionate or pituitary dwarves, though only two of these are definite. The picture that emerges from these data is

remarkably consistent for all three areas: the Classical world, the Old World, and the New World, from the Paleolithic to historic periods.

Throughout time and across space, dwarves, in all their variety, have functioned within their respective societies during their lives and have been treated as full members of their communities in death.

I have selected, from the canon of Maya sculpture compiled in Appendix A, a data set including not only those monuments depicting human forms that are clearly pathologically short, but some that have been identified as dwarves in the literature by others. These are described in Chapter 3; Chapter 4 presents the results of applying the diagnostic procedure for decreased stature described above. As discussed there, the depictions of dwarves on the monuments catalogued in Chapter 3 are consistent with a diagnosis of achondroplasia, with the exception of Caracol Stelae 11 and 21, the front of La Milpa Stela 4, the east column of Sayil Structure 4B1, and possibly the façade of Tikal Structure 5D-141. These might be cases of other, disproportionate, short-stature syndromes, either nonachondroplastic or related to achondroplasia, as described above; they might simply portray children, youths, or just short, proportionate people; or they might be a provincial artist's best attempt to depict a dwarf without having access to a model.

CHAPTER 3

CATALOGUE OF MONUMENTS

Introduction

I have selected, from the canon of Maya sculpture compiled in Appendix A, a data set of monuments that show not only the pathologically short-statured, but some that have been identified as 'dwarves' in the literature by others. They are here presented in alphanumerical order by site, using the names in the *Corpus of Maya Hieroglyphic Inscriptions* (*CMHI* 6:187-188). Two exceptions are: the description of the front of a monument is listed before the back, and '5D-1,' the structure number for Tikal Temple I, comes before '5C-4,' the structure number for Tikal Temple IV (in Chapter 6 and Table 1, these monuments are in chronological order).

For each scene that includes the depiction of one or more persons of disproportionate, restricted stature, a list of citations is presented, first of illustrations, then discussion. Even if it were desirable, it is clearly impossible to include every reference to every illustration of the dwarf motif, especially when it occurs with the often-reproduced, such as the two-headed snake on Tikal Temple IV's Lintel 3 or the beautiful

woman on El Peru Stela 34. Generally speaking, the list of illustrations includes: the earliest, such as the pioneering publications of Maler, Maudslay, and Morley; 'industry-standard' monographs, such as *Corpus of Maya Hieroglyphic Inscriptions* and *Tikal Reports*; and classic anthologies, such as Ruppert and Denison's (1943) *Reconnaissance* and Proskouriakoff's (1950) *Study*. The list of illustrations does not usually include those of details, such as hieroglyphs, or those unaccompanied by relevant discussion. The sole Internet resource consistently cited is Merle Greene Robertson's (1995) *Rubbings of Maya Sculpture* as of 2002, though electronic databases of Maya art are increasingly available. Following the suggestion by the compilers of *Corpus of Maya Hieroglyphic Inscriptions*, I use the abbreviation '*CMHI*,' followed directly by the complete page number, without date.

Similar limitations apply to the list of references to discussion of a particular monument. I cite passages that broke new ground for their time or reflect the most current interpretations; passing mentions, unless they are the earliest, are generally not included. Synthetic works that interpret monuments bearing the dwarf motif within the larger context of Maya art, such as Schele and Freidel's (1990) *Forest of Kings*, Proskouriakoff's (1993) *History*, and Martin and Grube's (2000) *Chronicle*, are listed. Articles of which the dwarf motif in Classic Maya art is the primary subject (see Studies of Maya Dwarf Iconography: 1970 to 2005

under The Dwarf Motif in Maya Art in Chapter 1) are also included. The references are the bibliographic citations for the descriptions; only specific ideas and direct quotations are further attributed.

Following the references, the scene bearing the dwarf motif is briefly situated in space and time; the implications of monumental provenience are reserved for Chapter 5. Description of the human forms in each scene follows. For primary figures on dwarf-motif monuments whose personal names have been deciphered, other names by which they have been known are given in parentheses here and upon the first mention in each other chapter; elsewhere, only one name in use at this time is given. Only aspects of the primary figure that relate to the secondary figure (or figures) in the scene are noted. With few exceptions, 'right' and 'left' are from the perspective of the subject, not the viewer; thus, a dwarf said to stand on the right side of a ruler is on the ruler's own right, which would be the left side of the viewer.

In describing the secondary figures (as noted in Chapter 1), although, according to the Little People of America, Inc. (2006), "dwarf, little person, LP, and person of short stature are all acceptable" (see also Adelson 2005a:3-4, 216-217; Snow 2003), I use 'dwarf' most often. I also consistently use the male pronoun, though it is possible that some dwarves were female; perhaps both male and female dwarves wore the

same outfit, or some yet-undetected attribute, such as headdress, distinguished male dwarves from female dwarves.

One of the most diagnostic attributes of disproportionate short stature is the height of the head relative to the rest of the body. For this reason, when possible I compare this ratio for the primary figure in each scene to the ratio for the secondary figure. The fractions given are approximations, based on the assumption that the eye is in the middle of the face, that is to say, that the height of a person's head is twice the distance from eye to chin. The ratios given are estimates only, for the purpose of contrasting the proportions of the figures in each scene. No measurements are given for seated persons or where the visual record is not reconstructable.

Although text here is limited to a description of each monument, some comparisons are briefly noted. Analysis and discussion are reserved for Chapter 4. As pointed out by others considering the dwarf motif (Foncerrada de Molina 1976:45; Mayer 1986:213-218; V. Miller 1985:141; Prager 2002:48), it is not limited to carved monuments, though of necessity this work has focused on that medium. A small sample of the most widely published instances of the dwarf motif in other media, including Jaina figurines and Holmul-style ceramic vessels, with references, is found in Appendix C.

Acanmul Structure 9 Column

References

Illustration. Figure 5a, from an unpublished photograph courtesy of Joseph W. Ball (see also Proskouriakoff 1950:Figure 100c). The accompanying drawing (Figure 5b) was produced by digitally enhancing the relief in the photograph and rendering it as line. Supplementing Pollock's drawing (1980:Figure 907b; reproduced by Prager 2002:Figure 9), it is merely a working hypothesis until research at Acanmul, now underway, produces a more definitive record.

Discussion. Mayer 1981:10, 13; Pollock 1980:540-541; Prager 2002:47; Proskouriakoff 1950:167, 185.

Provenience

Location. At least five carved and ten plain columns once graced Structure 9, forming the north side of a plaza. The single column on which significant relief survives is in the Campeche Museo Arqueologico, Etnografico y Historico (Joseph W. Ball, personal communication June 2007; Mayer 1981:13; Pollock 1980:541).

Date. The only date available for the Acanmul Structure 9 column is a *terminus post quem*, by Proskouriakoff, of 9.16.0.0.0 (A.D. 751) or "Classic" in style (1950:167). Interestingly, when the proportions of this secondary figure (head to total height) are compared with those of other

dwarves, the Acanmul dwarf falls in a group of monuments erected between 9.16.5.0.0 (A.D. 756) and 9.19.0.0.0 (A.D. 810), supporting Proskouriakoff's assessment.

Description

Primary Figure. Although the monument is badly eroded, a primary figure stands facing front, his head turned to his own left toward the large manikin scepter that he holds up in his left hand. His head forms about one sixth of his total stature.

Secondary Figures. Forming between a third and a half of the primary figure's height, a secondary figure stands, facing front, at the primary figure's left, his head turned to his outstretched right arm, his left arm raised behind his head.

Physical Description. His head forms just over one quarter of his height. The monument is weathered such that the right side of the dwarf's body, including his facial profile, is barely visible (Figure 5a). His upraised left hand, however, left arm, and left leg are definitely disproportionately short (unlike the figure illustrated by Pollock 1980:Figure 907b).

Attire and Accessories. The dwarf's clothing apparently includes a headband and a loincloth, or ex. He wears disk-shaped earspools with a central, tubular projection, a single strand of beads around his neck, and some adornment around his left wrist.

Calakmul Stela 16

References

Illustration. Unpublished CMHI drawing courtesy of Ian Graham, not reproduced here.

Discussion. Braswell et al. 2004:180; Folan et al. 1995:327; Marcus 1987:18-19, 58, 94, 111; Morley 1933:198, 205; Ruppert and Denison 1943:19, 100, 103.

Provenience

Location. Stela 16, bearing traces of dark red paint, was between Stelae 14 and 15 in front (north) of Structure IVb, which formed the eastern side of the Central Plaza of Calakmul.

Date. Calakmul Stela 16 celebrates the k'atun ending 9.19.0.0.0 (A.D. 810).

Description

Primary Figure. Calakmul Ruler 10, standing, facing front, holds a scepter, which Schele and Freidel (1990:384) identify as representing the deity K'awiil, in his right hand and a shield in his left; his head, turned to his right, makes up a fifth to a fourth of his height.

Secondary Figures. A dwarf stands to Ruler 10's right, beneath the scepter, in right profile.

Physical Description. Due to erosion, the head and face are barely visible, though it is possible to estimate that his head is between a fourth and a third of his height, and that he is from a third to a half as tall as Ruler 10. The dwarf has short limbs, fingertips just reaching hip level, especially relative to the torso.

Attire and Accessories. The dwarf wears a peaked headdress pointing up and forward, with a flower bud extending from the front, as well as an earspool with a central, tubular projection. He holds something soft, like a piece of fabric, in his right hand as well as something that spreads outward in his left. A mask, and perhaps the ends of a loincloth, hangs in front of his waist, and a garment with a tail hangs down in back. The dwarf's front mask and lower garment, seen in profile, are like those of the primary figure, seen frontally.

Calakmul Stela 29

References

Illustration. Figure 6, after Ruppert and Denison 1943:Plate 49d; CMHI photo and drawing courtesy of Ian Graham; Marcus 1987:Figures 20, 23, 24, 48; V. Miller 1985:Figure 23; Morley 1933:199.

Discussion. Coggins 1994:38, 41, 54; Folan et al. 1995:327; Marcus 1987:18-19, 57, 71-75, 110, 136-137; Martin 2005b:7; Martin and Grube

2000:106; Mayer 1986:213; V. Miller 1985:148, 151; Morley 1933:198-201; Proskouriakoff 1950:114, 185, 1993:38-39; Ruppert and Denison 1943:20, 100, 105-106; Sharer and Traxler 2006:360.

Provenience

Location. Stela 29 stood with its partner, Stela 28, on the north side of Structure V, which came to form the south side of the Calakmul Central Plaza.

Date. Calakmul Stela 29 commemorates the lajuntun (half-k'atun) ending 9.9.10.0.0 (A.D. 623).

Description

Primary Figure. Though it preserves neither legible name nor emblem glyph, this monument dates from the reign of Tajoom Uk'ab' K'ak' (Calakmul Ruler 2, Ta Batz'). The principal figure faces front, with his head turned to his right and his right arm extended downward in the 'scattering' gesture; his head forms just under a fifth of his height.

Secondary Figures. A dwarf stands directly under the principal figure's extended right arm, in right profile.

Physical Description. Like Calakmul Stela 16, the dwarf's head is barely visible; it appears to form about a third of his total height, which is between a third and a half of the primary figure's height. Erosion has erased almost all else.

Attire and Accessories. Except for traces of an upward-pointing, peaked headdress, no details are visible due to wear.

Calakmul Stela 89

References

Illustration. Figure 7, courtesy of Nikolai Grube; Coggins 1994:Figure 11; Foncerrada de Molina 1976:Figure 12; Mayer 1980:Plate 22, 1989:Plate 5; Ruppert and Denison 1943:Plate 53b.

Discussion. Coggins 1994:38-39, 41, 54; Foncerrada de Molina 1976:49, 51; Marcus 1987:vi, 18-19; 26, 58, 88, 111; Martin and Grube 2000:112-113; Mayer 1986:213; V. Miller 1985:148, 151; Morley 1933:198; Proskouriakoff 1950:128, 185, 1993:80-81; Ruppert and Denison 1943:14, 100, 121; Sharer and Traxler 2006:361.

Provenience

Location. Stela 89 once stood on the summit of Structure I, southeast of Calakmul's Central Plaza. It had been cut into pieces by 1983 and has been displayed by the Rautenstrauch Joest Museum für Völkerkunde in Cologne, West Germany.

Date. Calakmul Stela 89 is dated 9.15.0.0.14 (A.D. 731).

Description

Primary Figure. Though this monument is contemporaneous with one showing Yuknoom Took' K'awiil (Calakmul Ruler 5, 6, 7), there is reason to doubt, as discussed in Chapter 5, that this is he. In any case, the primary figure is facing front, his head turned to his right, holding a scepter representing K'awiil in his right hand and a shield in his left. He wears a headdress with two peaks pointing up and forward, the taller, rear peak folded back in a Z shape, and his hair flows out of the back of the headdress. His head is from a fifth to a fourth of his height.

Secondary Figures. On the primary figure's right, underneath the K'awiil scepter, stands a dwarf in right profile.

Physical Description. His head is between a fourth and a third of his height. Though his face is eroded, it does seem that the nasal bridge is depressed, especially in contrast to that of the primary figure, and his nose is short. The upper arm is definitely shortened, and the legs are quite reduced in length. The dwarf is approximately a third as tall as the primary figure.

Attire and Accessories. This dwarf wears the same double-peaked headdress, with the lower, front peak pointing up and forward and the taller, rear peak pointing up but folded backward, as the primary figure. His hair comes out the back of the headdress, as does that of the primary figure, but the dwarf's hair is not as long. He wears an ear ornament,

probably a disk-shaped earspool, but erosion does not permit this conclusion. Although nothing is discernable around his waist, there appear to be three large, round knots, as though of fabric, and loose ends hang from these. He also wears a fringed or trimmed kilt-like garment with a tail that hangs down in back and high-backed sandals that tie in front. He holds something with scalloped edges, like petals.

Caracol Stela 1

References

Illustration. Figure 8, after Beetz and Satterthwaite 1981:Figure 1; Coggins 1994:Figure 7; Greene Robertson 1995:D20960.PCT; V. Miller 1985:Figure 21; Prager 2002:Figure 1; Satterthwaite 1951:Plate XIII Figures 1-2, Plate XIV Figure 1.

Discussion. Beetz and Satterthwaite 1981:7-10, 105, 107-109, 112, 120-123, 128; A. Chase and D. Chase 1994:58-59; Coggins 1994:32, 34, 36, 38-41, 54; Grube 1994a:111; Houston 1987:89-90, 99; Martin and Grube 2000:88, 90; Mayer 1986:213; V. Miller 1985:148, 152; Prager 2002:37; Proskouriakoff 1993:39; Satterthwaite 1951:33, 37, 1954:31; Sharer and Traxler 2006:365; Stone et al. 1985:267-269, 275.

Provenience

Location. Paired with the giant-ajaw Altar 1, Stela 1 stood at the southern base of Structure A1, which formed the south side of Court A1, west of the Central Acropolis, in the southwestern part of Caracol's center (Maps 1, 2).

Date. Directly under the dwarf's feet is the k'atun ending 9.8.0.0.0 (A.D. 593), making Caracol Stela 1 the earliest securely dated monument to display the dwarf motif.

Description

Primary Figure. Yajaw Te' K'inich II (Caracol Ruler III, Lord Water, Lord Muluc, Kan Cross I) stands with both feet and head turned to his right and holds a ceremonial bar. His head is just about a fifth of his height.

Secondary Figures. Standing in right profile, on the right of Yajaw Te' K'inich II, a dwarf gazes up toward him, gesturing with the fingers of his left hand.

Physical Description. The head of the dwarf is between a fourth and a third of his total height, which in turn makes up about the same fraction of the height of Yajaw Te' K'inich II. His arms and legs, especially the upper parts, are quite short; his fingertips would come just to the tops of his hips. Only three fingers are shown on each hand, which are short and broad.

Attire and Accessories. This dwarf is elaborately costumed in a headdress that curves up at the back and has a flower bud fastened around it, holding something looped through it at the back. He wears an earspool as well as bead necklace, bead bracelets, and anklets. Two masks with pendant celts are suspended, one in the front and one in the back, from the loincloth around his waist, the loose ends of which hang down in front. Around his hips is the pelt of a spotted animal, trimmed with beads and fringe or plumes, with tail hanging down behind. He holds in his right hand something that appears to be flexible, like a pouch or flap of fabric or leather; A. Chase and D. Chase suggest that it might be an incense bag (1994:58). The dwarf, his back mask, and Yajaw Te' K'inich II all have the nose bead that Taube (2005:31) interprets as signifying breath.

Caracol Stela 4

References

Illustration. Figure 9, after Beetz and Satterthwaite 1981:Figure 5a.

Discussion. Beetz and Satterthwaite 1981:23-25, 108-109; A. Chase and D. Chase 1994:58-59; Coggins 1994:38, 54; Grube 1994a:105; Houston 1987:93; Martin and Grube 2000:88, 90, 105; Satterthwaite 1954:28.

Provenience

Location. According to Beetz and Satterthwaite (1981:23-25), the area of Caracol in which the slate fragments that composed Stela 4 were found, north of Court A1 and the Central Acropolis, is not its original location (Map 1).

Date. Beetz and Satterthwaite (1981:23-24) estimate 9.18.0.0.0???, noting, "The guess date is based only on a possible pairing with Altar 3." More recent finds, however, may date Caracol Stela 4 to the lajuntun ending of 9.7.10.0.0 (A.D. 583), half a k'atun before Stela 1, in which case it would be the earliest monument to display the dwarf motif (Houston 1987:93; Simon Martin, personal communication September 2006; Martin and Grube 2000:90).

Description

Primary Figure. This monument presumably portrays Yajaw Te' K'inich II (Caracol Ruler III, Lord Water, Lord Muluc, Kan Cross I), though only his front-facing lower legs remain.

Secondary Figures. Yajaw Te' K'inich II is accompanied by two individuals, a captive to his right and a dwarf, who appears to be standing in left profile, facing him to his left.

Physical Description. All that survives of the dwarf is his closed left fist.

Attire and Accessories. There is clear indication of a bracelet as well as possibly some hanging loincloth ends and the edge of a short, lower garment trimmed with beads. If the small snake head were part of his headdress, it would resemble that of the dwarf on the viewer's far right on Step VII of Hieroglyphic Stair 2 at Yaxchilan. It might also be the terminus of the curved handle of a K'awiil scepter held in the dwarf's right hand (see Accessories under Cultural Attributes in Chapter 4).

Caracol Stela 5

References

Illustration. Figure 10, after Beetz and Satterthwaite 1981:Figure 6a; Coggins 1994:Figure 8; Harris 2000b:Figure 1; Martin and Grube 2000:90; Prager 2002:Figure 19; Satterthwaite 1954:Figures 2, 3, 8.

Discussion. Beetz and Satterthwaite 1981:26-30, 105, 108-109, 112, 128; A. Chase and D. Chase 1994:58-59; Coggins 1994:32, 36-38, 41, 54; Grube 1994a:106-108, 111; Harris 2000a:40-41, 2000b; Houston 1987:90-91, 99; Martin and Grube 2000:90-91; Prager 2002:51-52; Proskouriakoff 1993:34, 41; Satterthwaite 1954:6, 12, 31; Schele and Freidel 1990:174, 449, 456; Sharer and Traxler 2006:365; Stone et al. 1985:269, 275.

Provenience

Location. A row of three stelae was erected in front (west) of Structure A13, south of Court A1 and the Central Acropolis, in the southwestern part of the center of Caracol. Stela 5 was the northernmost of the three (Map 1).

Date. Caracol Stela 5 was placed in honor of the k'atun ending 9.9.0.0.0 (A.D. 613).

Description

Primary Figure. Knot Ajaw (Caracol Ruler IV, Flaming Ajaw) stands facing front, holding a ceremonial bar; his head, which is turned to his right, constitutes from a sixth to a fifth of his total height.

Secondary Figures. Knot Ajaw is flanked by secondary figures: to his right is a small, kneeling individual, while to his left, a dwarf stands in left profile, facing him. A visual comparison of the two makes the difference in their bodily proportions quite clear.

Physical Description. The head of the dwarf constitutes more than a third of his height, which is just under a quarter that of Knot Ajaw. His profile, swooping from forehead to nose, is most unusual for a Maya. His limbs, especially his legs, are quite short.

Attire and Accessories. Whatever it is that this dwarf is wearing around his neck is unique to him. There is a bead, perhaps signifying breath (Taube 2005:31), at his nose, but also one at his forehead, a few

down his back, and a strand of them around each wrist. The T shape of his ear ornament may represent an earspool seen from the side. A loincloth, knotted at the side, supports a front mask with dangling celts. Finally, he wears a short, lower garment, edged with beads and fringe or feathers, around his hips (as does the primary figure) and holds a scepter in his right hand.

Caracol Stela 6 Front

References

Illustration. Figure 11, after Beetz and Satterthwaite 1981:Figure 7a; Harris 2000a:Figure 1a; Satterthwaite 1954:Figures 9, 10.

Discussion. Beetz and Satterthwaite 1981:31-35, 105, 107-109, 117-120, 121, 129; A. Chase and D. Chase 1994:58-59; Coggins 1994:37-38, 41, 54; Grube 1994a:106, 111; Harris 2000a; Houston 1987:88, 90-91, 99; Martin and Grube 2000:90-91; Prager 2002:48; Proskouriakoff 1993:34-35, 41; Satterthwaite 1954:6, 12, 31; Sharer and Traxler 2006:365; Stone et al. 1985:267-271, 275.

Provenience

Location. Stela 6 was the central monument in the line of three, between Stelae 5 and 7, in front (west) of Structure A13, south of Court

A1 and the Central Acropolis, in the southwestern part of Caracol's center (Map 1).

Date. The sides of Caracol Stela 6 present a series of dates, concluding with 9.8.10.0.0 at A.D. 603.

Description

Primary Figure. On the front of Stela 6, as on Stela 5, Knot Ajaw (Caracol Ruler IV, Flaming Ajaw) faces front and holds a ceremonial bar. Turned to his right, his head is more than a seventh of his height.

Secondary Figures. On Knot Ajaw's right stands a dwarf, gazing slightly upward with left hand raised, in right profile.

Physical Description. Erosion has destroyed much of the dwarf, but his head can be seen to be more than a third of his height, and his height is a quarter of that of Knot Ajaw. He has a bulging forehead, a sharp nose with breath bead, and a receding chin. His arms are not clearly visible but his legs are short.

Attire and Accessories. This dwarf wears a headdress and short garment, and he holds a scepter up with his left hand.

Caracol Stela 6 Back

References

Illustration. Figure 12, after Beetz and Satterthwaite 1981:Figure 8; Harris 2000a:Figure 1c; Proskouriakoff 1993:42; Satterthwaite 1954:Figures 2, 11.

Discussion. Beetz and Satterthwaite 1981:31-35, 105, 108-109, 117-120, 121, 128-129; A. Chase and D. Chase 1994:58-59; Coggins 1994:37-38, 41, 54; Grube 1994a:106, 111; Harris 2000a; Houston 1987:88, 90-91, 99; Martin and Grube 2000:90-91; Prager 2002:48; Proskouriakoff 1993:34-35, 41; Satterthwaite 1954:6, 12, 31; Sharer and Traxler 2006:365; Stone et al. 1985:267-271, 275.

Provenience

See Stela 6 Front, above, for location and date.

Description

Primary Figure. Yajaw Te' K'inich II (Caracol Ruler III, Lord Water, Lord Muluc, Kan Cross I) is facing front, holding an eccentric flint in his right hand and a short ceremonial bar in his left arm. His head, turned to face his right, is from a sixth to a fifth of his height.

Secondary Figures. The head of the dwarf, who stands in right profile on the right side of Yajaw Te' K'inich II, is missing.

Physical Description. The broad right hand, with four short fingers, and the short limbs of the dwarf can be clearly seen.

Attire and Accessories. Jewelry includes an earspool, a necklace or pectoral with at least two beads, a bead bracelet, and a bead anklet. He wears a loincloth, or *ex*, with squared ends; probably also a sash, knotted in front, with rounded ends; and a short, striped lower garment around his hips. In his left hand is a staff or club, apparently with hafted blades.

Caracol Stela 8

References

Illustration. Beetz and Satterthwaite 1981:Figure 9; this "poorly done" drawing is not reproduced here (Beetz and Satterthwaite 1981:3; see also Greene Robertson 1995:D20961.PCT).

Discussion. Beetz and Satterthwaite 1981:37-39, 104, 106-109, 112, 124, 129; Coggins 1994:38, 54; Grube 1994a:109, 112; Martin and Grube 2000:98.

Provenience

Location. In badly eroded fragments, Stela 8 was the southernmost stela in a line of four, with Stelae 11, 10, and 9, on the north-south axis of Court A1, west of the Caracol Central Acropolis (Maps 1, 2). Though near Altar 14, it does not appear to have been part of a pair.

Date. Beetz's drawing of Caracol Stela 8 appears to show 9 bak'tuns and 19 k'atuns, assumed to be the k'atun ending 9.19.0.0.0 (A.D. 810; Beetz and Satterthwaite 1981:Figure 9); Houston (1987:100) and Grube (1994a:112), however, give Stela 8 a date of "?9.18.?.?."

Description

Primary Figure. Although nothing of the primary figure's physical form survives, this must have been either K'inich Joy K'awiil (Caracol Ruler IX, Mahk'ina God K, K'inich Hok' K'awiil) or his successor, K'inich Toob'il Yopaat (or Yoaat; Caracol Ruler X, XI, Lord Quincunx; see Late Dwarf-Motif Monuments under Caracol in Chapter 5).

Secondary Figures. The proximity in both time and space of Stela 8 to Stelae 9 and 11, together with the few traces of remaining relief, allow a reconstruction of a dwarf, in right profile, on the primary figure's right.

Caracol Stela 9

References

Illustration. Figure 13, after Greene Robertson 1995:D20962.PCT; Beetz and Satterthwaite 1981:Figures 10, 34a.

Discussion. Beetz and Satterthwaite 1981:40-41, 104, 106-109, 112, 124, 129; Coggins 1994:38, 54; Martin and Grube 2000:96.

Provenience

Location. Stela 9 was central to Court A1, in the western part of the center of Caracol. It stood with giant-ajaw Altar 4 in a line of four monuments between Stelae 10 and 8 (Maps 1, 2).

Date. Caracol Stela 9 can only be estimated to date some time between 9.18.0.0.0 and 10.0.0.0.0 (A.D. 790 and A.D. 830).

Description

Primary Figure. It is possible that Stela 9 represents K'inich Joy K'awiil (Caracol Ruler IX, Mahk'ina God K, K'inich Hok' K'awiil), facing front, holding a ceremonial bar, his head turned to his right (see Late Dwarf-Motif Monuments under Caracol in Chapter 5).

Secondary Figures. On the primary figure's right is a dwarf, standing in right profile.

Physical Description. Although the profile of the dwarf is eroded, his right arm shows incomplete extension of the elbow, a broad hand, and short legs.

Attire and Accessories. He wears a headdress with two peaks, a shorter one in front and a taller one behind, an earspool, and a wristlet. There are traces of a loincloth, perhaps supporting a back mask, looped over in front with hanging ends. It is possible that he holds a scepter with curved base in his left hand.

Caracol Stela 11

References

Illustration. Figure 14, after Houston 1987:Figure 71a; Beetz and Satterthwaite 1981:Figures 12, 35b; A. Chase and D. Chase 1994:Figure 4; Greene Robertson 1995:D20965.PCT; Grube and Martin 2004:76.

Discussion. Beetz and Satterthwaite 1981:44-46, 104, 106-109, 112, 124, 129; A. Chase and D. Chase 1987:61, 1994:58-59; Coggins 1994:38, 54; Grube 1994a:83, 109, 112; Grube and Martin 2004:76; Helmke et al. 2006; Houston 1987:92, 95, 100; Martin and Grube 2000:96-97; Sharer and Traxler 2006:366.

Provenience

Location. Paired with giant-ajaw Altar 19, Stela 11 was the northernmost in a line, with Stelae 10, 9, and 8, on the north-south axis central to Caracol Court A1, in the western part of the site center (Maps 1, 2).

Date. The date of Caracol Stela 11 can be reconstructed as 9.18.10.0.0 (A.D. 800).

Description

Primary Figure. Stela 11 illustrates K'inich Joy K'awiil (Caracol Ruler IX, Mahk'ina God K, K'inich Hok' K'awiil) standing, facing forward,

holding a ceremonial bar. Turned to face his right, the head of K'inich is from a sixth to a fifth of his height.

Secondary Figures. As redrawn by Stephen Houston (1987:Figure 71a), this is one of the best-preserved dwarves at Caracol. He is standing, in right profile, on the right side of K'inich Joy K'awiil.

Physical Description. An indented nasal bridge, a short, small nose, and a somewhat receding chin characterize the profile. His head is about a quarter of his total height. His left hand is overly large for the rest of his body, and his arms and legs are short, the upper part more so than the lower part. The total height of the dwarf is between a fifth and a fourth that of K'inich Joy K'awiil. See Diagnosis under Achondroplasia in Chapter 2 and Nonachondroplastic Forms of Dwarfism under Summary [of Physical Attributes] in Chapter 4 for further discussion.

Attire and Accessories. He wears a tall headdress with a single peak and a band tied around its base, the ends trailing; an earspool and wristlets; and a decorated loincloth supporting one front mask and one back mask, both with hanging celts. The single cord he wears around his neck is unique. There is a trace of a hemline at his shin, but it is difficult to tell whether a lower garment was once present and has been effaced, or if he wears only a loincloth. A K'awiil scepter is in his left hand.

Caracol Stela 19

References

Illustration. Figure 15 after Grube 1994a:Figure 9.6; Beetz and Satterthwaite 1981:Figures 17a, 39a.

Discussion. Beetz and Satterthwaite 1981:69-71, 107-109, 112, 124-127, 129; Grube 1994a:93-95, 109; Martin and Grube 2000:98-99.

Provenience

Location. Stela 19 stood in front (north) of Structure B5, which formed the south side of the plaza bounded to the north by the massive Caana complex, north of the Central Acropolis, in the northeastern part of Caracol's center (Map 1).

Date. A clear Initial Series on Caracol Stela 19 corresponds to 9.19.10.0.0 (A.D. 820).

Description

Primary Figure. The eroded, fragmented Stela 19, as reassembled and redrawn by Nikolai Grube, shows K'inich Toob'il Yopaat (or Yoaat; Caracol Ruler X, XI, Lord Quincunx), but whether standing facing front with only his head turned to his right, or standing completely in left profile, is impossible to say.

Secondary Figures. According to Grube (1994a:93), "The scene ... is typical for the Late Classic at Caracol and portrays the king with a

ceremonial bar in front of a small dwarf figure, a motif which also occurs on Stelae 8, 9 and 11." If the small mask on a lower fragment is indeed part of a dwarf's adornment, then based on its position, he is standing in right profile to K'inich Toob'il Yopaat's right.

Physical Description. It is necessary to rely on Grube's identification, as not enough of the secondary figure remains for an independent assessment. What might be an upraised arm survives on a fragment.

Attire and Accessories. There is evidence of a small mask with pendant celt, which may be suspended in front of the dwarf's waist, and an associated glyph panel. If the upraised arm is interpreted correctly, it is next to traces of what could be the curved handle of a scepter.

Caracol Stela 21

References

Illustration. Figure 16, after Beetz and Satterthwaite 1981:Figure 19; Greene Robertson 1995:D20959.PCT; Martin and Grube 2000:94.

Discussion. Beetz and Satterthwaite 1981:74-76, 107-109, 112, 124, 129; A. Chase 1991:36-38; A. Chase and D. Chase 1987:61, 1994:58-59; Coggins 1994:38, 54; Grube 1994a:84, 108, 112; Martin and Grube 2000:94-95; Proskouriakoff 1993:78; Sharer and Traxler 2006:365.

Provenience

Location. The original location of Stela 21 is unknown, but it was probably at the northern base of Structure A1, which forms the south side of Court A1, west of Caracol's Central Acropolis, in the western part of the site center (Maps 1, 2).

Date. Directly below the feet of the primary figure and two secondary figures on Caracol Stela 21 is the lajuntun ending 9.13.10.0.0 (A.D. 702).

Description

Primary Figure. Although no name survives to identify the primary figure on Stela 21, the date of this slate monument places it during the reign of Caracol Ruler VII. Broken diagonally, its lower half features Ruler VII standing, facing front, holding a ceremonial bar, his head turned to his right.

Secondary Figures. Ruler VII stands between a captive on his right and a dwarf on his left, who stands in left profile.

Physical Description. The dwarf's head is a fifth of his total height. His profile shows a flat forehead and nasal bridge indentation. He has short limbs as well as short, stubby fingers. See Diagnosis under Achondroplasia in Chapter 2 and Nonachondroplastic Forms of Dwarfism under Summary [of Physical Attributes] in Chapter 4 for further discussion.

Attire and Accessories. This dwarf's headdress has a single peak, curved forward and possibly tied around with a flower bud. He wears an earspool, a pendant in the shape of a bivalve mollusk shell, and a singular style of wristlet; Proskouriakoff (1974:159) identifies the pendant as a *tau* or *Ik* pectoral. He appears to wear several layered, lower garments: an apron-like one in front, a longer one with edged hem that's short in front and long in back, and a loincloth with ends hanging down in front. In his right hand he holds a scepter.

Dos Pilas Stela 14

References

Illustration. Figure 17, after Houston 1989:Figure 27, 1993:Figure 3-24; Coggins 1994:Figure 17; Demarest et al. 1991:Figure 4.17; Grube 1992a:Figure 10; Grube and Hammond 1998:Figure 4 (see *Mexicon* XXI[1]:12-13); Inomata 2001:Figure 2.2; Mayer 1986:Figure 2; V. Miller 1985:Figure 24; G. Stuart and G. Stuart 1983:19.

Discussion. Coggins 1994:32-33, 43-44, 54; Demarest et al. 1991:42, 45; Houston 1989:59, 1993:70, 72, 105, 111; Martin and Grube 2000:58; Mayer 1986:213, 223; Milbrath 1999:298-299; V. Miller 1985:148, 150-151; Prager 2002:53; Sharer and Traxler 2006:384; G. Stuart and G. Stuart 1983:19-20.

Provenience

Location. Stela 14 and Stela 15 stood together on a terrace in front (north) of Structure 7, in an eastern area of Dos Pilas known today as 'El Duende' for these two dwarves. An earlier system numbered the stelae 25 and 26 and the structure, 146 (such as Houston and Mathews 1985; Mayer 1986:Figures 2, 3; V. Miller 1985:Figure 24; see Houston 1993:Table 3-1).

Date. Dos Pilas Stela 14's text mentions the k'atun ending 9.14.0.0.0 (A.D. 711) and a battle on 9.14.5.3.14 (A.D. 717).

Description

Primary Figure. Itzamnaaj K'awiil (Dos Pilas Ruler 2, Shield God K), standing, faces front, holding a K'awiil scepter in his right hand and a shield in his left hand. His head, turned to his right, forms just over a seventh of his total height.

Secondary Figures. On the right side of Itzamnaaj K'awiil stands a dwarf in right profile, his right hand raised. On Itzamnaaj's left is a water bird with a fish in its beak.

Physical Description. His head makes up between a fourth and a third of his total height, which is in turn from a fifth to a fourth of the height of Itzamnaaj. What remains of his profile is much like that of an elite Classic Maya of average stature. He has short limbs, particularly the upper part of the arms; the lower part of his legs is especially short.

Attire and Accessories. This richly outfitted dwarf wears a headdress with two peaks, a shorter one in front and a taller one in back that folds backward in a Z shape, perhaps with something tied around it that knots in back. He also wears an earspool; a fringed collar or short cape over his shoulders, with a disk ornament in front (perhaps a pendant necklace); and a loincloth knotted in front with ends hanging loose. Around his hips is draped a spotted pelt, probably jaguar, with the tail hanging down in back, worn over a garment trimmed with fringe or stripes. He holds up to his nose with his right hand what may be a flower.

Dos Pilas Stela 15

References

Illustration. Figure 18, after Houston 1993:Figure 3-25; Demarest et al. 1991:Figure 4.5; Houston 1992:Figures 4a, 6; Mayer 1986:Figure 3.

Discussion. Bassie-Sweet 1996:226; Demarest et al. 1991:42, 45; Houston 1992:528, 1993:70, 72, 106, 110-111; Martin and Grube 2000:58; Mayer 1986:213, 223; Milbrath 1999:298-299; Prager 2002:53; Sharer and Traxler 2006:384.

Provenience

Location. Stela 15 was paired with Stela 14 on the lower terrace in front of Dos Pilas Structure 7.

Date. Erected one lajuntun after Stela 14, Dos Pilas Stela 15 records the lajuntun ending 9.14.10.0.0 as well as some event four winals later (A.D. 721). Like Stela 14, its text refers to a battle, this one on 9.14.9.10.13 (A.D. 721).

Description

Primary Figure. As on Stela 14, Itzamnaaj K'awiil (Dos Pilas Ruler 2, Shield God K) is facing front with a K'awiil scepter in his right hand and a shield in his left. His head, turned to his right, makes up from a seventh to a sixth of his height.

Secondary Figures. Barely visible behind Itzamnaaj's elaborate legwear, on his right, stands a dwarf in right profile. A water bird with a fish in its beak stands on Itzamnaaj's left.

Physical Description. This dwarf's stature and proportions are absurdly exaggerated: his head makes up over a third of his total height, which is less than a quarter the height of Itzamnaaj K'awiil. The size of the upper part of the face is small relative to the lower part. His arms are not visible but his legs and feet are tiny.

Attire and Accessories. He wears the Z-shaped headdress with two peaks, the front one shorter, the rear one taller and folded backward. His

jewelry includes an earspool with central, tubular, projecting element and a bead necklace. He seems to be swathed in multiple layers of garments: a fringed collar or short cape over his shoulders; a loincloth or sash, or both, wrapped around his waist; a short, lower garment; and high-backed sandals.

El Peru Stela 34

References

Illustration. Figure 19, after J. Miller 1974:Figure 2; CMHI field drawing courtesy of Ian Graham; Coggins 1994:Figure 6; Foncerrada de Molina 1976:Figure 11; Houston 1992:Figures 2, 4b; Marcus 1976:frontispiece, 1987:Figures 50, 61; Mayer 1980:Plate 31; V. Miller 1985:Figure 22; Wanyerka 1997:Figures 1, 8, 10.

Discussion. W. Coe 1990:III:855; Coggins 1994:32-33, 41-42, 53-54; Folan et al. 1995:327; Foncerrada de Molina 1976:49, 51; Freidel and Escobedo 2004:269, 2005:3; I. Graham 1988:124-125; Houston 1992:528; Houston and Mathews 1985:14-15; Jones and Satterthwaite 1982:99; Marcus 1976:52, 1987:136, 140-145, 165-167; Mayer 1980:22-24, 1986:213; J. Miller 1974; V. Miller 1985:148, 150-151; Schele and Freidel 1990:181, 456, 458; Wanyerka 1997.

Provenience

Location. Now in the Cleveland Museum of Art, this monument was thought to be from Calakmul until 1983, when I. Graham (1988) discovered its 'carcass' still on the ground at the site of El Peru, one of a pair there that showed a lord and his wife. At one time, their provenience was probably the north side of Structure M12-35, a pyramidal building northwest of the southeastern acropolis.

Date. As reconstructed by Wanyerka (1997:82-89), the badly damaged hieroglyphic texts of El Peru Stela 34 denotes two period endings: the hotun (quarter-k'atun) ending 9.12.5.0.0 and the k'atun ending 9.13.0.0.0 (A.D. 677 and A.D. 692) as well as several events in between, including an accession at Calakmul on 9.12.13.17.7 (A.D. 686). An unprovenienced text records the arrival at El Peru of a royal Calakmul woman on 9.12.6.16.17 (A.D. 679).

Description

Primary Figure. The woman shown on Stela 34 was in some familial relationship to the Calakmul sovereign whose accession this text records: Yuknoom Yich'aak K'ak' (Jaguar Paw). She was also the wife of El Peru sovereign K'inich Balam II. Freidel and Escobedo (2004:269, 2005:2) read her name as Lady K'ab'il (or K'ab'el), while Martin and Grube (1994:15) and Wanyerka (1997:78, 81) read her title as Na Kan Ajaw 'royal woman of the snake head polity.' She stands facing front, a scepter in

her right hand and a shield in her left, her head turned to her right. Her head is between a sixth and a fifth of her height.

Secondary Figures. A dwarf stands, with hands out, in right profile at the woman's right side.

Physical Description. This very fine example of disproportionate short stature depicts a dwarf whose head is from a fourth to a third of his height, and he is between a third and a half as tall as K'ab'il, Na Kan Ajaw. Although his profile is imperfectly preserved, his arms and legs are short relative to the size of his torso. His fingers are short and his hands, broad.

Attire and Accessories. The dwarf's headdress has two peaks, a lower one in front and a taller one behind that folds backward. A third projection of some sort points forward over his forehead. His jewelry consists of an earspool with a central, tubular element as well as a collar and cuffs each made up of three strands of beads. While the headdress and earspool are not unusual, the multistrand bead jewelry is more like that of the primary figure than like anything that other dwarves wear. Wanyerka (1997:81) suggests that the square panel on his chest may be a mirror, "so that Na Kan Ajaw can see herself while she enacts the ritual." The knot with ends hanging down his back may indicate that the mirror is tied on, or that it is suspended from the series of tubular beads strung around his neck, or both. He also wears a loincloth wrapped around his

waist, the loose ends hanging down in front, and a short, lower garment with unique horizontal stripes trimming the hem. Backed sandals tied at the ankle complete his costume. In his left hand, he holds something that could be foliage, a pod, or a blossom and in his right hand, something that looks like a gourd, although it could be attached to a handle.

La Florida Stela 7

References

Illustration. Figure 20, after a 1944 photograph by Frances Morley, reproduced by Proskouriakoff (1950:Figure 61c). By the time of I. Graham's photograph and drawing (1970:Figure 6a, b, reproduced by Morales 1998:Figure 4), the portion of the stela with the secondary figure was gone.

Discussion. Coggins 1969:96; I. Graham 1970:436, 440, 454-455; Mayer 1986:213; V. Miller 1985:148; Proskouriakoff 1950:145, 189, 1993:106.

Provenience

Location. Stela 7 once stood in front (east) of Structure 16, in the northern part of La Florida, with Altar E and Stela 8.

Date. La Florida Stela 7 bears a Calendar Round date corresponding to the period ending 9.16.15.0.0 (A.D. 766).

Description

See A Test Case under Defining the Dwarf Motif in Chapter 8.

La Milpa Stela 4 Front

As Grube and Hammond (1998:129) point out, the two faces of La Milpa Stela 4 are so similar that the terms 'front' and 'back' are somewhat arbitrary. They call the side on which the secondary figure stands on the primary figure's left the 'front.'

References

Illustration. Figure 21, after a drawing by Nikolai Grube. Grube and Hammond's 1998 article was mistakenly accompanied by illustrations of substandard resolution. The corrected illustration (Figure 2) appears in *Mexicon* XXI(1) between pages 12 and 13.

Discussion. Grube 1994b:218; Grube and Hammond 1998; Hammond et al. 1996:90; Kidder 1938:153; Tourtellot et al. 1993:104.

Provenience

Location. Stela 4 was found in a line of monuments in front of Structure 1, which formed the eastern side of La Milpa's Great Plaza. Some doubts exist, however, that this is Stela 4's original location.

Date. Based on its resemblance to La Milpa Stela 7, which bears a Long Count date, Stela 4 could have been erected around 9.17.10.0.0 (about A.D. 780).

Description

Primary Figure. All that remain are the eroded traces of a front-facing primary figure from the waist down. La Milpa Stela 7 preserves a name spelled phonetically as Ukay; if Stela 4 is contemporary with Stela 7, it might also represent that lord.

Secondary Figures. A secondary figure stands to the primary figure's left, facing front but with his head turned to his right to gaze up at the primary figure, holding a spherical object in his right hand and bending his right leg. This pose has been described as 'dancing' (Grube 1992a:201). Grube and Hammond (1998:129) note the very faint outline of a bird, with beak pointing upward, between the primary figure's legs.

Physical Description. Though his head makes up about a quarter of his height, his facial profile is not unlike that of the Classic Maya elite. His torso is short and stocky relative to his arms and legs; his left hand, for example, reaches below hip level, nor is the upper segment of the arms and legs significantly shorter than the lower segment. See Diagnosis under Achondroplasia in Chapter 2 and Nonachondroplastic Forms of Dwarfism under Summary [of Physical Attributes] in Chapter 4 for further discussion.

Attire and Accessories. The secondary figure wears a headdress with a double peak, the shorter peak in front and taller peak in back, pointing up and forward, as well as an earspool, a necklace of four beads, and a simple wristlet. A mask or some other panel hangs from his loincloth in front. He also wears elements that Grube and Hammond (1998:129) identify as the belt and knee protector of a ball player, and in his right hand, he carries a ball.

La Milpa Stela 4 Back

References

Illustration. Figure 22, after a drawing by Nikolai Grube. Grube and Hammond's 1998 article was mistakenly accompanied by illustrations of substandard resolution. The corrected illustration (Figure 3) appears in *Mexicon* XXI(1) between pages 12 and 13.

Discussion. Grube 1994b:218; Grube and Hammond 1998; Hammond et al. 1996:90; Kidder 1938:153; Tourtellot et al. 1993:104.

Provenience

See Stela 4 Front, above, for location and date.

Description

Primary Figure. Somewhat more of the primary figure remains on the back of Stela 4 than on the front; a front-facing individual, with right

arm bent, from the chest down can be discerned. La Milpa Stela 7 preserves a name spelled phonetically as Ukay, and if Stela 4 is contemporary with Stela 7, it might also represent that lord.

Secondary Figures. Less of the secondary figure on the back is preserved than on the front. All that can be seen is the head and presumably the bent left arm of a human form standing to the primary figure's right and looking slightly up. It is not possible to detect whether he is entirely in right profile or is facing forward with only his head turned to his left. A large bird appears in this scene as well.

Physical Description. Although not much survives of this dwarf, he does differ slightly from that on the front of Stela 4: he seems to be shorter relative to the primary figure's stature, his head makes up more of his height (between a quarter and a third), and his limbs are correspondingly shorter, the left arm significantly so.

Attire and Accessories. Like the secondary figure on the front of Stela 4, this dwarf wears a double-peaked cap, the shorter, front peak of which points up and forward and the taller, back peak of which points upward but seems to be folded over to the back. He also wears three beads around his neck and an earspool. As do the physical appearance of the dwarves on the two sides of Stela 4, what remains of their attire differs slightly.

La Milpa Stela 12

References

Illustration. Figure 23, after Grube 1994b:Figure 3a; Tourtellot et al. 1993:Figure 6; Yaeger 1991:Figure 17.

Discussion. Grube 1994b:218, 220-221; Kidder 1938:153; Tourtellot et al. 1993:104; Yaeger 1991:31.

Provenience

Location. Stela 12 was found lying in front of Structure 3, which formed the southeastern corner of La Milpa's Great Plaza.

Date. Although legible hieroglyphs do survive on La Milpa Stela 12, no date is recognizable. Stylistically, it falls roughly between 9.8.10.0.0 and 9.17.10.0.0 or approximately A.D. 600 and A.D. 780.

Description

Primary Figure. Though badly eroded, the primary figure stands facing front, with a staff, resembling a ceremonial bar, in his right hand and a shield in his left. His head is turned to his right.

Secondary Figures. According to Grube (1994b:220), "a small secondary figure, probably a dwarf, but now totally eroded, is under the shield" held by the primary figure. This places the hypothesized dwarf on the primary figure's left, which is rare but not unheard-of, particularly at La Milpa. It is not possible to tell in which direction the dwarf would

face. All that survives is an angular shape where his headdress would be, a design without precedent.

As with Stela 19 at Caracol, it is necessary to rely on Grube's assessment that La Milpa Stela 12 features a dwarf (Nikolai K. Grube, personal communication December 2002). Yaeger (1991:31) observed "Under the shield is an object, possibly a deity, animal, or effigy head. ... It is too eroded to discern any detail." Other observers (Tourtellot et al. 1993:104, Figure 6) have not commented on a secondary figure. See Relative Positions of Primary and Secondary Figures under Physical Attributes in Chapter 4.

Motul de San José Stela 2 Front (West)

References

Illustration. Unpublished CMHI field photograph (Negative 7273/4) courtesy of Ian Graham, not reproduced here (Maler's photograph [1910:Plate 45] is of the back, or east, side). No line drawings of this monument are available at this time.

Discussion. Antonia E. Foias, personal communication October 2004; Grube 1988:66; Maler 1910:133-135; Morley 1937-1938:III:417-419; Proskouriakoff 1950:142, 191, 1993:150-151.

Provenience

Location. The monument stood by itself in front (west) of a structure in Group B, in the western part of Motul de San José.

Date. Proskouriakoff (1950:142, 191, 1993:150-151) discusses Morley's (1937-1938:III:419-421) attempt to date the Motul de San José monuments by style; she gives Stela 2 a style date of $9.17.0.0.0 \pm 2$ k'atuns (approximately A.D. 770).

Description

Primary Figure. The sculpture on the side of the monument facing away from the mound behind it had already been "badly defaced" when Maler observed it in 1910 (Maler 1910:135). There are three human forms in the scene. The leftmost only survives from the knees down, but is of average size and proportion. With feet flexed and heels raised, this person can be described as 'dancing'. Of the figure in the center, only the small masks decorating his collar or pectoral, traces of feathers, and portions of 'dancing' feet, one heel raised, remain.

Secondary Figures. In 1915, Morley was able to observe the "small figure to the [primary figure's] left" (1937-1938:III:418). He is standing in left profile.

Physical Description. Though eroded, his head seems to be about a third of his height, and his limbs, especially the upper part of the arm, are short.

Attire and Accessories. He wears the double-peaked headdress, the front, shorter peak pointing up and forward and the rear, taller peak pointing up but folded back in a Z shape. He seems to wear something like a cape hanging down his back, and at the front of his waist is clear evidence of knots tied with ends hanging down. He holds something that might be foliage in his hand. More details will surely be forthcoming when the drawings of the monument are available.

Motul de San José Stela 4

References

Illustration. Unpublished CMHI field sketch courtesy of Ian Graham, not reproduced here; Grube 1988:Figure 1; Houston 1992:Figure 3.

Discussion. Coggins 1994:51, 54; Antonia E. Foias, personal communication October 2004; Grube 1988:67; Houston 1992:528.

Provenience

Location. Between Stelae 3 and 5, Stela 4 was centered in front (west) of a twin-pyramid structure on the east side of Motul de San José's main plaza, in the southern part of the site.

Date. The only date available at this time for Motul de San José Stela 4 is a suggestion by Coggins (1994:54) of 9.14.10.0.0?? (about A.D. 720) based on its style.

Description

Primary Figure. Like Stela 2, only the front-facing feet remain, wearing backed, tasseled sandals.

Secondary Figures. To the right of the primary figure's feet are those of a dwarf in right profile.

Physical Description. The remains of the dwarf's legs are quite short and broad.

Attire and Accessories. Only the front, dangling ends of a loincloth; the hem of a lower garment, trimmed with a chevron design and fringe or stripes, with tail hanging down behind; and an anklet worn by the dwarf are preserved, though there might also be traces of a garment hanging down his back. A two-block glyph panel is associated.

Oxpemul Stela 19

References

Illustration. Figure 24, after a drawing courtesy of Nikolai Grube; a preliminary drawing appears in Robichaux and Pruett (2005:Figure 51).

Discussion. Nikolai Grube, personal communication September 2007; Marcus 1987:117, 122-123; Proskouriakoff 1950:128-129, 152; Hubert Robichaux, personal communication June 2007; Robichaux and Pruett 2005:34; Ruppert and Denison 1943:137, 142; Ivan Sprajc, personal communication October 2006.

Provenience

Location. Stela 19 was located north of Structure XIII in a plaza just over 1 km south of Oxpemul's center, accompanied by an altar.

Date. In a text beginning on the back and continuing on the left side, Oxpemul Stela 19 is dated 9.16.5.0.0 (A.D. 756).

Description

Primary Figure. A primary figure stands, facing front, his head turned to his right, holding up a scepter with his right hand and a shield with his left. His head makes up just under a fifth of his total stature.

Secondary Figures. A secondary figure stands in a three-quarter view of his left side, with his face turned over his left shoulder but his feet pointed toward his right, on the right side of the primary figure. His head is just over a fourth of his height, and he is just over a third as tall as the primary figure.

Physical Description. As shown in Grube's drawing, the secondary figure has an unusual facial profile, with indented nasal bridge, flattened nose, and thick lips. His head is large for his body, and his limbs,

especially his legs, appear reduced in length; the upper segment of his arm is somewhat shorter than the lower segment.

Attire and Accessories. This secondary figure wears a headdress, with two soft peaks projecting up and forward, that forms a backward Z shape. He is adorned with a round earspool and pectoral and wears a midlength, lower garment with trimmed hem; at his waist are what could be either round fabric knots or ornaments.

Santa Rosa Xtampak Palace Panel

References

Illustration. Figure 25, after Andrews 1997:Figure 41, 1999:Figure 29; Maler 1997 [1891]:Plate 173; Proskouriakoff 1950:Figure 94a.

Discussion. Andrews 1997:275-279, 307, 319, 1999:6-7, 21; Graña-Behrens 2005:33-35; Maler 1997 [1891]:210-217, 293; Mayer 1986:214; V. Miller 1985:146; Pollock 1970:54-57; Proskouriakoff 1950:165-166, 168, 195; Ruz Lhuillier 1945:37-38; Spinden 1913:201; Stamps 1970:60.

Provenience

Location. The so-called Palace was just west of the central plaza of Santa Rosa Xtampak. The carved panel that pictured the dwarf motif was on the first level of the Palace, centered on the rear wall of the outermost

room of a four-room suite on the north side of the Palace, entered by its own stair. Almost all of the stones of the panel have since been removed.

Date. Proskouriakoff dates the Santa Rosa Xtampak sculpture from 9.15.0.0.0 (about A.D. 730) to 10.4.0.0.0 (about A.D. 910) based on style (1950:165-166; see also Graña-Behrens 2005:35).

Description

Primary Figure. Carved blocks have been cut from their original location, then reassembled somewhat out of order, resulting in a mismatch between the upper parts of the human forms and the lower parts. A primary figure stands in left profile holding a K'awiil scepter in his right hand.

Secondary Figures. The scene includes the upper parts of two dwarves and the lower part of just one, all in left profile and presumably standing forward of the primary figure. Although the scene cannot be accurately reconstructed, this might be a rare case of the dwarf motif in which the dwarf or dwarves do not face the primary figure.

Physical Description. Due to the divided nature of the scene, the relative proportions of the dwarves are not reconstructable.

Attire and Accessories. The two dwarves whose heads are shown wear elaborate headdresses with disk elements, twisted or tied textile, and feathers coming out the top. One may be wearing a mask and the other, an earspool. The single bead on a cord around the neck of the

dwarf on the viewer's left is unique. The lower portion of one shows a back assemblage, tied around his waist, that includes some sort of panel, a disk element, and trailing fabric or feathers. A similar assemblage appears to hang from his waist in front. He seems to wear tied or wrapped foot coverings.

Sayil Structure 4B1 East Column

References

Illustration. Figure 26, after Pollock 1980:Figure 253a; Gendrop 1998:Figure 110j; Proskouriakoff 1950:Figure 102f.

Discussion. Gendrop 1998:146; Maler 1997 [1891]:293; Mayer 1981:9, 10, 20; V. Miller 1985:146; Pollock 1980:121; Proskouriakoff 1950:168, 195, 1965:490; Sharer and Traxler 2006:546.

Provenience

Location. The columns, once presumably freestanding, were encased by secondary masonry forming the central doorway on the north side of Structure 4B1, a relatively small building in the southwestern part of the site.

Date. As Structure 4B1 is located in an area of early elite occupation of Sayil, its columns date from A.D. 750 to A.D. 800 (Carmean

1990:225; Jeremy A. Sabloff, personal communication July 2006; see also Pollock 1980:562-563; Tourtellot and Sabloff 1994:71, 86-88, 1995:30).

Description

Primary Figure. A primary figure in three-quarter view, turned to his own right, holds a shield in his left hand.

Secondary Figures. Below the primary figure's shield, to his right, stands a secondary figure, facing front, his head turned to his right. His right arm is raised, and his left hand is at his waist. This is the only case in which a dwarf stands on a primary figure's right, yet does not face the primary figure.

Physical Description. His forehead and nose have been reconstructed to resemble that of the average Classic Maya elite with full lips and receding chin, and his head is more than a third of his height. Although his legs are quite short, his arms are of average length, especially compared to the secondary figure on the other column. See Diagnosis under Achondroplasia in Chapter 2 and Nonachondroplastic Forms of Dwarfism under Summary [of Physical Attributes] in Chapter 4 for further discussion.

Attire and Accessories. This secondary figure wears a headdress with a band around the forehead and feathers coming out the top, a pendant or pectoral ornament, and a loincloth wrapped around his waist and looped over to hang down in front.

Sayil Structure 4B1 West Column

References

Illustration. Figure 27, after Pollock 1980:Figure 253b; Gendrop 1998:Figure 110i; Proskouriakoff 1950:Figure 102g, 1965:Figure 12d.

Discussion. Gendrop 1998:146; Maler 1997 [1891]:293; Mayer 1981:9, 10, 20; V. Miller 1985:146; Pollock 1980:121; Proskouriakoff 1950:168, 195, 1965:490; Sharer and Traxler 2006:546.

Provenience

See East Column, above, for location and date.

Description

Primary Figure. In contrast to the east column, on which the primary figure faces his right, on the west column the primary figure, though shown standing frontally, turns his head to his left. He holds a staff in his right hand and a shield in his left, and his right heel is lifted. His head is between a sixth and a fifth of the height of his body.

Secondary Figures. A dwarf stands, facing front, on the primary figure's left, beneath the shield he holds; the dwarf has turned his head to his own right to face him.

Physical Description. His head is a fourth to a third of his height and shows a somewhat overhanging forehead with depressed nasal

bridge. His arms and legs are short, and he is between a third and a half as tall as the primary figure of the column.

Attire and Accessories. This dwarf, like that on the east column, wears a headdress with a band with feathers coming out of the top. In addition to the pendant or pectoral, he wears an earspool with a tubular, projecting, central element. Around his waist is a loincloth with ends hanging down in front. In contrast to dwarves on monuments from sites to the south, these are clothed quite simply.

Tikal Structure 5D-1 (Temple I) Lintel 3

References

Illustration. Figure 28, after Jones and Satterthwaite 1982:Figure 70; W. Coe et al. 1961:Figures 13, 14; Coggins 1994:Figure 14; Foncerrada de Molina 1976:Figure 7; Freidel et al. 1993:Figure 7.18; Greene Robertson 1995:D23639.PCT; Harris 2003:34; Harrison 1999:Figure 77; Jones 1977:Figure 1; Maudslay 1889-1902:III:Plates 71, 74; Mayer 1986:Figure 8; Proskouriakoff 1965:Figure 8a; Schele and Freidel 1990:Figure 5:26a; Sharer and Traxler 2006:Figure 8.4.

Discussion. W. Coe et al. 1961:21-23, 32-34, 42, 51, 64-72, 79; Coggins 1994:42-43, 54; Foncerrada de Molina 1976:49, 53; Freidel et al. 1993:310-312; Harris 1989a, 1989b; Harrison 1999:130, 133; Jones

1977:28-29, 32, 34-36, 41-42, 58; Jones and Satterthwaite 1982:97-100, 125, 127, 129; Martin and Grube 2000:44-45; Maudslay 1889-1902:III:45-47; Mayer 1986:215; Milbrath 1999:85, 238, 298-299; V. Miller 1985:150-151; Morley 1937-1938:I:349; Proskouriakoff 1950:125, 1965:485, 1993:54, 66, 69, 97; Schele and Freidel 1990:205-211, 466; Sharer and Traxler 2006:303, 393, 400; Shook 1958:14-15.

Provenience

Location. Facing the floor, the scene is carved into wooden beams that once spanned the innermost doorway of the three-room mortuary shrine at the top of Structure 5D-1 (Temple I), on Tikal's Great Plaza. The shrine honored the memory, while the structure below housed the tomb, of the primary figure shown on this lintel. Some beams of Lintel 3 had been removed by 1875; as of 1961, parts of beams were to be found in London's British Museum and Basel's Museum für Völkerkunde.

Date. Text accompanying the scene on Tikal Structure 5D-1 Lintel 3 records a series of events, including an accession on 9.12.9.17.16 (A.D. 682), the tun ending 9.13.3.0.0, a military victory on 9.13.3.7.18, and ceremonies performed on 9.13.3.9.18 (all A.D. 695). As described in Chapter 5, the lintels were probably set in place about two k'atuns later, sometime between 9.14.16.0.0 and 9.15.5.0.0 (or roughly between A.D. 725 and A.D. 735).

Description

Primary Figure. In right profile, Jasaw Chan K'awiil I (Tikal Ruler A, Ah Cacao) is seated on a throne, which in turn rests on a palanquin, beneath the giant image of a jaguar. He holds a K'awiil scepter in his right hand and a shield in his left hand.

Secondary Figures. Facing Jasaw Chan K'awiil I, in left profile, a dwarf stands on the floor on which the palanquin rests.

Physical Description. Unfortunately, erosion has erased his front profile, and his elaborate outfit conceals his limbs. It is possible to see, however, that his head constitutes about a third of his height.

Attire and Accessories. His jewelry includes an earspool with pendant beads and a bead necklace. What clothing is visible is quite detailed: a fringed collar or short cape around his shoulders; a back assemblage, including a mask with dangling celts, held by a loincloth around his waist; a jaguar pelt around his hips, trimmed with plumes, with the tail hanging down in back; and something fastened around one ankle.

Tikal Structure 5C-4 (Temple IV) Lintel 3

References

Illustration. Figure 29, after Jones and Satterthwaite 1982:Figure 74; W. Coe et al. 1961:Figures 29, 33; Coggins 1994:Figure 16; Greene Robertson 1995:D23642.PCT, D23648.PCT; Harrison 1999:Figure 94; Jones 1977:Figure 11; Kelemen 1946:Plate 274; Martin 2000b:Figure 14; Martin and Grube 2000:49; Maudslay 1889-1902:III:Plates 77, 78; Mayer 1978:Plate 7; Milbrath 1999:Plate 15; Sharer and Traxler 2006:Figure 8.10.

Discussion. W. Coe et al. 1961:21-23, 37-40, 42, 51, 54-63, 79; Coggins 1994:42-44, 53; Harris 2003:35-36; Harrison 1999:153-157, 165; Jones 1977:36, 39, 41-42, 45, 52-53; Jones and Satterthwaite 1982:101-103, 125-127, 129; Kelemen 1946:337; Martin 2000b:113-122; Martin and Grube 2000:48-49; Maudslay 1889-1902:III:45; Milbrath 1999:238, 300-301; V. Miller 1985:146; Morley 1937-1938:I:267, 350-356; Proskouriakoff 1950:125, 196, 1965:485, 1993:97; Rubio Cifuentes 1992; Sharer and Traxler 2006:304, 400; Shook 1958:14-15.

Provenience

Location. The 13 beams comprising Lintel 3 spanned the third of three doorways in the building at the top of Structure 5C-4 (Temple IV), west of Tikal's center. Removed around 1877, they were in the Museum für Völkerkunde in Basel, Switzerland by 1961.

Date. The narrative of Tikal Structure 5C-4 Lintel 3 begins on 9.15.10.0.0 (A.D. 741), continues with a military victory on 9.15.12.2.2 (A.D. 743), and describes ceremonies performed on 9.15.15.2.3 (A.D. 746). From other hieroglyphic texts, Jones (1977:53) has reasoned "the lintels of Temple IV had not yet been inscribed by 9.16.0.0.0" (A.D. 751; see also Harrison 1999:157).

Description

Primary Figure. Yik'in Chan K'awiil (Tikal Ruler B, Yaxkin Caan Chac) is seated on a throne, facing the viewer but with his head turned toward his right. His right hand holds a staff and his left, a shield. The image of a huge snake surmounts the throne, which sits atop three steps.

Secondary Figures. At the foot of the three steps stand two dwarves, one on each side of the throne, facing inward. Erosion has claimed all but the ear of the mask worn by the dwarf on Yik'in Chan K'awiil's right. The one on the sovereign's left is shown in left profile.

Physical Description. Because animal masks cover the entire heads of the two dwarves and not much of their limbs is exposed or preserved, little more of them can be described beyond that the head of the one on the sovereign's left makes up more than a third of his body.

Attire and Accessories. Both full-head masks have animal ears, tufts of curly animal hair, an earspool, and skeletal lower jaws. In addition, the dwarf on the ruler's left wears a fringed collar or short cape,

perhaps a garment hanging down the back, an armlet, and likely something around his ankle. Both the earspool design worn on his animal-head mask and the bands around his upper arm are unique to this monument. The dwarf on Yik'in's right also shows the garment hanging down his back. On both sides of the short stairway up to the throne, there appear to be narrow, diagonal shafts beneath their elbows, as though they each carried a staff, the butts resting on the floor behind them and the tips meeting or crossing in front of the stairway.

Tikal Structure 5D-52 Lintel

References

Illustration. Figure 30, after Jones and Satterthwaite 1982:Figure 75; W. Coe et al. 1961:Figures 36-37; Coggins 1994:Figure 15; Foncerrada de Molina 1976:Figure 6; Harrison 1999:Figure 91; Jones 1977:Figure 17; Mayer 1986:Figure 13; Morley 1937-1938:V:Plate 73a; Prager 2002:Figure 21.

Discussion. W. Coe et al. 1961:21-23, 40-42, 51, 72-75, 79; Coggins 1994:32-33, 43, 54; Foncerrada de Molina 1976:49, 50-51, 53; Harrison 1970:6, 29-31, 1999:149-151, 165, 2003:178, 191, 200-201, 204; Jones 1977:52; Jones and Satterthwaite 1982:103-105; Mayer 1986:215, 222-223; Milbrath 1999:237-238; V. Miller 1985:148, 151; Morley 1937-

121 .

1938:I:349; Prager 2002:53; Proskouriakoff 1950:125, 196, 1993:70, 97; Shook 1958:14.

Provenience

Location. Structure 5D-52 was the upper three stories of a complex on the southern side of Tikal's Central Acropolis, also known as Maler's Five-Story Palace and as Tozzer's Structure 10. The first story of this upper building was bisected transversely by a wall dividing three front rooms from three back rooms. Until the early 1900s, this lintel spanned the doorway into the central rear room. As of 1961, two beams were in the American Museum of Natural History in New York.

Date. The text accompanying this lintel's scene includes the same lajuntun ending that opens the Structure 5C-4 Lintel 3 text: 9.15.10.0.0 (A.D. 741). The wood of the lintel has also been C-14 dated to A.D. 621 ± 36 (Harrison 1970:30-31; Satterthwaite 1967).

Description

Primary Figure. Based on the date, this could be Yik'in Chan K'awiil (Tikal Ruler B, Yaxkin Caan Chac; see, however, Structure 5D-52 Lintel under Tikal in Chapter 5). The primary figure stands in left profile holding a K'awiil scepter in the right hand and a shield in the left. The head is just under a quarter the height of the body.

Secondary Figures. Standing in right profile, facing the primary figure, are a dwarf and two water birds.

Physical Description. The head of the dwarf is between a fourth and a third of his body, which is in turn from a third to a half as tall as that of the primary figure. His nose is short and round while his chin is prominent, the antithesis of the elite Classic Maya profile. His legs are not visible, but his arms, especially the upper segment, are short, and he has a round, protruding abdomen.

Attire and Accessories. The dwarf wears a headdress with a single, round peak pointing up and forward with flaps of fabric at the back, under which his hair hangs down, together with a string of beads. He wears an earspool with pendant disk and a wristlet. His clothing includes a fringed collar, a back assemblage held on by a loincloth knotted in front with ends hanging down, and a spotted animal skin draped over his hips. One design on the back assemblage is identical to the knotted hairdo over the face on the bench corner to the viewer's left on Tikal Structure 5D-141 and is very similar to the dwarf's back mask on Structure 5D-1 Lintel 3, suggesting that this back assemblage also includes a mask. He holds what might be blossoms and leaves.

Tikal Structure 5D-141 Façade

References

Illustration. Figure 31, after Mayer 1986:Figure 7; unpublished drawings by William R. Coe, courtesy of the Tikal Project of the University of Pennsylvania; Foncerrada de Molina 1976:Figure 9; Gendrop 1970:Figure 109c; unpublished photograph by Peter D. Harrison (negative 67-22-187), courtesy of the Tikal Project of the University of Pennsylvania.

Discussion. W. Coe 1967:70; Coggins 1994:43; Foncerrada de Molina 1976:49, 52; Harrison 1970:6-8, 13, 1999:186, 2003:191; Mayer 1986:215; V. Miller 1985:148.

Provenience

Location. The frieze was on the south side of Structure 5D-141, in the northeastern corner of Tikal's Central Acropolis (5D-44 on maps of 1967 and before; see Structure 5D-141 Façade under Tikal in Chapter 5).

Date. Structure 5D-141 and its façade can only be dated by stratigraphy to the Late Classic period (A.D. 600 to A.D. 800), though Harrison (2003:191) describes it as more or less contemporaneous with the first story of Structure 5D-52: 9.15.10.0.0 (A.D. 741).

Description

Primary Figure. A primary figure sits cross-legged on a bench or throne, facing front, holding a ceremonial bar.

Secondary Figures. To the primary figure's right, at the side of the bench, a woman sits cross-legged in right profile, gesturing with her right arm. To the primary figure's left stands a dwarf in left profile, gesturing with his left arm.

Physical Description. One of the few clearly visible through his headdress, this dwarf's bald head is a third of his height. His profile is most unusual with its overhanging forehead, deeply depressed nasal bridge, long, sharp nose, and thick, protuberant lips. His body exhibits short limbs, two short fingers, and kyphosis. See Diagnosis under Achondroplasia in Chapter 2 and Summary under Physical Attributes in Chapter 4 for further discussion.

Attire and Accessories. This dwarf wears a wrapped or twisted headband with feathers or fabric coming out front and back. His earspool has a projecting, tubular, central element, and beads hang down his back. He wears wristlets, anklets, and what might be a ball-player's yoke (see La Milpa Stela 4 Front, above). The ends of a loincloth hang down in front of his waist.

Tzum Stela 5

References

Illustration. Figure 32, after CMHI 4:59.

Discussion. CMHI 4:47; Mayer 1986:213.

Provenience

Location. All the stelae yet known from Tzum were found in Group B, a cluster of buildings on a platform at the terminus of a sacbe at the northeast extent of the site. What fragments remain of Stela 5 were found in front (west) of Structure 2, the largest building of Group B, on the eastern side of a plaza. Looting, however, destroyed evidence of its original location.

Date. Likewise, no date is available for Tzum Stela 5.

Description

Primary Figure. The eroded outline shows a primary figure standing, perhaps in a 'dancing' pose, facing front, possibly holding a scepter in his right hand.

Secondary Figures. On the primary figure's left, a person of more or less average proportions is seated cross-legged. On his right, beneath his outstretched arm, stands a dwarf in right profile.

Physical Description. The dwarf's head is from a third to a half of his height. The badly damaged condition of the monument precludes any

details other than that the upper segment of his arm, as well as his legs, are quite short.

Attire and Accessories. In spite of erosion, it is possible to see a headdress consisting of a headband and plumes, traces of an earspool, and something like textile hanging down the back. Some sets of spots may indicate animal fur. Unlike other illustrations of dwarves, there is no evidence of a loincloth (though the stone is badly worn), and the garment this dwarf wears seems rather long and full; could this be our only example of a female dwarf? He or she is holding something with a round top, perhaps a rattle, as Foncerrada de Molina (1976:50-52) and Prager (2002:52) have suggested.

Uxul Altar 2

References

Illustration. Figure 33, after Harvard University 2002-2004:H-34-351 58-34-20/63033; Ruppert and Denison 1943:Plate 59a.

Discussion. Folan et al. 2001:242; Marcus 1987:117, 120-121; Proskouriakoff 1993:52; Ruppert and Denison 1943:76, 149.

Provenience

Location. Altar 2 was in the center of the south side of Structure VI in the North Group at Uxul.

Date. The dwarf-motif scene is on the front of Uxul Altar 2. Hieroglyphic text on the top yields three dates: 9.9.9.9.18 (A.D. 622), 9.10.9.17.0, and 9.10.10.0.0 (both A.D. 642).

Description

Primary Figures. A central, L-shaped glyph panel vertically divides the scene in two. At the viewer's left, two average-statured figures, most likely in ball-player's garb and pose, kneel. A third average-statured, primary figure, his weight on right arm and right knee in ball-game stance, is on the viewer's right. The center of the scene is destroyed.

Secondary Figures. At the viewer's rightmost part of the scene stands a secondary figure in left profile.

Physical Description. The effaced condition of this monument makes all but the outline of a short-legged figure indiscernible.

Attire and Accessories. All that can be seen is the hem of a lower garment, with the loose ends of a sash hanging beneath, and perhaps some panels or lengths of fabric hanging down in front of the secondary figure.

Xultun Stela 3

References

Illustration. Figure 34, after *CMHI* 5:15; Morley 1937-1938:V:Plate 79b; Proskouriakoff 1950:Figure 76b.

Discussion. CMHI 5:9-10, 15; Coggins 1994:39, 41, 54; Garrison and Stuart 2004:853-854; Houston 1986:8; Morley 1921:322-324, 1922:362; 1937-1938:I:385-387, 413-415, 419-421; Proskouriakoff 1950:151, 198, 1965:488, 1993:184-185, 188; Schele and Freidel 1990:392.

Provenience

Location. Xultun Stela 3 stood centered on the stairway of Structure A-2, directly in front (south) of Stela 22. Structure 2 was one of two buildings forming the north side of the main plaza of Group A (Maps 3, 4). Stela 3 disappeared sometime around 1971.

Date. Glyphs allow the reconstruction of two dates: 10.0.3.3.8 (A.D. 833), probably recording the birth of the ruler shown on Xultun Stela 3, and 10.1.10.0.0 (A.D. 859), likely marking the lajuntun ending when the monument was erected.

Description

Primary Figure. An unknown Xultun sovereign stands facing front, his head turned to his right to gaze at a small cat held up in his right hand. In the crook of his left elbow is a scepter representing a deity that

Taube (1992:77-78) identifies as a composite of God K (or K'awiil) and Chaak. The head of the primary figure is just over a fifth of his height.

Secondary Figures. Morley (1937-1938:I:415) made a note of the dwarf in the corner of the scene, though he described him as seated. He stands in right profile on the primary figure's right side.

Physical Description. His head is just over a third of his height, which is from a fourth to a third the height of the primary figure. His profile shows a raised nasal bridge as well as full lips and chin. His arms and legs, especially the upper arm, are short.

Attire and Accessories. This dwarf is garbed very simply in a headdress with two folds or flattened peaks in the front, pointing up and forward, and one taller, squared-off part in the back, with two plumes sticking up. He is unique for showing no trace of jewelry on a reasonably well-preserved monument. Traces of a loincloth, knotted with loose ends in front of the waist, and a lower garment with a tail that hangs down in back are all that remain.

Xultun Stela 7

References

Illustration. CMHI 5:29; Morley 1937-1938:V:Plate 77a (neither reproduced here).

Discussion. CMHI 5:9-10; Coggins 1994:39, 41, 54; Garrison and Stuart 2004:853-854; Houston 1986:8; Morley 1921:322-324, 1937-1938:I:385-387, 395-397, 419-421; Proskouriakoff 1950:110, 112, 198, 1993:38, 185.

Provenience

Location. Stela 7 was found at the northwest corner of Structure A-4, on the east side of the Xultun Group A plaza (Maps 3, 4).

Date. Houston (1986:8) identifies a date of 9.10.10.0.0 (A.D. 642; see also Garrison and Stuart 2004:854). Coggins (1994:54) tentatively reconstructs two Initial Series inscribed on the sides of Xultun Stela 7: 9.10.0.0.0? and 9.11.0.0.0? (A.D. 633 and A.D. 652).

Description

Primary Figure. Only the merest outline of a standing human form with tasseled footwear, facing front, remains.

Secondary Figures. The outline of a dwarf, standing in right profile at the primary figure's own right side, is all that survives. Enough can be seen of his feet and garment hem to rule out a kneeling or crouching form.

Xultun Stela 8

References

Illustration. Figure 35, after *CMHI* 5:31; Morley 1937-1938:V:Plate 77b.

Discussion. CMHI 5:9-10; Coggins 1994:39, 41, 54; Garrison and Stuart 2004:853-854; Houston 1986:8; Morley 1921:322-324, 1937-1938:I:385-387, 395-397, 419-421; Proskouriakoff 1950:112, 139-140, 151, 198, 1993:38, 99, 142, 185.

Provenience

Location. Xultun Stela 8 stood just south of Stela 7, at the northwest corner of Structure A-4, on the east side of the Group A plaza (Maps 3, 4).

Date. For stylistic reasons, Proskouriakoff suggests a date for Xultun Stela 8 from 9.18.0.0.0 to 10.2.0.0.0 (roughly A.D. 790 to A.D. 870; Proskouriakoff 1950:139-140, 198, 1993:38, 99, 142, 185; see also Morley 1937-1938:I:395-397), which concurs with two dates reconstructed by Houston (1986:8): 9.19.19.7.19 and 10.0.0.0.0 (A.D. 829 and A.D. 830).

Description

Primary Figure. The bottom portion of Stela 8 is marginally better preserved than Stela 7. The feet of a standing, primary figure, facing front, are clear, while there are hints that his head is turned to his right.

Secondary Figures. A dwarf stands in right profile to the right side of the much larger primary figure.

Physical Description. Just enough remains to guess that his head makes up roughly a third of his height, with short arms and legs.

Attire and Accessories. A peaked headdress may be indicated, as well as a loincloth, tied or looped over in front with loose ends hanging down, and a lower garment.

Xultun Stela 10

References

Illustration. Figure 36, after CMHI 5:37; Kelemen 1946:Plate 70b; Mayer 1986:Figure 1; Morley 1937-1938:V:Plate 80b; Schele and Freidel 1990:Figure 10:8b; Proskouriakoff 1950:Figure 76c, 1965:Figure 11, 1993:189; Sharer 1994:Figure 14.17.

Discussion. CMHI 5:9-10; Coggins 1994:39, 41, 54; Garrison and Stuart 2004:853-854; Grieder 1962:291; Houston 1986:8; Kelemen 1946:120; Mayer 1986:213, 223; V. Miller 1985:148; Morley 1921:322-324, 1922:362, 1937-1938:I:385-387, 415-420; Proskouriakoff 1950:151, 198, 1965:488, 1993:184, 188; Schele and Freidel 1990:392; Sharer 1994:653.

Provenience

Location. Stela 10 once stood in front (east) of Morley's Structure VI and von Euw's Structure A-14, the main building on the west side of the Group A plaza at Xultun (Maps 3, 4). It disappeared some time during late 1974 or early 1975.

Date. Two dates are reconstructable for Xultun Stela 10: 10.1.13.7.17 and 10.3.0.0.0 (A.D. 862 and A.D. 889). Like Stela 3, these probably record the birth of the ruler shown and the k'atun ending when the monument was erected.

Description

Primary Figure. A well-preserved lord stands facing front, a scepter held in the crook of his left elbow. Taube (1992:77-78) identifies the deity represented by the scepter as a composite of God K (or K'awiil) and Chaak. The primary figure's head, which makes up roughly a fifth of his height, is turned to his right to face the small cat that he holds up in his right hand.

Secondary Figures. Morley (1937-1938:I:417-418) noted the "subsidiary human figure" in the corner of the scene, but suggested he was sitting or kneeling. He stands in right profile to the right of the primary figure.

Physical Description. His head is about a third of his height, with a full nose, lips, and chin. His limbs are quite short, especially the upper

segment of the arm. Some attempt may have been made to depict a short, broad hand with stubby fingers, and he has a protruding abdomen. He is about a third as tall as the primary figure of the scene.

Attire and Accessories. This dwarf wears a well-preserved headdress of the double-peaked style, with the lower, front peak divided in two and ornamented, perhaps with knots or beads, and the higher, back peak pointing up and forward. Additionally, he wears an earspool, a loincloth around his waist, knotted or looped in front, and a lower garment over his hips, hanging down in back. Its spots match those of the cat held by the primary figure, which might be an ocelot, a margay, or the cub of a cougar or jaguar (see Lower Garments under Attire in Chapter 4). The dwarf holds two long, somewhat pointed objects.

Xultun Stela 22

References

Illustration. CMHI 5:77, not reproduced here.

Discussion. CMHI 5:9-10; Coggins 1994:39, 41, 54; Garrison and Stuart 2004:853-854; Morley 1921:322-324, 1937-1938:I:385-387, 397-398, 419.

Provenience

Location. Xultun Stela 22 consists of the broken-off base of a monument set only 46 cm behind Stela 3, in front of Structure A-2, on the north side of the Group A plaza (Maps 3, 4).

Date. Morley (1937-1938:I:397-398) tentatively suggests 9.10.0.0.0??? (about A.D. 535) and Coggins (1994:54), 9.12.0.0.0?? (A.D. 672). For reasons explained in Chapter 5, 9.12.0.0.0 is likely correct for Xultun Stela 22.

Description

Primary Figure. Only the feet of a front-facing, primary figure remain.

Secondary Figures. Outlines show a dwarf, in right profile, to the right of the primary figure. Traces of a loincloth around the waist, possibly supporting a mask in front, and the tail of a garment hanging down in back are all that is left.

Xultun Stela 23

References

Illustration. CMHI 5:79-80, not reproduced here.

Discussion. CMHI 5:9-10; Coggins 1994:39-41, 54; Garrison and Stuart 2004:853-854.

Provenience

Location. Stela 23 was the westernmost of a line of three monuments with Stelae 24 and 25, set in front (north) of Structure A-23, outside the southeastern corner of the Xultun Group A plaza (Map 3).

Date. Coggins (1994:54) proposes a date of 9.17.0.0.0?? (A.D. 771) based on Xultun Stela 23's similarities of style with nearby Stelae 24 and 25 as well as on conjecture that they celebrated consecutive period endings.

Description

Primary Figure. Although only the feet, head, and one hand of the primary figure remain, they indicate a person standing, facing front, with head turned to his right, holding some composite creature in his right hand.

Secondary Figures. Just enough of an outline survives to indicate a dwarf, standing on the primary figure's right side, in right profile, including what might be the end of a loincloth in front of a foot.

Xultun Stela 24

References

Illustration. Figure 37, after *CMHI* 5:84; Coggins 1994:Figure 13.

Discussion. CMHI 5:9-10; Coggins 1994:39-41, 54; Garrison and Stuart 2004:853-854; Houston 1986:8.

Provenience

Location. Xultun Stela 24 was sited between Stelae 23 and 25 in front (north) of Structure A-23, outside the southeastern corner of the Group A plaza (Map 3).

Date. The only one of the three in line to carry a clear date, Xultun Stela 24 reads 9.16.10.0.0 (A.D. 761).

Description

Primary Figure. The best-preserved primary figure of the three monuments in line stands, facing front, holding a small cat in his right hand and a serpent over his left arm, his head turned to face right. His head is approximately a sixth to a fifth the height of his body.

Secondary Figures. A very small, poorly preserved dwarf stands in right profile, facing the primary figure, on his right.

Physical Description. With some guesswork, his head can be estimated to be about a third his height. His total height is from a fifth

to a fourth that of the primary figure. Though his face is eroded, his arms and legs are short.

Attire and Accessories. This dwarf wears a tall, curved headdress; based on its similarity to the headdress worn by the dwarf on Caracol Stela 1 (Figure 8), it may be tied around with a flower bud, now lost to erosion. He also wears an earspool with central, tubular projection, a lower garment with trimmed hem, and possibly an anklet. A single pattern of three dots could be taken to indicate jaguar fur, but the spots on the small cat, held over the dwarf's head by the primary figure of the scene, are quite different.

Xultun Stela 25

References

Illustration. Figure 38, after *CMHI* 5:88.

Discussion. CMHI 5:9-10; Coggins 1994:32-33, 39-41, 54; Garrison and Stuart 2004:853-854; Houston 1986:8.

Provenience

Location. Stela 25 was the easternmost of a line of three monuments with Stelae 23 and 24, set in front (north) of Structure A-23, outside the southeastern corner of the Xultun Group A plaza (Map 3).

Date. Based on the style of the three stelae in line and the supposition that they marked consecutive period endings, Coggins (1994:54) suggests a date of 9.17.10.0.0 or 9.18.10.0.0 (A.D. 780 or A.D. 800) for Xultun Stela 25.

Description

Primary Figure. Like those on Stelae 23 and 24, the primary figure stands facing front, with his head turned to his right toward the small cat that he holds up in his right hand. His head makes up between a sixth and a fifth of his body. A snake drapes over his left shoulder.

Secondary Figures. To the right of the primary figure stands a dwarf, in right profile, holding his left hand up and his right hand out.

Physical Description. The best-preserved secondary figure of the three in line, his head makes up from a fourth to a third of his body. His upper profile shows a bulging forehead, depressed nasal bridge, short nose, small features, and prominent chin. His legs and the upper part of his arms are quite short. His hands are broad with three short fingers on each, and he has a protruding abdomen. His stature is between a fourth and a third that of the primary figure.

Attire and Accessories. This dwarf's elaborate headdress includes double peaks, the shorter in front and the taller in back, folded backward in a Z shape, as well as other elements. He wears an earspool with a central projection and a wide bracelet or cuff. Two garments with

trimmed borders feature tails that hang down, the upper one a short cape over the shoulders and the lower one, edged with fringe or brocade, over the hips. In between the two is a loincloth knotted in front with loose ends hanging. As in the case of Stela 24, the lower garment is marked with sets of three dots in a triangle. No spots at all are found on the cat held above (though this part of the stone is worn), so it is difficult to identify what animal these marks are meant to represent. In his left hand, he holds what looks like a flower and in his right hand, something with rounded ends.

Yaxchilan Hieroglyphic Stair 2 Step VII

References

Illustration. Figure 39, after CMHI 3:160; de la Garza and Izquierdo 1992:344-345; Foncerrada de Molina 1976:Figure 5; Kurbjuhn 1985:Figure 9; Martin and Grube 2000:130; Mathews 1989:Figure 7-26; M. Miller and Houston 1987:Figure 8; V. Miller 1985:Figure 27; Montgomery 2000:JM01604; Schele and Freidel 1990:Figure 7:7; Schele and Miller 1986:Figure VI.7; G. Stuart and G. Stuart 1983:62; Tate 1992:Figures 18e, 111.

Discussion. CMHI 3:155; Cohodas 1991:267-269; de la Garza and Izquierdo 1992:346-350; Foncerrada de Molina 1976:48-49; Freidel et al.

1993:358-361, 485, 486; Hellmuth 1986:282, 443-444; Houston 1992:527-529; Kurbjuhn 1985:166, 168; Martin and Grube 2000:130; Mathews 1989:205-206, 210, 227-229; Mayer 1986:214, 223; Milbrath 1999:267-268, 300-301; M. Miller and Houston 1987:53-56, V. Miller 1985:148, 152; Proskouriakoff 1993:118-119; Schele and Freidel 1990:283, 430, 481, 1991:290-294; Schele and Miller 1986:249; Tate 1992:52, 96-97, 130-131, 1995:62.

Provenience

Location. The scene is carved on the riser of the seventh and central of thirteen blocks that formed a single, wide step (Hieroglyphic Stair 2) across the top of the Structure 33 platform. Structure 33 was at the top of a grand staircase, more or less central to Yaxchilan.

Date. Schele and Miller (1986:249) refer to the date that accompanies Step VII's scene as "one of the greatest numbers in Classic Maya inscriptions." It consists of eight 13s before a Long Count: 13.13.13.13.13.13.13.13.13.13.6.9 (an anniversary of A.D. 744).

Description

Primary Figure. Bird Jaguar IV (Bird Jaguar the Great, Yaxun Balam IV) is on one knee in the posture of a ball player, turned to his right and to the oncoming ball.

Secondary Figures. The ball that Bird Jaguar IV faces is inscribed with the body of a captive. Behind Bird Jaguar, two paunchy dwarves stand in left profile, slightly crouching.

Physical Description. Unfortunately, the profiles of both dwarves are erased, and because the dwarves have their knees bent, it is not possible to measure the proportion of their heads to their bodies. It is clear, however, that their heads and torsos are large relative to their arms and legs. Both have round, protruding abdomens.

Attire and Accessories. The dwarf nearest Bird Jaguar IV seems to wear a cap with a plume coming out the top, while the far dwarf has a forehead band with a snake coming out the top (similar to the snake head next to the dwarf on Caracol Stela 4; Figure 9). Tate (1992:52) refers to the ear ornament of the dwarf nearest Bird Jaguar as a "GI shell earplug"; Freidel and Schele identify it as the "shell earflare of Chak" (Freidel et al. 1993:360-361). The far dwarf wears an earspool with a central, tubular, projecting element. Both wear bead necklaces that hang down their backs as well as bead bracelets and anklets. In contrast to almost all other dwarves, they seem to be naked but for loincloths. The star or Venus signs behind their arms as well as what appear to be tails are discussed in Chapter 6.

Summary

Assumptions about dwarves' roles in ancient Maya courts and their association with other icons and elements of Classic Maya society can now be tested against the compiled data: 45 short-statured individuals in 42 scenes on 40 monuments. The definition of the dwarf motif. addressed in the next chapter, rests on the elements of proportion, position, apparel, and accessories observed above. Spatially, the 16 sites dwarf-motif sites represent five areas: the northern lowlands (Savil, Tzum, Acanmul, Santa Rosa Xtampak); what is now Campeche (Oxpemul, Calakmul, Uxul, La Milpa); the Peten (Xultun, El Peru, Tikal, Motul de San José); the foothills of the Maya Mountains (Caracol); and the Usumacinta drainage (Yaxchilan, Dos Pilas). Monuments rendering the dwarf motif span the A.D. seventh, eighth, and ninth centuries. Of this depth and breadth of data the next chapter now asks: what elements of costume characterize dwarves? Do all the examples represent achondroplasia, or are other stature-reducing conditions illustrated? Is there significance to what the dwarves hold in their hands? Can a dwarf be recognized by facial profile alone? How much does dwarves' stature, relative to the primary figures of the monuments, vary over time? What other secondary figures appear with them? And perhaps most interestingly, what significance could dwarves have held for the Classic Maya?

CHAPTER 4

ANALYSIS OF DWARF ICONOGRAPHY

As discussed in Chapter 1, the dwarf motif is defined in two ways: biologically and culturally. The medical community provides a process (outlined in Chapter 2) by which to identify stature-limiting conditions.

Physical Attributes

Following the diagnostic procedure described in Chapter 2, the first step in the analysis of the illustrations of disproportionate short stature catalogued in Chapter 3 is to decide: how short is short? Modern medical science has established an arbitrary limit, below which adult stature is considered reduced. Because the present data are in the form of artistic renditions of disproportionate short stature, it is necessary to compare each depiction of a dwarf to the primary figure on the same monument.

Relative Statures of Primary and Secondary Figures

Less than half of the monuments in the catalog are sufficiently preserved to estimate the ratio of the height of the secondary figure to that of the primary figure, and of all the measurements, this is the most variable. Secondary figures are anywhere from a fifth to nearly a half the

height of primary figures (expressed as percentages on Figure 40) with no detectable spatial or temporal pattern. Reents-Budet (1985:23) finds that the secondary figures on Holmul-style polychrome cylindrical vases are about half as tall as the primary figures. Height (or lack thereof) is not sufficient, however, to label a short-statured person a 'dwarf,' given that the Maya, like other ancient artists, recorded persons at varying scales to indicate their relative importance (Caso 1942:44; Covarrubias 1942:46-47; Dasen 1988:254, 265, 1993:36-45; Foncerrada de Molina 1976:45-47; Greene Robertson 1985:III:63; Sampsell 2001:62-63; Weeks 1971:149-150, 188).

The second step is to separate proportionate short stature from disproportionate. To do this, we compare the proportions of the primary figures, as carved on the stelae and lintels, to the proportions of the secondary figures.

Relative Proportions of Primary and Secondary Figures

Proportions of Primary Figures. Referring to Stela 3 at Xultun, erected on 10.1.10.0.0 (A.D. 859), Morley (1937-1938:I:415) notes, "the human figure has at last assumed natural proportions." In describing the individuals portrayed on the monuments of Yaxchilan, Tate (1992:37) reports, "the head itself is about one-ninth of the figure. … The figures are of naturalistic proportion, certainly more so than any other Classic or Postclassic Mesoamerican figures" (compare, however, Spinden 1913:158).

Of the stelae that render the dwarf motif, less than half picture primary figures whose proportions can be reconstructed.

During the earlier part of the iconographic record of the dwarf motif, from 9.8.0.0.0 (A.D. 593) to 9.16.5.0.0 (A.D. 756), the proportion of head to body varied quite widely for the primary figures for whom we have data, from just over a seventh to under a quarter. During the later part, from 9.16.10.0.0 (A.D. 761) to 10.3.0.0.0 (A.D. 889), the variation narrowed, and primary figures have heads that average about a fifth of their height (expressed as percentage on Figure 41). Stelae 14 and 15 from Dos Pilas are two of the three with the most naturalistic proportions, that is, the heads of the primary figures make up the smallest percentage of total height (Figures 17, 18). Calakmul Stelae 16 and 89 are two of the three at the opposite extreme, exhibiting primary figures whose heads form between a fifth and a fourth of total height (Figure 7). Of the measurable monuments, over half show primary figures with heads that make up from over a sixth of their total height to just over a fifth.

Proportions of Secondary Figures. Secondary figures fare somewhat better in terms of preservation, as about two-thirds of them have reconstructable proportions (only short-statured secondary figures are shown on Figure 41; Tzum Stela 5 is not included because it is undated). The secondary figures have heads that range from less than a quarter of

total height to over a third. Of the measurable secondary figures, 80 % have heads that average about a third of their total stature. Although no geographical pattern is evident, the monuments from Xultun, which tend to be later in the archaeological record, are the most consistent in terms of the secondary figures' proportions.

Three of the secondary figures have heads that make up a quarter or less of their stature, a proportion that approaches that of primary figures: those on Caracol Stelae 11 and 21 as well as the front of La Milpa Stela 4; these will be discussed below (Figures 14, 16, 21). At the interface of the head-to-body ratios for primary and secondary figures are two cases that overlap: the secondary figure on Caracol Stela 21, whose head is between a fifth and a fourth of his height, and the primary figure on the lintel from Structure 5D-52 at Tikal, whose head is almost a quarter of his or her height (Figures 16, 30). The primary figure on the Tikal lintel is one of two outliers at the upper limits of head-to-body ratios. The other is the secondary figure on Tzum Stela 5, with a head that is between a third and a half of his or her body (not shown on Figure 41 because it is undated). In both cases, damage to the monument affects measurement, and both figures, one primary and one secondary, wear garments that might belong to women (see Structure 5D-52 Lintel under Tikal in Chapter 5).

In summary, primary figures have a head-to-body ratio that averages between one to five and one to six, while secondary figures have a head-to-body ratio that averages one to just over three, indicating that secondary figures, as a class, are disproportionate relative to the primary ones. The consistency of the dwarf motif over time and space, with regard to height relative to primary figures as well as head-to-body proportion, could indicate a degree of standardization among the polities rendering dwarves, or, as discussed above in biological terms, it could reflect the remarkably consistent phenotype that achondroplasia produces (Figures 1, 2b).

Other Physical Characteristics

Limbs. In biological classification, once stature is determined to be truly short and disproportionate as well, those that are short limbed are sorted from those that have short torsos. Whereas specialists compare various measures of the human body, obviously the present data limit the method to observation only. Upper limbs are not visible in a quarter of the monuments illustrating dwarves, and only partly visible in another quarter of the examples. Of the remaining half, in all but a few instances, the dwarves' elbows are above the level of their waists, or their hands only reach to the level of their hips. Exceptions are the dwarves on Dos Pilas Stela 14 and Xultun Stela 25, the lower part of whose arms are relatively long, as well as the front of La Milpa Stela 4 and the east

column of Sayil Structure 4B1, whose arms are long overall (Figures 17, 21, 26, 38).

In the case of achondroplasia, extending the arm by straightening the elbow is usually incomplete, as on Caracol Stela 9 and Oxpemul Stela 19 (Figures 13, 24). In most cases, dwarves on monuments are standing with their arms bent, a natural pose for holding something out in front of themselves as well as for those with incomplete extension of the elbow (Figure 1). Interestingly, the three representations of dwarves with straightened arms are all from Caracol: Stela 1, the back of Stela 6, and Stela 21 (Figures 8, 12, 16. That Stelae 1 and 6 were placed only half a k'atun apart might cause us to speculate that they are two portraits of a single individual. The dwarf on Stela 1 is shown as having only three fingers on each hand, however, while the dwarf on Stela 6 clearly has four, and the shapes of their right arms are not the same.) Bailey (1971:75) notes that although a block to full elbow extension is almost always present, it is variable and not always symmetrical.

On almost half of the stelae displaying dwarves, the lower limbs are either not visible or only partially visible. The representations that do preserve dwarves' legs show clearly that they are very short, absurdly so in examples such as Dos Pilas Stelae 14, 15, and Motul de San José Stela 4, all probably put up between 9.14.0.0.0 and 9.14.10.0.0 (roughly between A.D. 710 and A.D. 720; Figures 17, 18). One characteristic that

distinguishes achondroplasia from other types of short-limbed dwarfism is that the proximal segment of the limb is most affected. Appendix B presents some types of dwarfism affecting medial and distal limb segments (see Riparo del Romito 2, Italy, under Western Europe; Dorchester and Jarrow Monastery JA 67 NG 2 under England; and Ludos-Csurgó, Serbia under Eastern Europe in Appendix B). On every lintel or stela on which the evidence for shortened limbs is available, the proximal segment of the dwarf's limb is at least as short as, or shorter than, the distal segment.

Facial Profiles. In contrast, while the facial profile of a person with achondroplasia is quite distinctive and fairly consistent (Figures 1, 2b), only a few are accurately recorded on monuments, probably for a number of reasons. One is the problem of preservation: whereas many examples of the conventionalized profile of the Classic Maya elite, formed in infancy by modeling the skull, have come down to us (M. Miller and Martin 2004:25), only a few scenes retain sufficient detail to be able to discern the profile of a dwarf. The dozen or so that have vary widely, even within sites. The facial profiles of the dwarves on Stelae 4 and 5 from Caracol, for example, raised one and a half k'atuns apart, are quite different, and neither is typical of the achondroplastic profile (Figures 9, 10). In some cases, such as Stela 11 at Caracol, the front of Stela 4 at La Milpa, and perhaps the façade of Structure 5D-141 at Tikal, a diagnosis

other than, or in addition to, achondroplasia is likely (Figures 14, 21, 31). Indeed, the only monument that features a facial profile characteristic of achondroplasia is Stela 25 from Xultun (Figure 38).

One thing that does not vary is the difference between the facial profile of the primary figure and those of the secondary figure. In every case in which the profiles of both figures survive and can be clearly seen, they contrast significantly. The single exception is Stela 10 from Xultun, on which the facial profile of the secondary figure is reconstructed; the profiles of the primary and secondary figures differ, but only slightly (Figure 36).

Houston, Stuart, and Taube identify two sculptures, one in wood and one in stone, as depictions of dwarves based on their facial profiles alone (Houston et al. 2006:196). The first is an unprovenienced figure dated both stylistically and by radiocarbon to the middle of the Classic period, though "the style of the sculpture is not ... characteristically Maya" (Ekholm 1964:4). According to Ekholm (1964:10) and Houston et al. (2006:196), the sculpture was modified to hold a mirror (see Durán under European Texts in Chapter 7). While neither the costume nor pose is typical of dwarves, the facial profile is: "bulbous forehead and short snub nose" with depressed nasal bridge (Ekholm 1964:11, 12). The second figure, carved in stone, was recovered in pieces from Structure 9N-82 at Copan and dates to the Late Classic (Schele and Miller 1986:151,

Plate 46). His costume and pose are those of a scribe, not a dwarf. Though his profile is "wide and flat with a flat pug nose," he lacks the bulging forehead and depressed nasal bridge typical of achondroplasia (Schele and Miller 1986:151). In both cases, the postures of the figures reveal that their limbs are too long to be those of dwarves. In particular, a person with achondroplasia could not readily assume these seated positions, with legs folded under and feet either pointed backward or at the opposite knee.

The preceding analysis of the facial features of secondary figures identified on monuments as dwarves makes clear that profile alone is insufficient to interpret a figure as a dwarf. As Schele and Miller (1986:151) point out in the case of the Copan sculpture, the Maya are simply depicting the opposite of the Classic profile so beloved and conventionalized by ancient artists: instead of the nasal profile flowing smoothly from forehead to nose tip, the bridges of these figures' noses are flat or indented, and instead of the pendulous nose end, these are blunt and slightly upturned at the ends. Instead of full, protuberant lips, these figures have thin, flat lips that show teeth between. Instead of large, slanted, almond- or teardrop-shaped eyes, those of the Copan figure are beady: small and round. Rather than representing dwarves, these figures, like Drawings 68 and 83 from Naj Tunich (see Caves under

Other Associations, below; Stone 1995:220, 228), illustrate the antithesis of the Maya ideal of beauty.

Hands. On over half of the monuments that record the dwarf motif, the hands of the dwarf are, for a number of reasons, not visible in detail. On a third of the remaining examples, Classic artists seem to have made little attempt to illustrate dwarves' individual fingers, especially in later scenes (see Reents-Budet 1985:29 for a similar treatment by painters in the Holmul style). On Dos Pilas Stela 14, the front of La Milpa Stela 4, and Xultun Stela 10, the dwarves are holding things – three differently shaped things – in their hands, and their fingers are simply not depicted (Figures 17, 21, 36). On the east column of Sayil Structure 4B1 and Stela 3 at Xultun, the fingers of the dwarves' empty hands are not shown, although those of the primary figures are well rendered (Figures 26, 34). Most of these monuments tend to be toward the end of the iconographic record, from K'atun Seventeen through Bak'tun Ten, or the later A.D. eighth and ninth centuries.

Of the scenes in which dwarves' fingers are pictured, over a third of them are shown with only three fingers and a thumb. Both hands of the dwarf on Caracol Stela 1, set up on 9.8.0.0.0 (A.D. 593), and Xultun Stela 25, probably set up on either 9.17.10.0.0 or 9.18.10.0.0 (A.D. 780 or A.D. 800), are carved this way, though the primary figures on both stelae have a full complement of digits (Figures 8, 38). Both the primary and

secondary figures of Oxpemul Stela 19 have only three fingers, though the right hand of the primary finger also shows a thumb (Figure 24). All that survives of the dwarf on Caracol Stela 4 is his left hand, curled into a fist but showing only three fingers and a thumb (Figure 9). The west column of Structure 4B1 at Sayil, the façade of Structure 5D-141 at Tikal, and possibly the Structure 9 column from Acanmul are very similar in the treatment of the dwarves' left hands: the thumb is divided from the hand, but the fingers are represented by single stroke (Figures 5, 27, 31). The façade from Tikal is interesting because a woman, seated cross-legged on the primary figure's right, and a dwarf, on his left, make the same gesture, the woman showing four fingers but her thumb apparently folded behind her hand. If the dwarf is holding his hand the same way, still only three fingers are pictured.

On nearly two-thirds of the lintels and stelae that portray dwarves with fingers, they have four of them and a thumb. These range in date from the earlier examples of the dwarf motif, such as Caracol Stela 6 positioned on 9.8.10.0.0 (A.D. 603), to the later examples, such as Calakmul Stela 16 situated on 9.19.0.0.0 (A.D. 810; Figure 12). They include Stela 5 from Caracol, Stela 34 from El Peru, and the lintel from Tikal Structure 5D-52, on which dwarves grasp things such as scepters; in each case, the fingers are too short to wrap around the base or handle (Figures 10, 19, 30). On Stela 34 from El Peru in particular, the primary

figure grasps a scepter in her right and a shield in her left with fingers wrapped around, meeting the thumb, unlike those of the dwarf. The two exceptions to the short, broad hands, displayed especially on the back of Caracol Stela 6 and on Caracol Stela 21, are Step VII of Yaxchilan Hieroglyphic Stair 2 and Caracol Stela 11 (Figures 12, 14, 16, 39). The latter can be explained if this monument features a person with a nonachondroplastic type of dwarfism.

One of the most distinctive characteristics of achondroplasia is sometimes called a trident hand, which precludes the sides of fingers touching each other, that is, the fingers cannot be brought parallel when extended. It is most pronounced in childhood and lessens, as the fingers grow, with maturity. Another feature of achondroplasia is variable finger length. Both conditions affect the middle and ring fingers most. Even in adulthood, the hands tend to be short and broad with stubby, splayed fingers (Bailey 1971:75; Nemours 2003-2006). Apparently, Classic Maya artists were attempting to convey the sorts of anomalies of hand shape that characterize achondroplasia by representing fewer fingers as well as a reduction in their length.

Summary

Achondroplasia. Following the process outlined in Chapter 2 for diagnosing stature-diminishing conditions, it is clear that Classic Maya artists were making an attempt to record a rhizomelic form of

disproportionate dwarfism, the most common of which is achondroplasia. On average, dwarves on monuments are about a third as tall as the primary figures. Primary figures have an average head-to-body ratio of one to five, while secondary figures have an average head-to-body ratio of one to three (though there is some overlap at the extremes). The length of both upper and lower limbs is reduced, particularly the upper segment of the arm. One of the most diagnostic features of achondroplasia is the distinctive facial profile, and this the Classic Maya artists seem to have made no effort to reproduce. The facial profiles of the secondary figures, however, do consistently vary from those of the primary figures. Classic Maya artists do appear to have made an effort to illustrate the shape of the hands that is characteristic of achondroplasia by depicting not only broad hands with short fingers, but fewer fingers as well.

As discussed in Chapter 2, there is no reason to assume that the prevalence of achondroplasia has differed markedly from pre-Columbian times to modern times. While there are factors that would drive the frequency of the mutation that causes achondroplasia down, these are balanced by other factors, and perhaps social practices, that would raise the frequency. As achondroplasia accounts for the vast majority of disproportionate short stature currently, we may expect this to be true for Classic Maya society as well. The monumental carvings of dwarves

listed in Chapter 3 are consistent with a diagnosis of achondroplasia, with the exception of Caracol Stelae 11 and 21, the front of La Milpa Stela 4, the east column of Sayil Structure 4B1, and possibly the façade of Tikal Structure 5D-141 (Figures 14, 16, 21, 24, 26, 31).

Nonachondroplastic Forms of Dwarfism. William G. Mackenzie (personal communication April 2006), a specialist in short-statured conditions, suggests to me that the dwarf on Caracol Stela 11 has spondyloepiphyseal dysplasia (SED), a disproportionate dwarfism that produces a short neck, barrel-shaped chest, and short torso without greatly affecting the skull, hands, or feet. This could explain the relatively large size of the dwarf's left hand and the one-to-four proportion of his head height to total height, at the limit of the range for achondroplasia. The extent to which spondyloepiphyseal dysplasia affects the limbs is variable, but spinal curvature is common (Figures 2d, 14; Skämsta Graves 33124 and 41850, Sweden in Appendix B; Adelson 2005a:291; Aufderheide and Rodríguez-Martín 1998:361; Bailey 1973:438-439, 455-456; Nemours 2003-2006; Sillence et al. 1979:839).

Caracol Stela 21 and the east column of Structure 4B1 at Sayil both illustrate secondary figures without characteristics typical of achondroplasia. Caracol Stela 21 (Figure 16) portrays a secondary figure with a head-to-body ratio similar to that of some of the primary figures on monuments that picture the dwarf motif, though erosion of the lower

part of the dwarf's face precludes accurate measurement. The ability to straighten the arm completely, as this dwarf appears to be doing, is generally not present with achondroplasia. He does, however, have broad hands and short fingers. The secondary figure on the Sayil Structure 4B1 east column (Figure 26) has arms, particularly the left, too long for a case of achondroplasia, though his head is certainly large for his body. These secondary figures might be depictions of conditions related to achondroplasia. Hypochondroplasia, for example, appears as though it were a milder form of achondroplasia, with a less distinctive shape of head and hands and a more variable stature: 115 cm to 152 cm. Pseudoachondroplasia is a rhizomelic form of disproportionate dwarfism, affecting the hips and shoulders but not the skull. Stature can be more dramatically restricted than in cases of achondroplasia and more variable than hypochondroplasia: 90 cm to 140 cm (Adelson 2005a:288; Bailey 1973:83, 117-123; Langer et al. 1993:780; Nemours 2003-2006; Rimoin 1975:13-15, 53; Sillence et al. 1979:835, 838-839; Wiedemann et al. 1992:260, 268; Wynne-Davies and Fairbank 1976:24). The most likely diagnosis for the secondary figures on the Caracol and Sayil monuments is hypochondroplasia or pseudoachondroplasia (Figures 2c, 16, 26; see also Necropolis Tomb 2304 #12-5160, Giza in Appendix B; another possibility, in the case of Sayil, is an artist attempting to depict a shortlimbed dwarf without access to a model). Although the body of the dwarf on the façade of Tikal Structure 5D-141 is typical of a person with achondroplasia, the profile might indicate another type of chondrodystrophy in addition (Figure 31).

La Milpa Stela 4 is estimated to date to approximately 9.17.10.0.0 (about A.D. 780). The front renders a secondary figure that, if seen in isolation and not relative to a primary figure, would not necessarily be judged a dwarf biologically (Figure 21). His head-to-body ratio, though at the limit, is within the range of that of the primary figures on dwarf-motif monuments (see, for example, the lintel of Tikal Structure 5D-52; Figure 30). His profile is nonachondroplastic and, though his torso is stocky, the length of his limbs is not dramatically reduced, and the upper and lower segments are in proportion. Though his headdress and jewelry are typical of dwarves, similar accessories are found on primary figures as well. He is attired somewhat differently than other dwarves and is the only one known so far to hold a ball. Only his size and position on the monument, relative to the primary figure, prompt his identification as a dwarf.

The two sides of Stela 4 from La Milpa are interesting when compared to the two columns of Structure 4B1 from Sayil (Figures 21, 22, 26, 27). Though none are textually dated, all three monuments were likely created between about A.D. 750 and A.D. 800 (Carmean 1990:225; Grube and Hammond 1998:131; Jeremy A. Sabloff, personal

communication July 2006). In both cases, the two scenes are mirror images in terms of the relative positions of the primary and secondary figures. One secondary figure of each pair is more proportionate than the other: on the front of La Milpa Stela 4 and the east column of Sayil Structure 4B1, the proportions of the secondary figures approach those of average stature (though the secondary figure from Sayil does have a disproportionately large head); they have arms longer than what would be expected if achondroplasia were being depicted. On the back of La Milpa Stela 4 and the west column of Sayil Structure 4B1, however, the secondary figures have larger heads and shorter limbs, that is to say, they are less proportionate than their mirror images. If La Milpa Stela 4's two sides and Sayil Structure 4B1's two columns each depict the same short-statured individual, did their sculptors use the opportunity presented by the second likeness to portray the dwarf more accurately?

All of these cases, particularly the secondary figures on Caracol Stelae 11 and 21 (Figures 14, 16), have other, cultural characteristics that identify them as dwarves, and to these we now turn.

Cultural Attributes

Primary Figures

On three of the four lintels that exhibit dwarves from Tikal, the

primary figure is seated on a throne: Jasaw Chan K'awiil I (Tikal Ruler A, Ah Cacao), in Structure 5D-1 (Temple I); his son, Yik'in Chan K'awiil (Tikal Ruler B, Yaxkin Caan Chac) in Structure 5C-4 (Temple IV); and the central, cross-legged figure on the façade of Tikal Structure 5D-141 (Figures 28, 29). On Step VII of Hieroglyphic Stair 2 at Yaxchilan, Bird Jaguar IV (Bird Jaguar the Great, Yaxun Balam IV) is on one knee, one arm thrust out behind him, leaning toward the oncoming ball; Uxul Altar 2 presents a similar scene (Figures 33, 39). Both primary figures on Stela 2 from Motul de San José have one or both heels raised in 'dancing'. The west column of Sayil Structure 4B1 and Tzum Stela 5, as will be discussed more fully below, feature a primary figure with one or both heels raised (Figures 27, 32). All of the other monuments that display the dwarf motif, as far as the evidence is preserved, show primary figures standing with both feet firmly on the ground.

Nearly a quarter of the scenes that record the dwarf motif are too damaged to ascertain what accessories the primary figures might be carrying. Another quarter of the monuments come from Caracol, where, for at least 10.5 k'atuns, rulers were illustrated carrying the ceremonial bar, from Stela 1, put in place on 9.8.0.0.0 (A.D. 593), to Stela 11, placed on 9.18.10.0.0 (A.D. 800), possibly as late as 10.0.0.0.0 (A.D. 830). Stelae 4, 8, and 19 are insufficiently preserved to determine whether they depict a ceremonial bar or not, though Stelae 8 and 19 retain traces that, by

iconography and position, would be appropriate for the termini of ceremonial bars. If accepted, these cases would extend the temporal range another k'atun and a half, from possibly as early as 9.7.10.0.0 (A.D. 583) to 9.19.0.0.0 (A.D. 820). On the back of Stela 6, Yajaw Te' K'inich II (Caracol Ruler III, Lord Water, Lord Muluc, Kan Cross I) carries a shortened version in his left arm and an eccentric flint in his right hand (see Scepters under Accessories, below). Only one dwarf-motif monument that is not from Caracol shows a ceremonial bar: the façade of Structure 5D-141 at Tikal, which can be dated only to the Late Classic period (Figures 8, 9, 12, 14, 15).

Monuments that are too damaged to ascertain what accessories the primary figures carry, and those that show the ceremonial bar, together account for nearly half of the iconographic record. Of the remaining half, all but a few render lords or ladies with round shields, either carried in the left hand or worn on the left arm. Shields, carried by primary figures, are found on dwarf-motif monuments for nine and a half k'atuns, from 9.9.10.0.0 (A.D. 623) to 9.19.0.0.0 (A.D. 810). They are geographically widespread, from Sayil in the north to Dos Pilas in the south and from El Peru in the west to La Milpa in the east. In several cases (Dos Pilas Stelae 14 and 15, El Peru Stela 34, La Milpa Stela 12, Tikal Structure 5D-1 Lintel 3), the primary figure is holding the back of the shield toward the viewer (Figures 17-19, 23, 28). The primary figures on the east and west

columns of Sayil Structure 4B1 hold shields with plain faces, though trimmed perimeters (Figures 26, 27). One of the shields from Calakmul, on Stela 16, is only partially preserved, while Stela 29 from Calakmul and Lintel 3 from Tikal Structure 5C-4 have shields bearing geometric designs (Figures 6, 29). Shields bearing the cruller-eyed Jaguar Sun face are carved on Calakmul Stela 89 and the Tikal Structure 5D-52 lintel (Figures 7, 30). These two monuments bear dates just half a k'atun apart: 9.15.0.0.14 (A.D. 731) and 9.15.10.0.0 (A.D. 741), respectively.

The combination most frequently held by primary figures is a shield in the left hand and a scepter in the right. The scepter usually bears the image of the deity K'awiil, as on Calakmul Stela 89, Dos Pilas Stelae 14, 15, the Santa Rosa Xtampak panel, Tikal Structures 5D-1 Lintel 3 and 5D-52, as well as possibly Calakmul Stela 16 and Oxpemul Stela 19 (Figures 7, 17, 18, 24, 25, 28, 30). Most of these monuments are within two and a half k'atuns of each other, from 9.13.3.0.0 (A.D. 695) to 9.15.10.0.0 (A.D. 741). J. Miller (1974:154) and Wanyerka (1997:80) identify the object in the right hand of the primary figure on El Peru Stela 34 as the bow and serpent scepter, associated with world-tree imagery and accession rites, perhaps a battle standard (Figure 19). The primary figure on Stela 12 at La Milpa holds a staff (identified as a lancet by Grube 1994b:220) and shield, that on the west column of Structure 4B1 at Sayil a plain staff and shield, and that on Lintel 3 of Structure 5C-4 at

Tikal, a decorated staff and shield (Figures 23, 27, 29). Only on Calakmul Stela 29 does a 'scattering' gesture by the primary figure accompany a shield (Figure 6). Primary figures on Xultun Stelae 3 and 10 each hold a small cat in the right hand and, in the left arm, a scepter representing a deity that Taube (1992:77-78) identifies as a composite of God K (or K'awiil) and Chaak (Figures 34, 36). Similarly, the primary figures on Xultun Stelae 24 and 25 each hold a cat in the right hand and a serpent draped over the left arm (Figures 37, 38).

Relative Positions of Primary and Secondary Figures

A consistent trait is the dwarf's position relative to the primary figure. In 64% of the dwarf-motif scenes, the dwarf stands on the right side of the primary figure. In all of these cases in which the evidence survives, the dwarf faces the primary, central figure, and the primary figure faces him. The sole exception is the east column of Sayil Structure 4B1, on which the dwarf on the primary figure's right faces away from him; this might be attributed to regional style (Figure 26). Stela 19 from Oxpemul is also variable: although the secondary figure's head is turned toward the primary figure, his feet are pointing away (Figure 24). On every monument on which the dwarf stands to the primary figure's right, with the exception of Stela 5 at Tzum, which portrays an individual seated on the left side, no other human form appears on the monument save for bound captives below the lord's or lady's feet (Figure 32). The

dwarves on two stelae from Dos Pilas, 14 and 15, are opposed by birds on the primary figure's left side (Figures 17, 18). The presence of other secondary figures, of average proportion, is discussed below.

In 22 % of the dwarf-motif scenes, the dwarf stands on the primary figure's left in one of two circumstances: he has been displaced by another secondary figure, or a scene with a dwarf on the left is balanced by a scene with one on the right. On Stelae 4 and 21 from Caracol, a captive sits on the primary figure's right (Figures 9, 16; also noted by Coggins 1994:32). On Caracol Stela 5, Motul de San José Stela 2, and the Tikal Structure 5D-141 façade, a secondary figure of average stature is on the primary figure's right (Figure 10). On Stela 4 from Caracol, Stela 4 from La Milpa, and Stela 2 from Motul de San José, it is unfortunately impossible to tell which way the primary figure is facing (Figures 9, 21, 22). On Caracol Stelae 5 and 21, the primary figure turns toward the secondary one on his right, who has displaced the dwarf to his left (Figures 10, 16).

The other configuration in which dwarves appear on the primary figure's left side is a pair of mirror images, seen on the front and back of La Milpa Stela 4, the east and west columns of Sayil Structure 4B1, and Lintel 3 of Tikal Structure 5C-4 (Figures 21, 22, 26, 27, 29). As the east column at Sayil is the only scene with a dwarf on the primary figure's right yet facing away, so the west column is the only example of a dwarf

on the primary figure's left, to which the primary figure has turned to face him. Similarly, on one of the columns associated with Structure 9 at nearby Acanmul, the primary and secondary figures face each other, but the dwarf stands on the primary figure's left side (Figure 5). This scene was likely balanced by either another secondary figure on the primary figure's right or by another column with a secondary figure on the primary figure's right. Thus, Stela 12 from La Milpa is the only case known to date of a dwarf, if indeed this is a dwarf, on the left side of a primary figure with no corresponding figure on his right nor any carving on the back of the stela, and the primary figure turned to his own right, away from the dwarf (Figure 23). The singularity of this positioning casts doubt on the already speculative presence of a dwarf.

The remaining 14 % of the dwarf-motif scenes present other configurations. Two lintels from Tikal, in Structures 5D-1 and 5D-52, picture a primary figure seated on a throne seen from the side, with the primary and secondary figures facing each other directly, both in profile (Figures 28, 30). On the Structure 5D-52 lintel, the dwarf appears on the viewer's left side of the scene, and on the Structure 5D-1 lintel, he appears to the viewer's right. In ball-game settings, the primary and secondary figures on Uxul Altar 2 and Step VII of Yaxchilan Hieroglyphic Stair 2 are facing in the same direction, turned to their right sides (Figures 33, 39). Although these are the only two cases in which the

dwarves are actually behind the primary figure, these scenes are parallel to those in which a captive, faced by the primary figure, has displaced the dwarves to the left. At Yaxchilan, the captive's bound form appears on the ball. Though the evidence has not been preserved, Uxul Altar 2 probably presented a similar configuration. While it is difficult to determine what the original positions of the figures on the Santa Rosa Xtampak panel may have been, it seems that both dwarves as well as the primary figure are turned to their right sides there, as well (Figure 25).

The primacy of the right side for the Maya is documented both archaeologically and ethnographically. Coggins demonstrates that east was the honored position, associated with the rising sun, depicted on the right (Coggins 1980:728-729; see also Schele and Freidel 1990:66).

Analyzing the orientation of monuments and structures at Yaxchilan, Tate (1992:37, 142) and Robin (2001:213-216) discover that persons portrayed thereon consistently have the rising sun, or east, on their right. The significance of the eastern direction in Maya architectural spatial patterning is well attested through Ashmore's work (1986:40-43, 1989:272-273, 1991:200-201, 1992:174; see also A. Chase 1991:38). Palka (2002:423, 426) demonstrates that in ancient Maya scenes, primary figures reach out to their own right, while secondary figures, such as dwarves, approach the primary figure's right side by turning to their own left. Gossen (1972:138-142) notes that in one community of Tzotzil Maya

in the central Chiapas highlands, participants in ritual replicate the path of the sun by beginning in the east and moving north, then west. If, as Schele and Freidel (1990:88, 144-145) suggest, Maya public art recorded lords and ladies in ritual performance, then dwarves are an important counterpoint, opposite the rulers in stature, comeliness, and position. Most display their own right or 'honored' side of the body to the viewer and stand on their rulers' right, yet turn toward their own left and frequently gesture or hold an object up in the left hand.

Headdresses

About 70 % of the monuments that retain evidence of the headgear that dwarves wear exhibit a headdress with one or more points or peaks of some sort at the top or the front. Usually these appear to be made of a soft, flexible material, like fabric, while a few seem to be made of something more rigid, like wood or fiber. Examples of the latter are Caracol Stela 1, set in position on 9.8.0.0.0 (A.D. 593), Caracol Stela 21, set in position on 9.13.10.0.0 (A.D. 702), and Xultun Stela 24, set in position on 9.16.10.0.0 (A.D. 761). All three have a stiff peak that curves from the back toward the front and a narrow band around the base. From the evidence on Caracol Stela 1, a flower bud is fastened around it (Figures 8, 16, 37).

The remaining headwear on dwarves cannot be sorted into neat categories, as they combine the common features in a variety of ways.

Calakmul Stela 16, for example, has what might be a flower bud tied around the base, as on the rigid headdresses described above, but also has a soft peak or peaks, as though of fabric. It has a puffy appearance, as though it were stuffed or padded inside. A similar headdress with a single puffy peak from Calakmul is found on Stela 29, as well as on Caracol Stela 11, Dos Pilas Stela 14, and the lintel of Tikal Structure 5D-52 (Figures 6, 14, 17, 30; Corson 1976:38 found a similar form of headdress on Jaina dwarf figurines; see also Halperin 2005:Figure 10a). The two from Calakmul are the earliest, dated 9.9.10.0.0 (A.D. 623), and the latest, dated 9.19.0.0.0 (A.D. 810). All of these except for Calakmul Stela 29, which is very poorly preserved, display a band tied around the base of the headdress. The stelae and lintels from Caracol, Dos Pilas, and Tikal feature the ends of the knotted ties sticking out or hanging down from the back of the headdress.

Dwarf headgear on stelae from Xultun has a double band around the base of the headdress that seems to produce shorter peaks or projections in front and a taller one in back. Particularly on Stelae 3 and 10, the band appears to be knotted or perhaps threaded through large beads, a design also found on Caracol Stela 11 and Dos Pilas Stela 14 (Figures 14, 17, 34, 36). Xultun Stela 8 also gives the impression of two peaks, though the carving is eroded there (Figure 35). The monuments of Xultun tend to be late in the iconographic record; these are from Bak'tun

Ten. The headdresses worn by the dwarves on both sides of La Milpa Stela 4 also appear to be divided into two peaks, a taller one behind and a shorter one in front, though no evidence of a tie or band survives (Figures 21, 22).

An elaboration of the double-peaked headdress, which Proskouriakoff (1993:81) described as "a tall white band of fabric projecting forward and doubled back at the peak" and I am calling a Z shape, is most clearly seen worn by both the primary and secondary figures on Calakmul Stela 89 as well as by the dwarf on El Peru Stela 34 (Figures 7, 19). Dwarves at several other settlements also wear this style: Dos Pilas (Stelae 14 and 15), La Milpa (the back of Stela 4), Motul de San José (Stela 2), Oxpemul (Stela 19), and Xultun (Stela 25). Half the examples are poorly dated, but the style persists from 9.13.0.0.0 at least through 9.16.5.0.0 (A.D. 692 through A.D. 756) and quite possibly until 9.18.10.0.0 (A.D. 800). Caracol Stela 9 may also be a variation of this shape (Figures 13, 17, 18, 22, 24, 38).

Less commonly, dwarves wear headdresses with feathers sticking out, such as those on the panel of the Santa Rosa Xtampak palace, the columns of Sayil Structure 4B1, the façade of Tikal Structure 5D-141, and Stela 5 of Tzum (Figures 25-27, 31, 32). The dwarf at Yaxchilan, nearest Bird Jaguar IV on Hieroglyphic Stair 2 Step VII, may also sport a feather from the top of his hat (Figure 39). The headwear on the Santa Rosa

Xtampak panel, the Tikal Structure 5D-141 facade, and possibly the Acanmul column is most alike, appearing to be headbands of twisted textile (Figures 5, 25, 31). Dwarves on Stela 5 from Caracol, the columns of Structure 4B1 from Sayil, and Stela 5 from Tzum wear headbands of striped fabric or rectangular panels (Figures 10, 26, 27, 32). Though incomplete, the headdresses which dwarves wear on the front of Caracol Stela 6 and Tikal 5D-1 Lintel 3 are of comparable design (Figures 11, 28). On Step VII of Hieroglyphic Stair 2 at Yaxchilan, the dwarf on the far side of Bird Jaguar IV does not seem to be wearing a headdress as such, but perhaps a headband of some sort with a small snake, like the one near where the dwarf's head would be on Caracol Stela 4 (Figures 9, 39). A single monument represents dwarves without headdresses: Lintel 3 of Tikal Structure 5C-4. Both dwarves wear animal-head masks over their own heads instead (Figure 29).

Thus, while headgear worn by dwarves varies, and neither clear trend through time nor pattern across space governs headdress design, some common elements are: one or two peaks or points, projecting up and forward, either stiff or soft; a band tied around the base of the headdress; and sometimes, a rear peak that is folded backwards to form a Z shape. Corson, in his study of Jaina figurines, finds that "turban headdresses appear characteristic of dwarfs," but only for a restricted period of time and with great variation (1973:61, 1976:37-39; see also V.

Miller 1985:143). In a recent analysis of figurines from Motul de San José, Halperin (2005:Figures 10, 29) illustrates peaked headdresses with banded bases on figurine heads that she identifies as representing dwarves.

Attire

Fringed Capes. One article of clothing restricted in both time and space is seen best on the surviving beam of Tikal 5D-1 Lintel 3. Dwarves, on all three lintels at Tikal and both stelae at Dos Pilas that depict dwarves, wear the fringed collar or short cape (Figures 17, 18, 28-30). These portrayals cluster fairly tightly in time between 9.13.3.0.0 and 9.15.15.0.0 (A.D. 695 and A.D. 746). The short cape appears on no other monuments that record dwarves, though the one on Stela 25 at Xultun is wearing a similar garment (Figure 38). The dwarf on the façade of Tikal Structure 5D-141, however, wears no upper garment (Figure 31). On one of the lintels at Tikal, from Structure 5C-4, a dwarf wears a garment that hangs down his back to approximately the level of his waist (Figure 29). Unlike the short cape, there is evidence of garments hanging down the backs of both dwarves from Motul de San José (Stelae 2 and 4), Tzum (Stela 5), and Xultun (Stela 25; Figures 32, 38). These monuments are, lamentably, poorly dated.

Loincloths (Exob). The *ex*, or loincloth, worn by Maya men in the Classic period (Sharer and Traxler 2006:666, 671), is worn by dwarves as

well, wrapped around the waist and tied in front with loose ends hanging down. In most instances, they are obviously knotted in the front (such as on Calakmul Stela 89, Caracol Stela 6 back, and Dos Pilas Stela 14; Figures 7, 12, 17), while in others, one end seems to be merely looped over and pulled through (as on the east column of Sayil Structure 4B1 and Xultun Stela 8; Figures 26, 35). In the cases of the front of Stela 4 at La Milpa, the columns of Structure 4B1 at Sayil, the riser of Hieroglyphic Stair 2 Step VII at Yaxchilan, as well as possibly the column of Structure 9 at Acanmul and Stela 11 at Caracol, the dwarves appear naked but for their headwear, loincloths, and jewelry (Figures 5, 14, 21, 26, 27, 39). On Caracol Stela 21, the front of the dwarf's ex was apparently covered by a sort of apron (Figure 16). These monuments are poorly dated, but they fall in the later half of the iconographic record (from 9.15.13.6.9 to about 9.18.10.0.0, or A.D. 744 to about A.D. 800). On Tzum Stela 5, unlike other renditions of dwarves, there is no evidence of a loincloth (though the stela is badly worn), and the garment seems rather long and full (Figure 32). It is possible that this is our only example thus far of a female dwarf.

Lower Garments. V. Miller (1985:148), Houston (1992:526), and Coggins (1994:32) have pointed out that dwarves often wear a short, draped lower garment, which Miller labels a "skirt" and Houston a "kilt." While both terms are appropriate, 'skirt' connotes a garment worn by

females, and 'kilt' implies a garment worn tucked or gathered into folds. I find the terms 'sarong' or 'pareu' more accurately describe a length of fabric wrapped flat around the waist or hips, but find no persuasive argument for extracting these from their cultural contexts. Therefore, I generally use the neutral 'lower garment', describing specific examples as 'wrapped' or 'draped'.

Houston (1992:527) observes that the primary figures on dwarf-motif monuments wear distinctive clothing, specifically jade-beaded skirts, headdresses with quadripartite badges, and beaded pectorals with trilobate ends, while Coggins (1994:28) notes that male primary figures wear the 'sun apron' or a woman's dress with the 'xok apron'. When the present corpus of dwarf-motif monuments is surveyed, however, these items of apparel are somewhat inconsistent. A short garment, wrapped around the hips and trimmed with celts, beads, or plumes is worn by some of the first Caracol rulers to be shown on monuments with dwarves, such as Yajaw Te' K'inich II on the back of Stela 6 and Knot Ajaw (Caracol Ruler IV, Flaming Ajaw) on Stela 5 and the front of Stela 6 (Figures 10-12). Similar styles are worn by Caracol Ruler VII on Stela 21, five k'atuns later, and, oddly enough, by the primary figures on the east and west columns of Sayil Structure 4B1 (Figures 16, 26, 27). It is

garment similar to that of the ruler, which was then conventionalized in later dwarf portraits.

Although the evidence of nearly half of the monuments that illustrate the dwarf motif is equivocal in terms of the lower garment, a few preserve a surprising amount of detail, especially at the garment's lower edge. The hem of the garment worn by the dwarf on Stela 34 at El Peru, for example, is trimmed by unique horizontal stripes (Figure 19). Much more common is an edge treatment of vertical lines that may indicate stripes, brocade, or fringe, found on Stela 89 from Calakmul, Stelae 6 (back) and 21 from Caracol, Stela 14 from Dos Pilas, Stela 4 from Motul de San José, Stela 19 from Oxpemul, as well as Stelae 24 and 25 from Xultun (Figures 7, 12, 16, 17, 37, 38). These monuments are dated from 9.8.10.0.0 (A.D. 603) to 9.16.10.0.0 (A.D. 761) and possibly as late as 9.18.10.0.0 (A.D. 800). Although almost nothing of the dwarf himself survives on Motul de San José Stela 4, there is a clear indication of a band of chevrons above a band of small squares. In the case of Dos Pilas Stela 14, the fringe hangs below feline pelt (Figure 17). Two early stelae from Caracol, 1 and 5, preserve what seems to be a fringed hem trimmed with beads, while the jaguar pelt of the dwarf on Lintel 3 of Tikal Structure 5D-1 appears to be edged with tiny plumes (Figures 8, 10, 28). Hem treatment is often not preserved, so cases where the hems appear plain

(such as Calakmul Stela 16 and Xultun Stelae 3, 8, 10, and 22) may simply not retain that level of detail (Figures 34-36).

Of the stelae and lintels on which evidence of a lower garment survive, about half show a tail that hangs down in the back; the other half either have no tail or the record is ambiguous. Caracol Stela 1, Dos Pilas Stela 14, Tikal Structure 5D-1 Lintel 3, and Xultun Stelae 10 and 25 clearly depict lower garments, with tails, marked with spots (Figures 8, 17, 28, 36, 38). Calakmul Stelae 16 and 89, Motul de San José Stela 4, and Xultun Stelae 3 and 22 render lower garments, with tails, but no trace of spots (Figures 7, 34). As the monuments from Motul de San José and Xultun are badly preserved, it is possible that the fine incision, with which this detail was recorded, is a casualty of erosion. The Structure 5D-52 lintel from Tikal, Stela 5 from Tzum, and Stela 24 from Xultun retain traces of spots but whether they have tails is difficult to discern (Figures 30, 32, 37). It is possible that we are meant to know from the tails alone that these garments were made of pelts; alternatively, the lower garments that dwarves wear may have tails whether made of animal hide or not.

One monument from Caracol (Stela 1), one from Dos Pilas (Stela 14), two from Tikal (the lintels of Structures 5D-1 and 52), one from Tzum (Stela 5), and three from Xultun (Stelae 10, 24, 25) portray dwarves wearing garments over their hips made of the pelt of a spotted animal (Figures 8, 17, 28, 30, 32, 36-38). As noted above, all but three have tails.

Spatially, distribution of this design is similar to, but less restricted than, that of the fringed collar or short cape worn by dwarves only on two Dos Pilas stelae and three Tikal lintels (and perhaps one stela at Xultun; Figures 17, 18, 28-30, 38). Temporally, however, although this is only a small fraction of the monuments bearing the dwarf motif, it includes one of the earliest, Caracol Stela 1 at 9.8.0.0.0 (A.D. 593), and one of the latest, Xultun Stela 10 at 10.3.0.0.0 (A.D. 889); most fall toward the earlier end of the range.

While identification of the materials of which the dwarves' lower garments are made is complicated by poor preservation, Tikal Structure 5D-1 Lintel 3, which bears a date of 9.13.3.0.0 (A.D. 695), unmistakably exhibits jaguar fur (Figure 28). The pattern on Dos Pilas Stela 14, erected just over a k'atun later (on 9.14.5.3.14 or A.D. 717), is similar, and both have a large, crosshatched spot at the end of the tail (Figure 17). Taube (2005:30) notes that Maya sovereigns sometimes also wear jaguar pelts, and Schele and Freidel (1990:211) point out the significance of the jaguar motif to the scene on Lintel 3 in Structure 5D-1 at Tikal. It is possible that the dwarf is wearing jaguar skin in homage to the patron deity of Tikal on the occasion of victory over their long-time rival.

Three other types of spots are found on the garments of dwarves: plain circles on Caracol Stela 1 and Xultun Stela 10 (Figures 8, 36), rings on the Tikal Structure 5D-52 lintel (Figure 30), and patterns of three dots

on Tzum Stela 5 as well as Xultun Stelae 24 and 25 (Figures 32, 37, 38). Though usually interpreted as the hide of a jaguar (Coggins 1994:32, 36; V. Miller 1985:148), a smaller cat might be indicated, as Houston (1992:527) proposes, especially when the spots are compared with the jaguar spots on Lintel 3 of Structure 5D-1 from Tikal (Figure 28). In addition to jaguars, spotted members of the genus *Felis* include margays, ocelots, and cougar cubs, any of which might be represented here. The similarity of spots on the dwarf's garment to those on the cat held by the primary figure on Xultun Stela 10 argues for the pelt of a smaller feline (Figure 36). The pattern of three spots in a triangle, found on Tzum Stela 5 and Xultun Stelae 24 and 25, however, is not found on any of the cats held by sovereigns on Xultun Stelae 3, 10, 24, or 25; perhaps the fur of another animal is indicated (Figures 32, 34, 36-38). In any case, it is clear that dwarves from Caracol, Dos Pilas, and Tikal at least are sumptuously dressed.

Luxurious attire for dwarves does not extend to footwear: evidence for them wearing high-backed sandals is limited to El Peru Stela 34, put in place on 9.13.0.0.0 (A.D. 692), Dos Pilas Stela 15, placed on 9.14.10.0.0 (A.D. 721), Calakmul Stela 89, placed on 9.15.0.0.14 (A.D. 731), and possibly Calakmul Stela 16, placed 9.19.0.0.0 (A.D. 810; Figures 7, 18, 19). But for the last uncertain instance, these monuments are within two k'atuns of each other.

Jewelry

Necklaces. As in the case of attire, preservation of the details of ornaments worn by dwarves is limited. Only about 40 % of monuments bearing the dwarf motif retain evidence of the jewelry that they wear around their necks. Of these, about half wear a single strand of beads: the column of Structure 9 at Acanmul, Stela 1 and the back of Stela 6 at Caracol, Stela 15 at Dos Pilas, the front and back of Stela 4 at La Milpa, and both dwarves on Step VII of Hieroglyphic Stair 2 at Yaxchilan (Figures 5, 8, 12, 18, 21, 22, 39). The dwarf on Lintel 3 of Tikal Structure 5D-1 might have square pendant on his strand of beads (Figure 28). These monuments are from 9.8.0.0.0 (A.D. 593) to approximately 9.17.10.0.0 (roughly A.D. 780).

Otherwise, the necklaces that dwarves wear are quite variable. The central dwarf on the panel from Santa Rosa Xtampak appears to have a single bead on a cord around his neck, while that on Caracol Stela 21 wears what looks like the shell of a bivalve mollusk (Figures 16, 25). Might the dwarves on the columns of Structure 4B1 from Sayil also be wearing pectoral ornaments that represent seashells (Figures 26, 27; Prager 2001:279; Schele 1997:152, 158)? The dwarf on Oxpemul Stela 19 (as drawn by Grube) wears a pectoral that is a larger version of the pendant worn by the Caracol Stela 21 dwarf (Figures 16, 24). The dwarf on Caracol Stela 11 has a single strand around his neck with no pendant

or beads, while the one on Stela 14 from Dos Pilas and those from Sayil have pectoral adornments with no evidence of suspension from cords around their necks (Figures 14, 17, 26, 27). The dwarves on Caracol Stela 5 and El Peru Stela 34 are wearing wide ornaments that are unique (Figures 10, 19). These examples of dwarves wearing necklaces are just as widely distributed through time – from 9.9.0.0.0 (A.D. 613) to 9.18.10.0.0 (A.D. 800), perhaps as late as 10.4.0.0.0 (A.D. 910) – as they are across space.

A few examples of a short strand of beads hanging down the back of the neck of a dwarf, presumably as a counterweight to a front adornment, are found on two stelae from Caracol (1 and 5), two scenes from Tikal (the lintel of Structure 5D-52 and the façade of Structure 5D-141), and two from Yaxchilan (on Step VII of Hieroglyphic Stair 2; Figures 8, 10, 30, 31, 39).

Earspools. With the possible exceptions of one of the dwarves on the Santa Rosa Xtampak panel and of Xultun Stela 3, there is no reasonably well-preserved stela or lintel that features a dwarf who is not wearing an earspool (Figures 25, 34). Nearly two-thirds of the monuments retain evidence of the types of earspools dwarves wear; of these, almost half are a simple disk with concentric rings. They are found at Caracol (Stelae 6 back, 9, 11, and 21), Dos Pilas (Stela 14), La Milpa (Stela 4 front and back), Oxpemul (Stela 19), Santa Rosa Xtampak

(the dwarf on the viewer's right), Tikal (Structure 5C-4 Lintel 3, again, the dwarf on the viewer's right), and Xultun (Stela 10; Figures 12-14, 16, 17, 21, 22, 24, 25, 29, 36). This style persists in use by dwarves for 14.5 k'atuns, from 9.8.10.0.0 to 10.3.0.0.0 (A.D. 603 to A.D. 889). One from Caracol and two from Tikal wear variations on the simple disk with concentric rings: on Caracol Stela 1, an earspool with two small beads below; on Tikal Structure 5D-1 Lintel 3, an earspool with an assemblage of large and small beads hanging from it; and on the lintel of Tikal Structure 5D-52, a large disk above with a small one below (Figures 8, 28, 30). The T shape of the ear ornament on Caracol Stela 5 may represent an earspool seen from the side; if so, this view, worn by a dwarf, is unique to this stela (Figure 10).

The other type of earspool, the disk with a tube projecting from the center, can be found worn by dwarves on the Acanmul Structure 9 column, Calakmul Stela 16, Dos Pilas Stela 15, El Peru Stela 34, the Sayil Structure 4B1 west column, Tikal Structure 5D-141, Xultun Stelae 24, 25, and the dwarf on the viewer's right on Yaxchilan Hieroglyphic Stair 2 Step VII (Figures 5, 18, 19, 27, 31, 37, 38, 39). In contrast to the simple, ringshaped earspool, which was worn by dwarves for 14.5 k'atuns, this type of earspool tended to be worn for only six k'atuns, from 9.13.0.0.0 (perhaps earlier) to 9.19.0.0.0 (A.D. 692 to A.D. 810). Its geographic distribution, however, is quite as wide.

Bracelets. In just over half of the scenes that display the dwarf motif, preservation is sufficient to detect the decoration that they wear on their wrists. Like the earspool, nearly every dwarf wears wrist adornment of some kind; only the two from Sayil and two from Xultun (Stelae 3, 10) show no trace of wrist ornamentation (Figures 26, 27, 34, 36). These tend to be later in the iconographic record. Types of wristwear vary, including a simple, narrow band, found perhaps on Caracol Stela 9 as well as on Stela 11 and the front of La Milpa Stela 4 (Figures 13, 14, 21). Though not conclusively dated, these monuments are generally from 9.16.5.0.0 to about 10.0.0.0.0 (A.D. 756 to about A.D. 830). A wider style, more like a cuff, is worn by dwarves possibly on the Acanmul Structure 9 column as well as on Calakmul Stela 16, Dos Pilas Stela 14, and Xultun Stela 25, from at least 9.14.0.0.0 (A.D. 711) to 9.19.0.0.0 (A.D. 810; Figures 5, 17, 38). The wide bead collar worn by the dwarf on El Peru Stela 34 is matched by three strands of beads around his right wrist (Figure 19). Three dwarves from Caracol (on early Stelae 1, 5, and the back of 6) and two from Yaxchilan (on Step VII of Hieroglyphic Stair 2) wear a single strand of round beads (Figures 8, 10, 12, 39). Although all that survives of the dwarf on Caracol Stela 4 is his left hand, he is wearing a bracelet of rectangular beads; both secondary figures on the façade of Structure 5D-141 at Tikal wear a comparable style (Figures

9, 31). Two Caracol stelae, 19 and 21, record dwarves wearing singular styles of wrist ornamentation (Figures 15, 16).

One type appears only on Tikal lintels, around the ankle of the dwarf on Structure 5D-1 Lintel 3, around both the ankle and upper arm of the dwarf on the viewer's right on Structure 5C-4 Lintel 3, and around the wrist of the dwarf on the Structure 5D-52 lintel (Figures 28-30). It seems to be a strip of fabric or paper held on by a narrow cord. These monuments are within just over two and a half k'atuns of each other, from 9.13.3.0.0 to 9.15.15.2.3 (A.D. 695 to A.D. 746).

Anklets. Ankle adornment worn by dwarves is not as common as bracelets and necklaces, though just as variable. Although the lower corners of stelae and lintels, where such fine detail would be found, tend to be worn and damaged, examples of dwarves with no evidence of ankle decoration occur at Caracol (Stelae 5, 11), Dos Pilas (Stela 14), La Milpa (the front of Stela 4), Motul de San José (Stela 2), Sayil (the Structure 4B1 columns), and Xultun (Stelae 3, 8, 10, 25; Figures 10, 14, 17, 21, 26, 27, 34-36, 38). Monuments that preserve only inconclusive traces of ankle ornamentation include Motul de San José Stela 4, the Santa Rosa Xtampak panel, the Tikal Structure 5D-52 lintel, and Xultun Stela 24 (Figures 25, 30, 37). The dwarf on the back of Caracol Stela 6 wears a strand of beads on one ankle, while both dwarves on Yaxchilan Hieroglyphic Stair 2 Step VII, over seven k'atuns later, wear a strand of beads on each ankle

(Figures 12, 39). Dwarves on Caracol Stela 1 and the façade of Tikal Structure 5D-141 wear what might be rectangular beads (Figures 8, 31). The anklets on the dwarves in Tikal Structures 5D-1 and 5C-4 are mentioned above (Figures 28, 29).

We cannot assume that the jewelry that dwarves wear is made of jade any more than their clothing can be assumed to be of jaguar. It is clear, however, that most dwarves are decked out in fine goods. Most wear a distinctive headdress and lower, wrapped garment, but even when clad in only a loincloth, they adorn themselves with necklaces, bracelets, and especially earspools. If we infer from their presence on monuments and their position at the right hand of the primary figure that they are involved in ritual performance, it follows that their ornaments are of jade, for as Taube has pointed out, "jade also symbolized the immaterial breath essence of the soul, allowing for ritual contact with otherwise remote gods and ancestors" (2005:47).

Accessories

Scepters. Just as the lords of Caracol favor the ceremonial bar, dwarves at Caracol hold scepters. Of the ten scenes known there to record dwarves, three (Stelae 4, 8, and 19) are too badly damaged to retain conclusive evidence of what they hold in their hands (though traces of what might be the curved handle of a scepter survive on Stelae 4 and 19; Figures 9, 15). On Caracol Stela 1, the dwarf holds in his right

hand something that appears to be flexible, like a pouch or fold of fabric or leather (Figure 8); A. Chase and D. Chase suggest that it might be an incense bag (1994:58). On the back of Stela 6, the dwarf holds in his left hand a staff or club into which three blades have apparently been hafted (Figure 12). These are two of the earliest renditions of dwarves, at Caracol or anywhere else, dating to 9.8.0.0.0 and 9.8.10.0.0 (A.D. 593 and A.D. 603).

The remaining scenes (Stelae 5, the front of 6, 11, 21, and possibly 9 and 19) portray dwarves holding scepters (Figures 10, 11, 13, 14-16). On the earliest of these, the front of Stela 6, the dwarf holds a cross-shaped scepter with a straight, pointed handle. All the other scepters held by dwarves have curved handles, but only Stela 11 preserves sufficient detail to identify a representation of K'awiil. On two of the late stelae, 9 and 19, the evidence for a scepter is limited to traces of a curved handle below the dwarf's hand. Caracol dwarves standing to the right of the ruler hold a scepter or staff up in their left hands (Stelae 6, 9, and 11; Figures 11-14) while dwarves standing to the left of Caracol rulers hold a scepter up in their right hands (Stelae 5, 21, and possibly 4; Figures 9, 10, 16). At no other site do dwarves hold scepters, and at Caracol, they do so for at least 10 k'atuns, from 9.8.10.0.0 (A.D. 603), perhaps as early as 9.7.10.0.0 (A.D. 583), to 9.18.10.0.0 (A.D. 800), perhaps as late as 10.0.0.0.0 (about A.D. 830).

Thus, the stelae of Caracol pair a primary figure holding a ceremonial bar with a secondary figure holding a scepter. Since Early Classic times, the ceremonial bar has been an important accounterment of Maya sovereigns (Martin and Grube 2000:90; Sharer and Traxler 2006:310, 454, 740). Schele and Freidel relate the ceremonial bar, or two-headed serpent bar, to the branches of the world tree, from which a lord or lady ritually materializes deities and ancestors (1990:68-69, 90, 142, 416). The K'awiil scepter, or manikin scepter, symbolizes noble lineage, dynastic descent, and rulership itself (Coggins 1988; Grube 2001; M. Miller and Martin 2004:32, 51-52, 293; M. Miller and Taube 1993:110, 147; Schele and Freidel 1990:143, 343; Sharer and Traxler 2006:401, 447, 554, 739, 747; Taube 1992:79). According to A. Chase and D. Chase, referring to Caracol,

The association between the dwarf and the manikin scepter is not simply fortuitous. In presenting the manikin scepter to a new ruler, it may be postulated that the dwarf has at least symbolically retrieved the symbol of power from the Underworld and the dead ruler [1994:58-59].

At Caracol between 9.7.10.0.0 (A.D. 583) and 9.19.10.0.0 (A.D. 820), five sovereigns are illustrated on stelae with dwarves, usually holding scepters. The first is Yajaw Te' K'inich II, who came to Caracol's throne on 9.5.19.1.2 (A.D. 553). He erected his first stela, 14, within one tun of his accession, depicting a primary figure seated cross-legged, but no dwarf. A k'atun and a half later, on 9.7.10.0.0 (A.D. 583), he most likely

situated Stela 4. What little survives of it does preserve a small snake head that might be the terminus of a curved scepter handle (Figure 9). After another half a k'atun, on 9.8.0.0.0 (A.D. 593), Yajaw placed Stela 1. the only dwarf-motif monument on which the primary figure holds a ceremonial bar but the dwarf does not hold a scepter or a staff (Figure 8). There is some evidence that Yajaw Te' K'inich II was still living when his son, Knot Ajaw, took the throne. Yajaw is shown on the back of Knot Ajaw's first monument, Stela 6, holding not the double-headed ceremonial bar that Maya sovereigns carry -- that honor goes to Knot Ajaw, portrayed grasping it on the front of the stela -- but a heavily decorated, short bar, with round ends, in the crook of his left elbow and an eccentric flint in his right hand. The dwarf at his right holds up, not the K'awiil scepter of rulership, but a staff or club, into which three blades have apparently been inserted (Figures 11, 12). Yajaw Te' K'inich II's accession monument does not include a dwarf. If he were ever pictured with a dwarf holding a K'awiil scepter, it was on the destroyed Stela 4, his second monument, put in place over a k'atun and a half after his accession (Beetz and Satterthwaite 1981:7-10, 23-25, 31-35, 52-55; Harris 2000a:28, 38-41; Martin and Grube 2000:88-90; Sharer and Traxler 2006:361, 365).

Knot Ajaw acceded on 9.8.5.16.12 (A.D. 599). Over four tuns later, on 9.8.10.0.0 (A.D. 603), Knot Ajaw raised Stela 6, with his father on the

back and himself, accompanied by a dwarf holding a scepter, on the front (Figures 11, 12). Half a k'atun later, on 9.9.0.4.0 (A.D. 613), Knot Ajaw set Stela 5 in place. Both Stelae 5 and the front of Stela 6 feature Knot Ajaw carrying a ceremonial bar, with a dwarf holding up a scepter, but on neither scepter can K'awiil clearly be identified (Figures 10, 11). Prufer et al. (2003:229-230) have discussed the possibility that scepters might depict deities, ancestors, or patrons other than K'awiil, which might be the case on Stelae 5 and 6. Of Knot Ajaw's final monument, Stela 7, nothing much survives. Stela 21, positioned 9.13.10.0.0 (A.D. 702), displays a Caracol lord known only as Ruler VII carrying a ceremonial bar accompanied by a dwarf holding up a scepter (Figure 16), but his accession date has not been discovered. Knot Ajaw is thus illustrated twice with a dwarf holding a scepter, whether representing K'awiil or not, four tuns and fourteen tuns after assuming leadership (Beetz and Satterthwaite 1981:26-36, 74-76; Harris 2000b:34, 39-41; Martin and Grube 2000:90-91; Sharer and Traxler 2006:365).

K'inich Joy K'awiil (Caracol Ruler IX, Mahk'ina God K, K'inich Hok' K'awiil) took the Caracol throne on 9.18.9.5.9 (A.D. 799), as a ball court marker records (Helmke et al. 2006). Like Yajaw Te' K'inich II, he erected a period-ending stela within his first tun of leadership. Stela 11, situated 9.18.10.0.0 (A.D. 800), is the clearest representation of K'awiil on a scepter held by a dwarf; K'inich Joy K'awiil holds a ceremonial bar (Figure

14). Stela 9 may be another of his monuments. Though it clearly shows a lord holding a ceremonial bar, only partial evidence for a scepter endures, and its date can only be estimated (Figure 13). As described in Chapter 5, the badly damaged Stela 8, dated 9.19.0.0.0 (A.D. 810), was placed by either K'inich Joy K'awiil or his successor, K'inich Toob'il Yopaat (or Yoaat; Caracol Ruler X, Ruler XI, Lord Quincunx). Stela 19, put in place 9.19.10.0.0 (A.D. 820) is likewise in poor condition, though some evidence for the curved handle of a scepter survives (Figure 15). It probably pictures K'inich Toob'il Yopaat, whose accession date is not well documented (Beetz and Satterthwaite 1981:37-41, 44-46, 69-71; Simon Martin, personal communication January 2007; Martin and Grube 2000:96-98; Sharer and Traxler 2006:366, 415).

Based on this evidence, the postulation by A. Chase and D. Chase (1994:58-59; see also Graña-Behrens and Grube 2001:430; Prager 2001:278), though intriguing, cannot be affirmed. Only K'inich Joy K'awiil on Stela 11 can be described as a "new ruler"; Yajaw Te' K'inich II and Knot Ajaw had each been in power for over a k'atun and a half, and over four tuns, respectively, when shown with dwarves holding scepters. It is possible that the scepters the dwarves hold for the rulers represent other patron deities or lineage founders. All four rulers set up dwarfmotif monuments on the first and subsequent period ending after accession, indicating, as Houston (1992:527) suggests, that the dwarf

played a role, not so much in accession itself, but in the turnings of calendrical cycles. This function appears to persist at Caracol for at least 10 k'atuns and perhaps a few more. Once the motif moved out of the realm of Caracol, however, the purpose of the dwarf to hold the K'awiil scepter disappeared. As will be shown below, the connection of dwarves to the underworld rests on similarly fragile links, while other evidence supports the relationship of dwarves to calendric cycles.

Foliage. Several researchers have noted that dwarves appear to hold things that might be foliage. Foncerrada de Molina (1976:50-52) suggests that they might be stalks with a flower bud and leaves, possibly of cacao, and that some of them might be rattles. Mayer (1980:23, 1986:223) also identifies the foliage as cacao and the flowers as possibly representing water lilies. V. Miller (1985:148) simply refers to "leaves or other vegetation." Houston (1992:527), based on painted ceramic evidence, notes "the dwarf grasps hafted objects that apparently have soft tips ... [that] may consist of feathers." According to Proskouriakoff (1993:70), the dwarf on the lintel of Tikal Structure 5D-52 is "holding in his hands aquatic plants." Coggins (1994:32-33) points out that dwarves "carry what may be leaves or plumes affixed in handles." Grube and Hammond (1998:131) suggest "hafted objects that apparently have soft tips." Prager (2002:52) lists the things that dwarves might carry as a piece of fabric, a rattle, leaves or petals, and cacao fruit or flowers.

Each of the dwarves portrayed on Calakmul Stelae 16, 89, Caracol Stela 1, Dos Pilas Stela 14, El Peru Stela 34, Motul de San José Stela 2, the Tikal Structure 5D-52 lintel, and Xultun Stelae 10, 25 carry something different, yet all these objects could be foliage or vegetation of some kind, whether pod, blossom, or leaf (Figures 7, 8, 17, 19, 30, 36, 38). In my opinion, the most botanically likely identification is a water lily, in bud form in the dwarf's left hand on El Peru Stela 34 but in partially opened form on Calakmul Stela 89, Dos Pilas Stela 14, the Tikal Structure 5D-52 lintel, and possibly Motul de San José Stela 2, especially if water lily buds are tied around the dwarves' headdresses on Caracol Stela 1 and Calakmul Stela 16. These two monuments, Caracol Stela 1 (erected 9.8.0.0.0 or A.D. 593) and Calakmul Stela 16 (erected 9.19.0.0.0 or A.D. 810), bracket the examples listed above temporally, suggesting that the association of dwarves with water lily blooms is a long one. (A possible significance of the water lily will be further discussed below.) None of these dwarves hold anything that looks to me like cacao, either in bloom or in pod, with the possible exception of the leaves in the left hand of the dwarf on Stela 34 from El Peru, which could be from the cacao tree.

Some of the objects in hands have a more crafted than natural look, as though, as Coggins (1994:32-33) proposes, they are inserted in handles. The dwarf on El Peru Stela 34, for example, though holding what looks like leaves or petals in his left hand, holds in his right hand

something that could be a gourd rattle (Figure 19), as Foncerrada de Molina (1976:51) and Prager (2002:52) suggest. This might also identify the round object in the right hand of the dwarf on Tzum Stela 5 (Figure 32). Two of the dwarves with water lily buds on their headdresses, on Stela 1 at Caracol and Stela 16 at Calakmul, hold what could be pieces of fabric, though they could also be leaves; A. Chase and D. Chase (1994:58) suggest an incense bag for the Caracol dwarf (Figure 8). Two at Xultun, on Stelae 10 and 25, hold long, slender objects with rounded ends that could be botanical in nature (Figures 36, 38).

No clear association emerges between the objects, such as scepters and shields, held by primary figures and the objects held by secondary figures other than at Caracol, discussed above. No examples of dwarves holding foliage are known from Caracol, except possibly Stela 1 (Figure 8). Of the nine cases of what we may assume to be foliage of some sort listed above, three, perhaps four (Calakmul Stela 89, Dos Pilas Stela 14, the Tikal Structure 5D-52 lintel, and possibly Calakmul Stela 16) accompany lords holding the K'awiil scepter (Figures 7, 17, 30). With the exception of Calakmul Stela 16, they were installed between 9.14.5.3.14 (A.D. 717) and 9.15.10.0.0 (A.D. 741). El Peru Stela 34 and Xultun Stela 10 picture dwarves holding what might be foliage next to lords holding scepters bearing images other than K'awiil (Figures 19, 36). On Caracol Stela 1, the ruler carries a ceremonial bar; on Xultun Stela 25, a cat and

snake; Motul de San José Stela 2 is damaged beyond recognition (Figures 8, 38).

Masks. Unequivocal depictions of masks, suspended from dwarves' sashes or loincloths with celts dangling from them, are limited to Caracol and Tikal. Only Caracol Stelae 1 and 11, put up 10.5 k'atuns apart, exhibit dwarves wearing masks on both the front and back (Figures 8, 14). A mask appears on the front only of the dwarves on Caracol Stelae 5 and 19 as well as on the back of dwarves on two Tikal lintels: in Structures 5D-1 and 5D-52 (Figures 10, 15, 28, 30; due to a beam missing from Structure 5D-1, it is impossible to rule out a mask on the front as well). Traces of what might be a back mask survive on Caracol Stela 9 and what might be front masks on Calakmul Stela 16, the front of La Milpa Stela 4, and Xultun Stela 22 (Figures 13, 21). A dwarf wears a square panel at the front on El Peru Stela 34 and at the back on the Santa Rosa Xtampak scene (Figures 19, 25). While limited geographically to Caracol and Tikal, and possibly to Calakmul, La Milpa, and Xultun as well, masks as elements of dwarf apparel span from 9.8.0.0.0 to 9.19.10.0.0 (A.D. 593 to A.D. 820).

Other Secondary Figures

Some monuments, such as Caracol Stelae 8, 9, La Milpa Stela 4, Uxul Altar 2, and Xultun Stela 22 are too damaged to retain evidence of what other human forms might have been present (Figures 13, 21, 22,

33). The scene on Uxul Altar 2 almost certainly once included at least three ball players, but what, beside a hieroglyphic panel, once filled the central area is impossible to reconstruct. Stela 2 from Motul de San José apparently had two average-sized persons, but nothing above their legs survives. The panel from the palace of Santa Rosa Xtampak illustrates an average-sized secondary figure, but his or her position is difficult to reconstruct (Figure 25). The scene on Tzum Stela 5, though poorly preserved, is unique in exhibiting a central, primary figure with a dwarf to his right and an average-sized, secondary figure to his left (Figure 32). The seated person is unusual, apparently wearing a bird-head mask and holding some object in each hand (see Music and Dance under Other Associations, below). In addition to Motul de San José Stela 2, two other monuments display a dwarf to the primary figure's left and an averagesized, secondary figure to his right: Stela 5 at Caracol and the façade of Structure 5D-141 at Tikal (Figure 10). Chapter 5 discusses the identity of the other secondary figure on Caracol Stela 5.

Captives. Other persons that displace a dwarf from the ruler's right to his left are bound captives, as on two stelae from Caracol: 4, probably put in place on 9.7.10.0.0 (A.D. 583) and 21, put in place on 9.13.10.0.0 (A.D. 702), as well as on Yaxchilan Hieroglyphic Stair 2 Step VII, inscribed 9.15.13.6.9 (A.D. 744; Figures 9, 16, 39). Martin and Grube (2000:94) suggest a translation for the caption identifying the prisoner on

Caracol Stela 21: "k'uhul ajaw or 'divine lord'." Similarly, the prisoner whose body forms the ball on Step VII of Hieroglyphic Stair 2 at Yaxchilan is a lord from Lakamtuun, a polity attacked at least twice by Yaxchilan (Martin and Grube 2000:21, 121, 130, 135). Uxul Altar 2, dated 9.10.10.0.0 (A.D. 642), probably once showed a captive in the form of a ball as well (Figure 33). The position of dwarves and captives, as secondary figures, relative to the primary figures on monuments has been discussed above.

Water birds. The appearance of water birds with dwarves on monuments is limited to Dos Pilas Stela 14, dated 9.14.5.3.14 (A.D. 717), Stela 15, dated 9.14.10.0.0 (A.D. 721), the lintel of Tikal Structure 5D-52, dated 9.15.10.0.0 (A.D. 741), and the front and back of La Milpa Stela 4, dated approximately 9.17.10.0.0 (about A.D. 780; Figures 17, 18, 21, 22, 30). In the case of Dos Pilas, Stela 1, raised on the far side of the main plaza just over 10 tuns before Stela 14, also features a water bird holding a fish in its beak on Itzamnaaj K'awiil's left, but no dwarf (Itzamnaaj K'awiil is also known as Dos Pilas Ruler 2 and Shield God K; see Dos Pilas in Chapter 5; Greene Robertson 1995:D23743.PCT; Houston 1993:72). Harrison (1999:149) describes the water bird as "an iconographic motif that was quite popular in the Early Classic period at Tikal" (see also Coggins 1975:300; Harrison 1999:151; Reents-Budet 1994:244, 246).

The water-bird motif has often been related to the design on painted ceramic vessels from a burial at Holmul. The scene on the 'floor' of a dish, for example, is the dwarf with Holmul dancer, while pelicans circle the sides both inside and out (Merwin and Vaillant 1932:Plate 29c, 72, 77; Reents-Budet 1985:19, 97). Jade pieces, recovered from the Cenote of Chichen Itza, may have once been part of a plaque (Proskouriakoff 1974:Plate 79 No. 16). The scene is

a suggested reconstruction, put together from small, mostly disconnected fragments and is probably not wholly accurate. The themes, however, are clear. On one face of the plaque is a standing figure of a Maya man, with a bird on one side and a dwarf on the other [Proskouriakoff 1974:193].

The only portion of the bird recovered was a small section of breast, wing, and foot. Of the dwarf, only the nose, lips, loincloth end, and toes were found. Although everything else is speculation, it is sometimes cited as an additional example of the dwarf and water-bird motif (for example, V. Miller 1985:151, Figure 25).

Coggins (1975:300) first observed the association, at Tikal, of dwarves with large water birds. In describing the lintel of Structure 5D-52 there (Figure 30), Jones and Satterthwaite (1982:105) remark "the dwarfish figure and water birds in the scene add an almost domestic quality," while Proskouriakoff (1993:70) describes the scene – "a dwarf(?) holding in his hands aquatic plants, and beside him ... two cormorants" – as appropriate to a location with a reservoir view (see also Coggins

1994:33, 44; V. Miller 1985:148; Prager 2002:53; Proskouriakoff 1993:97). The presence of the water bird on Dos Pilas Stela 14 (Figure 17) is noted by G. Stuart and G. Stuart (1983:19-20) and Coggins (1994:33); V. Miller (1985:151) and A. Chase and D. Chase (1994:59) refer to the water bird as mythical. Houston (1989:59) identifies the water bird on Dos Pilas Stela 14 as a heron (see also Bassie-Sweet 1996:226), while Schele and Freidel (1990:417) describe, on monuments, a generic water bird with "the crest of the heron and the upturned, bulging beak of the cormorant" (see also Reents-Budet 1994:244). Finally, with the discovery of La Milpa Stela 4, Grube and Hammond write:

The dwarf-and-bird motif forms an iconographic ensemble of still unknown meaning. The hieroglyphic texts of monuments with this motif do not provide clues to its understanding. The discovery of further examples of this motif will eventually shed more light onto this specific scene [1998:131].

One possible significance of the water-bird motif will be discussed below.

Other Associations.

Cacao. Although Foncerrada de Molina (1976:50-52), Mayer (1980:23, 1986:223), Benavides C. (1998:543), and Prager (2002:52) all mention dwarves in connection with cacao, the above data offer no evidence to support this association. A single exception is the leaves in the left hand of the dwarf on Stela 34 from El Peru, which could be from the cacao tree (Figure 19).

Female imagery. In their articles on the dwarf motif, V. Miller (1985:152) states "dwarfs ... are often shown with women or with paired monuments of males and females," while Coggins (1994:28) suggests "dwarfs are associated with imagery of the royal mother." As Pendergast (1966:157, 1969:46) points out, however, the depiction of dwarves with women is largely within the medium of clay figurines from Jaina (see Appendix C). Though the representation of the dwarf motif in the medium of modeled and molded clay is beyond the scope of this work, the relating of dwarves to women by the Jaina figurines does not carry over to the monumental evidence.

The only examples thus far known on which women are recorded with dwarves are El Peru Stela 34, raised 9.13.0.0.0 (A.D. 692), on which a Calakmul lady is the primary figure, and the façade of Late Classic Tikal Structure 5D-141, on which a seated woman shares the secondary status of the dwarf (Figure 19). Indeed, on a pair of stelae from Calakmul portraying a royal couple, the dwarf appears on the lord's stela, not the lady's (Marcus 1987:72). On Caracol Stela 1, set in place on 9.8.0.0.0 (A.D. 593; Figure 8), Yajaw Te' K'inich II is wearing a woman's garment (Coggins 1994:34, 40; V. Miller 1985:152; Proskouriakoff 1993:39; Stone et al. 1985:269). Jones and Satterthwaite (1982:105) consider the possibility that the Tikal Structure 5D-52 lintel illustrates a woman (Figure 30), but reject it based on comparison to Tikal Stelae 5 and 20.

Even if all these were taken as concurrences of dwarves with female imagery, the evidence -- four cases out of ten times that many -- would still be insignificant.

The Ball Game. Like the alleged affiliation of the dwarf motif with female imagery, a scene in clay from Jaina links dwarves with the ball game (Mayer 1986:217, 223, Figure 11; V. Miller 1985:143, 152; Schele 1997:158). On Step VII of Hieroglyphic Stair 2 at Yaxchilan, two dwarves watch Bird Jaguar IV play ball, though the action takes place not in a ball court, but as M. Miller and Houston point out, against the steps of Structure 33 (1987:54). Uxul Altar 2 once showed a similar scene (Figures 33, 39). These cases seem to have led some (Benavides C. 1998:543; Mayer 1986:223; Piña Chan 1997:10; Prager 2002:50; G. Stuart 1981:235; Taladoire and Colsenet 1991:172) to assume that dwarves correlate with the ball game. As Grube and Hammond (1998:131) point out, however, "dwarves in ballgame attire or ballgame contexts are extremely rare." They have interpreted the accounterments of the dwarves on each face of Stela 4 at La Milpa as those of a ball player: knee and elbow protectors, belt, and ball (Figures 21, 22; Grube and Hammond 1998:129). Dwarves wear a loincloth or sash around the waist so consistently, however, with no other ball-game imagery, that I hesitate to identify all their "belts" as ball-players' gear. On the other hand, the dwarf on the façade of Structure 5D-141 of Tikal is wearing what could very well be a ball-

player's yoke (Figure 31). As with the suggested connection with female imagery, however, even counting all these as examples of dwarves involved in some way with the ball game, the evidence -- five cases out of eight times that many -- is still not significant. Interpretation of the dwarf motif as symbolizing human sacrifice or the underworld realm based on a link with the ball game is thus not defensible.

Caves. Although the association of dwarves with caves rests largely on ethnographic data, as will be discussed in Chapter 7, iconographic and archaeological evidence is also sometimes used to suggest a connection (for example, Martin and Grube 2000:16; Pohl and Pohl 1983:32, 51; Stone 1995:153-154; G. Stuart 1981:227, 234-235). Kurbjuhn (1985:160) relates dwarves to the occupants of shells: snails and turtles; Coggins (1994:36) extends the metaphor of the shell to represent caves. The two stelae from Dos Pilas that depict dwarves, Stelae 14 and 15, were situated on an architectural complex that overlies a large cave (Brady and Ashmore 1999:128, 130, 131; Houston and Mathews 1985:4). At least two characters from Caracol and one from Calakmul left a record of their pilgrimage to a cave, Naj Tunich, one in a text dated A.D. 692 (Martin and Grube 2000:95-97).

Andrea Stone identifies two of the drawings at Naj Tunich as showing dwarves. Drawing 68 is labeled a dwarf based on "such features as a swollen forehead, pug nose, fat upper lip, and bulging stomach"

(Stone 1995:220; see also Brady 2001:306 No. 481; Brady and Stone 1986:24). The head of the person in Drawing 68 is not out of proportion for his body, however, nor are his limbs reduced in length. While it is true that his forehead does bulge out below his headdress (which closely resembles that of the dwarves on Caracol Stela 11 and Xultun Stela 3; Figures 14, 34), no other feature of his profile is characteristic of achondroplasia, nor does his stomach protrude significantly more than the "rotund, seated lord" he accompanies (Stone 1995:153). As demonstrated above, facial profiles of the dwarves recorded on lintels and stelae differ widely, so they cannot be used to diagnose a case of dwarfism. There is no other evidence, either physical or cultural, that the ancient Maya were rendering a dwarf in Naj Tunich Drawing 68.

Stone (1995:228) identifies Drawing 83 as a dwarf "similar to the one in Drawing 68: bulging forehead, pug nose, lantern jaw, and here a protruding lower lip. Some of these traits were noted in Drawing 67," which Stone does not label a dwarf. While the head of the figure in Drawing 83 is overly large for his body, he is seated cross-legged with his arms folded around his chest, a position that no short-limbed dwarf could assume. Like Drawing 68, he does have a bulging forehead, but no other characteristics, either physical or cultural, that would indicate dwarfism. In fact, Stone (1995:40, 153, 228) suggests that he illustrates not a human, but a cave-dwelling deity. This he might be, but the

evidence from Naj Tunich does not support any connection of short, disproportionate people to caves. Rather, these figures, like the sculptures in wood from an unknown source and in stone from Copan Structure 9N-82, illustrate the antithesis of the Maya ideal of beauty (see Facial Profiles under Other Physical Characteristics, above). Interpretation of the dwarf motif as symbolizing the underworld realm based on an involvement with caves, as with the ball game, is not defensible.

The Supernatural and the Underworld. Like their proposed affiliation with caves, the evidence linking dwarves to the world of the supernatural or 'other' rests largely on ethnography, as will be addressed in Chapter 7. According to Tate (1993:9), "those whose bodies were transformed by the gods into such shapes as hunchbacks and dwarfs were considered to be specially favored with supernatural powers" (see also Sánchez Saldaña and Salas Cuesta 1975:41). "Dwarfs ... were related to the supernatural and the world of the dead" (Piña Chan 1997:10), "revered as possessors of supernatural powers" (Wanyerka 1997:81), "connected with the 'other world' and, by extension, with the gods" (Benavides C. 1998:542), and "supernatural beings in human form" (Prager 2001:278). Based on paint recovered from stucco at Palenque, Greene Robertson (2004:247) suggests "blue represented things divine, such as dwarves." (Traces of blue paint have been found on Jaina

figurines portraying dwarves, but white and yellow are found as well [Corson 1976:34, 37-38].)

More specifically, the 'other' realm that dwarves are alleged to relate to is the underworld, based on ethnographic evidence and on the representation of dwarfism by figurines from the mortuary island of Jaina (a small sample of the most widely published can be found in Appendix C; see also Wanyerka 1997:88). Most dwarf-motif figurines are only vaguely provenienced, yet "dwarfs ... were considered to have many supernatural powers deriving from their chthonic origins" (Clancy 1985:176). Prager (2001:279) interprets a seashell hanging on a cord around the neck of a Jaina dwarf figurine as "probably symbolizing the underworld" (see Schele 1997:152, 158 for another interpretation. Caracol Stela 21 and both columns of Sayil Structure 4B1 might also display dwarves wearing seashells; Figures 16, 26, 27). According to V. Miller (1985:143), "the large number of Jaina dwarf figurines surely represents ... widespread belief that the dwarf would be a useful companion during the journey to the underworld." Contrastingly, M. Miller (1975:18) wrote, "The sheer numbers [of dwarf figurines] suggest their great importance to the Maya, but the specific iconography remains unknown." As reviewed in Chapter 1, Corson's work on Jaina figurines demonstrates that the dwarf motif in that medium is restricted both temporally and spatially, that no evidence connects Jaina mortuary

figurines with Classic lowland iconography, and that "few grounds [exist] for assuming that all occurrences of dwarfs in Classic period art refer to the same, or even related, bodies of belief" (Corson 1973:62, 1976:40; see, however, Kerr 2001-2002:6579). Halperin's (2005) analysis of clay figurines from Motul de San José does not support a mortuary association for the dwarf motif.

The role most often ascribed to dwarves with regard to the realm of the 'other' is that of messengers or mediators (Cohodas 1991:268-269; Graña-Behrens and Grube 2001:430; Prager 2001:279; Tate 1993:16). Part of the iconographic evidence that dwarves might mediate between this world and the underworld comes from their alleged link with the ball game, as ball courts are thought to be one passageway between realms (Tate 1992:97, 131). The connection between dwarves and the ball game, however, as discussed above, is extremely tenuous, based only on one scene in clay from Jaina, two scenes in stone from Uxul and Yaxchilan, and three speculative examples (La Milpa Stela 4 and the Tikal Structure 5D-141 lintel) of dwarves wearing ball-players' gear (Figures 21, 22, 31, 33, 39).

Another part of the iconographic evidence for dwarves as gobetweens comes from Caracol, where A. Chase and D. Chase suggest that dwarves

were responsible not only for ensuring the passage of the Maya elite through the Underworld after death, but also for the orderly passage of rule through the physical transferal of certain symbols of power between dead and living ruler. In effect, it would seem that they served as 'middlemen' or agents between the Maya Underworld and the world of the living [1994:58].

As addressed above (see Scepters under Accessories), however, only on Caracol Stela 11 does a dwarf appear with a ruler in power for less than one tun. In every other case for which data survive, the ruler has been in power for at least four tuns (though Caracol Ruler VII, on Stela 21, and K'inich Toob'il Yopaat, probably on Stela 19, have inconclusive accession dates). Stela 6 displays Yajaw Te K'inich II on one side and his son and successor, Knot Ajaw, on the other. At the time the stela was erected, Yajaw Te K'inich II seems to have had abdicated to Knot Ajaw over four tuns earlier. A dwarf with a scepter accompanies Knot Ajaw, while a one with a staff, apparently hafted with blades, accompanies 'retired' Yajaw Te K'inich II. Even if the dwarf or dwarves could be interpreted as some sort of intermediary between generations, based on this single scenario, the role would be limited to Caracol, the only site at which dwarves carry scepters (Figures 11, 12, 14-16).

A. Chase and D. Chase (1994:59) do observe an interesting parallel between dwarves paired with captives and dwarves paired with water birds. Captives are destined for the underworld, while aquatic birds have the unique ability to dive into the watery nether realm and return to the

terrestrial plane (Reents-Budet 1994:244-248; Tate 1995:62).

Unfortunately for an underworld interpretation, dwarves are only paired with captives in three scenes: Caracol Stelae 4, 21, and Yaxchilan Hieroglyphic Stair 2 Step VII (Figures 9, 16, 39). They are paired with water birds in five scenes: Dos Pilas Stelae 14, 15, both sides of La Milpa Stelae 4, and the lintel of Tikal Structure 5D-52 (Figures 17, 18, 21, 22, 30). Even taken together, these concurrences add up to only a fifth of the instances of the dwarf motif, hardly a significant relationship between dwarves and the nether realm.

A somewhat stronger case might be made for the affiliation of dwarves with water lilies, also interpreted as symbols of the otherworld boundary (Coggins 1994:36; M. Miller and Taube 1993:184; Prager 2001:279; Schele and Freidel 1990:209). Dwarves on Calakmul Stela 16 and Caracol Stela 1 have what appear to be flower buds on the fronts of their headdresses; Caracol Stela 21 might be a third example, based on its similarity (Figures 8, 16). As discussed above, Calakmul Stelae 16, 89, Dos Pilas Stela 14, El Peru Stela 34, Motul de San José Stela 2, the Tikal Structure 5D-52 lintel, and Xultun Stelae 10 and 25 all picture dwarves holding things that might be leaves, buds, or blossoms (Figures 7, 17, 19, 30, 36, 38). None are specifically identifiable, but a representation of a water lily cannot be ruled out for any of these cases. There are more

cases of dwarves with foliage, possibly of the water lily, than there are of other underworld motifs such as ball courts, caves, or water birds.

Maize and the Maize God. Just as the supposed correspondence of dwarves with the underworld is based in part on Jaina figurines, so their alleged association with the maize god is based on painted ceramic cylinder vases in the so-called 'Holmul style' (see Reents-Budet et al. 2000:107; a small sample of the most widely published can be found in Appendix C). M. Miller, Samayoa, and Martin also note the association of dwarves with the maize god on carved jade plaques (M. Miller and Martin 2004:128, 147; M. Miller and Samayoa 1998:58, 60, 64). Three examples that display the dwarf motif (one tripod dish and one cylindrical vase from a burial at Holmul and a polychrome vessel fragment from Uaxactun) come from controlled excavations. The collector of the Yalloch vase, Thomas Gann, writes that it came from a chultun in western Belize (1918:138) as well as from a cave near Xunantunich (1925:Plate 72). From an elite burial at Buenavista del Cayo was excavated 'the Jauncy Vase', a Holmul-style vessel that does not feature the dwarf motif (Taschek and Ball 1992). Otherwise, most Holmul-style vases, like Jaina-style figurines, lack provenience (Reents-Budet 1985: Figure 3.25, 1994: Figures 3.25, 7.3, 7.4; Reents-Budet et al. 2000:107-109, 113-117).

Most iconographers follow Taube (1985) in identifying the 'Holmul dancer' as the maize god. Freidel and Schele (Freidel et al. 1993:276)

relate this dance to the epic creation story, reenacting the maize god's death and rebirth. Because most Holmul-style polychrome cylindrical vases record a dwarf accompanying each dancer, it is thought that the dwarves must have a role in this process of dying, passing through the underworld, and rising again like the maize plant (Coggins 1994:35: Grube and Hammond 1998:130-131; M. Miller and Martin 2004:25, 47; M. Miller and Samayoa 1998:58, 60; M. Miller and Taube 1993:82; Prager 2001:279; Reents-Budet 2001a:259; Schele 1997:151, 158; Wanyerka 1997:75-76, 81). M. Coe (1978:94-99, 101), however, suggests that the vases might depict the actual meeting of sovereign lords (see also Freidel 2000:27; V. Miller 1985:148). The two interpretations are not mutually exclusive, as the iconography of the vases can function on more than one level at once. Taschek and Ball (1992:496) caution against "lumping" these vases together based on their superficial appearance, as this obscures what is probably a richly varied symbolic program with multiple levels of meaning (see also Reents-Budet et al. 2000:107). Reents-Budet (1985:19, 96), for example, points out that Holmul-style scenes illustrate two types of short stature: "achondroplasia (short-limbed dwarfism) and a hunchback or barrel-chested deformity." Whatever the interpretation of the vase iconography, it does not seem to carry over into the depiction of dwarves on Late Classic monuments.

Within the monumental record of the Late Classic, the dwarf-motif monuments from Caracol, El Peru, Tikal, and possibly Sayil and Xultun show maize imagery, though not specifically attached to the dwarves. On Caracol Stela 1, Yajaw Te' K'inich II wears a quadripartite headdress, beaded cape, knee-length garment, and possibly a seashell at his waist, which Stone et al. (1985:269) identify as women's clothing, but which Prager (2002:37) and Wanyerka (1997:75) interpret as the costume of the maize god (see also Coggins 1994:34, 40; V. Miller 1985:152; Proskouriakoff 1993:39). The ends of the ceremonial bar held by Yajaw Te' K'inich II seem to sprout maize foliage (Figure 8). On Caracol Stela 5, Knot Ajaw wears a foliated maize cob in his headdress (Figure 10). The front of Stela 6 has what might be a maize cob at very top, and the back of Stela 6 as well as Stelae 11 and 21 show maize foliage (Figures 11, 12, 14, 16). As Caracol Stelae 1, 5, and 6 represent the first k'atun of the dwarf motif, it would appear that it has maize symbolism at its very root.

Quenon and LeFort (1997:884) as well as Wanyerka (1997:75) see the woman on El Peru Stela 34 as also dressed in the foliated maize god's costume (Figure 19). Spinden (1913:89-90) cites the embellishments around the serpent heads on Tikal Structure 5C-4 Lintel 3 as an example of maize foliage and kernels, also found above the jaguar's head on Structure 5D-1 Lintel 3 and above the face of the K'awiil scepter on the lintel of Structure 5D-52 (Figures 28-30). Harris (2006:41), however,

observes that while the Structure 5C-4 lintel text refers to Yik'in Chan K'awiil impersonating the maize god, this is not reflected by his image on the lintel. The primary figure's headdress on the west column of Sayil Structure 4B1 may allude to maize kernels and foliage, while the primary figures on later monuments of Xultun (such as Stelae 3 and 10) may also have maize elements in their headdresses (Figures 27, 34, 36). With these exceptions, constituting less than a fifth of dwarf-motif scenes, maize iconography does not seem to have accompanied the dwarf motif as it moved from Caracol (Stelae 1, 5, and 6) to other settlements (as will be discussed in Chapter 6). One possible reason might be that the ceremonial bar, held by rulers, sprouts maize foliage, and only at Caracol do dwarves, clutching scepters, accompany rulers carrying the ceremonial bar (with the exception of Tikal Structure 5D-141). As the dwarf motif spreads out from the Caracol realm, dwarves at other sites accompany rulers who hold scepters and shields instead.

Music and Dance. A second suggested correlation based on the evidence from painted pottery, a painted mural, and a few monuments is of dwarves with music and dancing. As discussed above, Holmul-style pottery portrays two or three average-statured dancers, each accompanied by a dwarf (Grube 1992a:201; Grube and Hammond 1998:130-131; Houston et al. 2006:267; Merwin and Vaillant 1932:Plates 2b, 30a, c; M. Miller 1992a:159, 1992b:241; M. Miller and Martin 2004:47;

M. Miller and Samayoa 1998:60; V. Miller 1985:147-148; Reents-Budet 1985:18-19, 28, 1991:217-218; Schele 1997:151). As Proskouriakoff (1950:18-19) finds for monuments, Reents-Budet (1985:95-97) finds that artists in the Holmul style painted secondary figures with more freedom and less codification than primary figures, suggesting "dwarfs are of secondary importance to this scene." Unlike dwarves on monuments, their clothing is generally simple. Some dwarves are rendered in a 'dancing' pose, but some are not. The Buenavista 'Jauncy Vase', one of the few polychrome cylindrical vases in the Holmul style with a robust provenience, lacks dwarves altogether (Taschek and Ball 1992).

In Structure 1 at Bonampak, in the vault of the west wall of Room 3, is a scene first described by Villagra Caleti (1949:28-29) as a group carrying a single figure with a jaguar skin around his hips on a platform. Thompson (1955:55) further describes the character being carried as "a queer little figure with grotesque features, ... projecting supraorbital ridges and a huge proboscis." Both Thompson (1955:55) and Proskouriakoff (1993:168) propose that the form is a clothed effigy, not a live person. M. Miller, however, points to Lazo's discovery that the figure's hands are outstretched over a drum as evidence that a live person, in fact, a dwarf, is drumming while being carried on a platform. Those carrying the platform are themselves either deformed or wearing masks, and one carries a rattle (M. Miller 1986:132, 142, 1988:325-326,

2001:14, 2002:45; see also Coggins 1994:37; Contreras Santiago 1988:52; de la Fuente and Stains Cicero 1998:29, 31; V. Miller 1985:147; Nájera Coronado 1991:101; Prager 2002:50, Figure 15). The features of the personage on the platform are so unusual, as, indeed, are those of the bearers, that it cannot be identified as a dwarf on that basis alone. M. Miller and Martin (2004:43) recognize, on a vase in the National Gallery of Australia (82.2292 / K 1453), the wooden effigy of a dwarf, part of a piece of furniture, which had been thought an actual dwarf; nor is it impossible that a drum and a wooden, effigy drummer are both being carried in a procession. On the other hand, Sahagún records that persons with deformities performed for Mexica lords by playing a drum (Anderson and Dibble 1954 [1545?-1570?]:49; Sánchez Saldaña and Salas Cuesta 1975:42).

A further line of evidence for the proposed connection of dwarves with music and dance comes from a stone column, now in the Campeche Museum, variously thought to be from Champoton, Tunkuyí, or Bakna (see references for Centro INAH Campeche 10-342791 / T04 under Northern Lowland Columns in Appendix C). Carved in the round, the scene pictures two primary figures, one standing and one seated on a bench, on either side of a dwarf, with two additional secondary figures, apparently blowing horns, kneeling next to the bench. The dwarf is on the toes of his right foot, pointing the toes of his left foot to the floor,

with both arms outstretched, clearly dancing to the musical accompaniment of the woodwinds just to his right. His garb, though rather skimpier than those typically worn by dwarves on stelae, is not irreconcilable with the monumental record (see also Worcester Art Museum 1962-1 under Northern Lowland Columns in Appendix C; the dwarf on the primary figure's right also has one foot flexed).

As discussed above, 80 % of the provenienced monuments that preserve clear evidence exhibit both primary and secondary figures with both feet firmly on the ground. As far as primary figures go, Grube (1992a:209, 212, 216) identifies Dos Pilas Stela 14 as representing Itzamnaaj K'awiil dancing with a K'awiil scepter, the Lintel 3 text of Tikal Structure 5C-4 as recording Yik'in Chan K'awiil dancing during a solar eclipse, and Xultun Stela 25 as a "dance monument" associated with a plaza (Figures 17, 29, 38). Garrison and Stuart (2004:853) relate the iconography and the text, describing dance, of Xultun stelae to the Holmul-dancer motif. Specifically, Xultun Stela 7 might present a dance on the occasion of a period ending (Garrison and Stuart 2004:854). The average-sized persons on Motul de San José Stela 2 and the west column of Sayil Structure 4B1 have one or both heels raised (Figure 27). Beside the Campeche column, iconographic evidence for dwarves 'dancing' is limited to the front (and possibly the back) of La Milpa Stela 4 (Figures 21, 22; Grube and Hammond 1998:129-130; Hammond et al. 1996:90). As

Foncerrada de Molina (1976:50-52) and Prager (2002:52) suggest that the dwarf on Tzum Stela 5 is holding a rattle (Figure 32), could the secondary figures be providing a rhythmic accompaniment to the primary figure's dance? All these proposed cases together still add up to less than a quarter of the monuments displaying the dwarf motif, hardly a convincing connection.

As Schele and Freidel (1990:464) point out, it is likely that dedication rites were accompanied by dance; according to Grube (1992a:215), in fact, "dance scenes are among the most common motifs in Classic Maya iconography" (see also Houston et al. 2006:267). As we have seen, dwarves are not critical to whatever dance is being performed on ceramic vessels in the Holmul style; the identification of a dwarf among the Bonampak musicians is equivocal; and though the dwarf on the Campeche column is clearly dancing, other than his presence, there is little stylistic or iconographic relationship between this secondarily provenienced monument and those displaying dwarves at southern lowland polities. Stelae witnessed the turnings of calendrical cycles, likely commemorated with "processions, speeches, feasting, drinking, and dancing" (Rice and Rice 2004:89), but it appears that only a fraction of those featuring the dwarf motif refer explicitly to music or dance. Thus, the evidence indicates that dwarves are not associated with dance or

music any more or less than any other persons celebrating a calendric holiday.

Dwarves at Court. The evidence for a suggested correlation of the dwarf motif with the underworld comes from ethnography and from the representation of dwarves in modeled and molded clay from the mortuary island of Jaina. Evidence for an alleged connection of the dwarf motif with the maize god, music, and dance rests largely on the representation of dwarves on painted cylindrical vessels in the Holmul style. Recent interest in the royal courts of the ancient Maya (such as Inomata 2001, M. Miller and Martin 2004) has led to speculation on the role of the dwarf there, based on observations by Spanish conquistadors of dwarves in Mexica courts (see European Texts under Ethnohistory in Chapter 7) and on court scenes from Maya polychrome ceramics. Unlike Jaina figurines and Holmul-style pots, however, of which a few have been recovered archaeologically, the graphic evidence for dwarves at court is based almost completely on unprovenienced wares.

One role ascribed to dwarf 'courtiers' or 'attendants' is that of counselor and props manager to the ruler. Presumably from representations on Caracol stelae of dwarves holding the K'awiil scepter, Schele (1997:151-152) interpolates that they "carried the sacred objects of the king, and worked for the court as diviners and sages" as well as "brought special objects that their lords required during rituals." The

fullest exposition of this role is by M. Miller and Martin (see also Wanyerka 1997:88):

Maya lords sought the company and advice of dwarves and hunchbacks, who were thought to be both entertaining and wise. ... Court scenes on Maya vases indicate that they were at least from time to time the king's closest and most trusted counselors The Maya ruler, like the Maize God he emulated, held dwarves and hunchbacks among his esteemed courtiers. ... Dwarves and hunchbacks often served as counselors to the highest-ranking lords [M. Miller and Martin 2004:40, 47, 292].

According to Houston et al. (2006:196), "dwarfs filled a variety of functions at Classic Maya courts, serving as scribes and bearers of sacred regalia and incense (presupposing a priestly role), as well as being sources of amusement."

A second role ascribed to dwarves is that of performer. For example, "at the Maya court, just as at the court of the Aztec ruler Motecuhzoma, dwarfs were special courtiers who entertained the royal family" (Schele and Miller 1986:150; see also Graña-Behrens and Grube 2001:430; Sánchez Saldaña and Salas Cuesta 1975:41-42; Wanyerka 1997:81, 88). A third role ascribed to dwarves is that of food server (Graña-Behrens and Grube 2001:430; M. Miller and Martin 2004:20; Schele 1997:151-152). On the unprovenienced Australia National Gallery vessel 82.2292 / K 1453, according to Prager (2001:278, Figure 437), a dwarf "tests the quality of the food in the calabashes and jugs ... They served exquisite dishes and sampled the quality of the drinks" (see also

references in Appendix C). As none of these assertions can be tested against any archaeologically recovered data, their accuracy is impossible to assess. While the dwarves shown on Classic lowland monuments might conceivably be interpreted as "counselors" to the rulers at whose right sides they stand, their supposed role as court waiters and jesters is not as well documented as the dignity and presence that they bring to the scenes in stone, perhaps records of ritual performance (Schele and Freidel 1990:88, 144-145).

Defining the Dwarf Motif

As discussed in Chapter 1, exploration of the meaning of the dwarf motif in Classic Maya art will rest on a definition of the motif that provides a common base of understanding. Thus the first question this work addresses is: What makes a Maya dwarf, a dwarf, biologically and culturally? In analyzing the elements that together compose an iconographic motif, researchers including Proskouriakoff (1950:18-19), Kurbjuhn (1986), Tate (1992:xii), Baudez (1994:281), and Viel (1999:381) have found variability, across space and through time, in how consistent and how meaningful those elements are. Once a working definition of the dwarf motif is generated, then a discussion can begin of what the meaning, for the Classic Maya, of the dwarf motif might have been.

Physical Attributes

The relative height of dwarves to primary figures on monuments averages about a third, though it can vary anywhere from a fifth as tall to approaching a half. Having a head-to-body ratio of one to just over three. dwarves on monuments are disproportionate relative to primary figures, who have a head-to-body ratio that averages between one to five and one to six. Although Maya artists rarely reproduced the facial profile typical of a person with achondroplasia, where the profiles of both primary and secondary figures survive and can be clearly seen, they contrast significantly. Similarly, on every lintel or stela on which the evidence for short limbs is available, the proximal segments of the dwarves' limbs are at least as short as, or shorter than, the distal segments. Apparently, Classic Maya artists were also attempting to convey the anomalies of hand shape that characterize achondroplasia by showing short fingers as well as fewer fingers. Thus, the physical attributes by which dwarves can be recognized on monuments are: short stature with disproportionality of both head to body and upper limb segments to lower, facial profiles contrasting with primary figures, bent arms, and hand anomalies, especially fingers.

Cultural Attributes

Nearly two-thirds of the dwarves on monuments stand in profile on the primary figure's right. They are usually the only secondary figure in

the scene except for captives below the feet, and they are facing and being faced by the primary figure. When the dwarf stands on the left, either another secondary figure is on the right, or the scene is balanced by a mirror image. Dwarves wear headdresses that quite often have one or two peaks or points, projecting up and forward, either stiff or soft; a band tied around the base of the headdress; or a rear peak that is folded backwards to form a Z shape. Their clothing consist of the ex, or loincloth, and a lower garment wrapped or draped sarong-like over the hips, commonly with a tail that hangs down in the back, sometimes of animal pelt. Most wear no sandals. Jewelry, in the form of necklaces, bracelets, and especially earspools, is almost always present, though styles vary. Sometimes dwarves hold what might be foliage or vegetation of some kind, but this is also inconsistent. In general, dwarves can be recognized by their position on the right hand of the primary figure on the monument and by their often-sumptuous attire of distinctive headdress, hip drape, and jewelry.

Some attributes are specific to certain centers. Dwarves at Caracol, for example, commonly hold the K'awiil scepter, while those at Tikal and Dos Pilas wear a short, fringed, cape-like garment over their shoulders. When associations such as water birds, the ball game, caves, the supernatural, the underworld, or the maize god are postulated for dwarves, as Baudez put it, "only examples that support the proposed

hypotheses are selected" (1994:4). When the entire corpus of dwarf monuments is analyzed, however, only a few cases of each of these associations are found.

Symbolic Attributes

There is, however, a common thread through some of these associations and their interpretations of the meaning of the dwarf motif. Ablon (1984:169-170) and Inomata (2001:39, 49) relate dwarves to the concept of liminality. According to Turner (1972 [1964]:340-341), when persons are in a liminal state, "their condition is one of ambiguity and paradox, ... a realm of pure possibility ... secluded, partially or completely, from the realm of culturally defined and ordered states and statuses." As Ablon (1984:170) puts it, "dwarfs fit this categorization in an exquisitely nuanced way." Some of the associations suggested also have a liminal quality. For example, Reents-Budet analyzes the cormorant motif on Classic polychrome pottery. Cormorants fly in the heavens, nest on the terrestrial plane, and dive below the dark water, traversing the boundaries between the natural realms (Reents-Budet 1994:246, 248; see also A. Chase and D. Chase 1994:59). This also applies to the water lily, living at the interface of bright, warm air and dark, cold water (Coggins 1994:36; Mayer 1986:223; M. Miller and Taube 1993:184; Prager 2002:52). The Maya concept of ball courts and caves as transitional between this world and the 'other' is well documented (Coggins 1994:36; Martin and

Grube 2000:16; Pohl and Pohl 1983:32, 51; Schele and Freidel 1990:126; Sharer and Traxler 2006:730-731; Stone 1995:152-154; G. Stuart 1981:234-235; Tate 1992:75, 97, 131). Finally, although dwarves carry the K'awiil scepter only at Caracol, according to Freidel and Schele, "this smoking ax represents a moment of transition" (Freidel et al. 1993:194). While it is true that each of these is associated with the dwarf motif in only a handful of cases, when they are considered together, these attributes symbolizing liminality accompany a significant portion of the known dwarf-motif monuments. Houston (1992:527) has suggested that dwarves participated in calendric ritual; if they do represent liminality, they would be particularly appropriate to celebrate the day that one calendric cycle ends and the next begins.

The introduction to this work asked: can a spatial analysis of the dwarf motif help us to "reconstruct their sociopolitical world" as well as to decode "their imagery ... replete with sacred implications" (A. Miller 1986:13)? The iconographic evidence from the monumental record indicates that for the Classic Maya, dwarf imagery expressed the liminality that was so central to their ideology (Ablon 1984:169-170; Inomata 2001:36-40, 49). The next two chapters address the reconstruction of their sociopolitical world, first at the site level, then at the regional level.

CHAPTER 5

ANALYSIS OF THE DWARF MOTIF AT FIVE SITES

Introduction

Chapter 1's methodological review highlights the importance of context in the analysis of iconographic data and the need for sensitivity to the structures underlying those data. Coggins (1994:41), for example, observes that stelae illustrating dwarves tend to cluster in the southern and southeastern areas of plazas and of sites. Of the polities known thus far to depict the dwarf motif, however, half apparently have just one scene: Uxul, Oxpemul, Santa Rosa Xtampak, Acanmul, Tzum, Yaxchilan, and El Peru (although Stela 22 from El Peru might show a dwarf; the surviving evidence is inconclusive, and some of these sites are poorly documented). Motul de San José and Sayil each have two renditions of dwarves, while two monuments from La Milpa present two, perhaps three dwarves. Data from these sites are thus insufficient to analyze the spatiotemporal distribution of the dwarf motif at the site level.

Although only two stelae from Dos Pilas each portray one dwarf, their historical context is unusually complete. Three stelae from Calakmul proper picture the dwarf motif. Since Oxpemul and Uxul are

both dependencies of Calakmul, however, the single display of the dwarf motif at each of those two sites could be added to its iconographic corpus; as Calakmul Stelae 27 and 53 cannot be ruled out as dwarf-motif monuments, the Calakmul polity with its satellites may have as many as seven representations of the dwarf motif (Folan et al. 2001:241-243; Marcus 1987:92, 111, Figure 43; Morley 1933:198; Proskouriakoff 1993:107; Ruppert and Denison 1943:103, 105, 112, 121, Plate 51b). Monuments at Tikal feature five dwarves in four scenes. Xultun and Caracol illustrate dwarves on a significant number of stelae -- eight and nine respectively -- but the iconographic record from Xultun has been ravaged. Based on the evidence available at this time, then, only Dos Pilas, Calakmul, Tikal, Xultun, and Caracol have sufficient data to trace the dwarf motif through their historical narratives and across their cultural landscapes. Analysis of the motif at these sites, however, reveals some interesting cyclical patterns in both space and time, as well as some observations of the way in which sites give regionally shared iconography their own local 'spin'.

Caracol

Introduction

William Coe and Christopher Jones, in the preface to *The*

Monuments and Inscriptions of Caracol, Belize, write of their recognition that the epigraphy and iconography of that polity is "too important to languish endlessly in the form of cabineted raw field data and our mentor's preliminary manuscripts" and of their decision that it should be "put expeditiously into print" (W. Coe and Jones 1981:xi). The efforts of Beetz and Satterthwaite (1981) to do that makes possible the analyses scholars currently achieve. It is especially critical to an analysis of the dwarf motif in Maya iconography, as it apparently begins at Caracol, and a quarter of the examples thus far compiled are found there. The discussion below additionally rests upon the work of Satterthwaite (1951, 1954); Stone et al. (1985); Houston (1987); A. Chase and D. Chase (1987, 1994, A. Chase 1991); Schele and Freidel (1990); Proskouriakoff (1993); Grube (1994a; Grube and Martin 2004); Harris (2000a, 2000b); Martin (Martin and Grube 2000); Helmke et al. (2006); as well as Sharer and Traxler (2006). Of 23 stelae at Caracol, 15 retain sufficient evidence to determine whether they displayed dwarves, and of these, nine illustrate the dwarf motif, one monument twice.

Early Dwarf-Motif Monuments: Stelae 4, 1, 6, and 5

Stela 4. The iconographic record of the dwarf motif opens with two stelae probably erected by one of the best-known sovereigns of Caracol and two erected by his older son, likely within a k'atun and a half. The identification of an early Calakmul king's name on a slate fragment in the

basement of the University of Pennsylvania Museum suggests a date of 9.7.10.0.0 (A.D. 583) for Stela 4. If correct, that date makes Stela 4 the earliest monument yet known to depict the dwarf motif (Grube 1994a:105; Houston 1987:93, Simon Martin, personal communication September 2006; Martin and Grube 2000:90, 105). Unfortunately, the area of Caracol in which the slate pieces of Stela 4 were found, north of Court A1 and the Central Acropolis, is probably not its original location (Map 1; Beetz and Satterthwaite 1981:23-25). The early date places Stela 4 a k'atun and a half into the reign of Yajaw Te' K'inich II (Caracol Ruler III, Lord Water, Lord Muluc, Kan Cross I) and shows a captive to his right and a dwarf to his left (Figure 9).

Stela 1. If the suggested date of 9.7.10.0.0 (A.D. 583) for Stela 4 is accurate, then Yajaw Te' K'inich II situated Stela 1 half a k'atun later, on 9.8.0.0.0 (A.D. 593). Unlike Stela 4, Caracol Stela 1 and its giant-ajaw altar were found undisturbed, in very good condition, at the southern base of Structure A1, west of the Central Acropolis, in the southwestern part of the site center (Maps 1, 2). Beetz and Satterthwaite (1981:105) as well as Coggins (1994:41) note that Stela 1 represents a shift in monument placement from the stelae celebrating the k'atun endings 9.4.0.0.0, 9.5.0.0.0, and 9.6.0.0.0, though only to an adjacent structure about 85 m to the southwest.

Stone et al. (1985:269) points out that on Stela 1, Yajaw Te' K'inich II is rendered dressed in a woman's garment (see also Coggins 1994:34, 40; V. Miller 1985:152; Proskouriakoff 1993:39; Wanyerka 1997:75) accompanied by a dwarf. This is our first surviving portrayal of a dwarf decked out in beaded jewelry, spotted animal pelt trimmed with beads, and masks dangling celts, both front and back (Figure 8). Stela 1 is the only early dwarf-motif monument paired with an altar. Although this pair is the last that Yajaw Te' K'inich II put up, he is also pictured on the first stela put up by his older son and heir.

Stela 6. Knot Ajaw (Caracol Ruler IV, Flaming Ajaw) came to Caracol's throne over five tuns later, perhaps while his father was still living (Grube 1994a:106; Martin and Grube 2000:90-91; Sharer and Traxler 2006:365). He raised a row of two, perhaps three stelae along the front (west) side of Structure A13, approximately 130 m southeast of Stela 1, continuing the southward trend in monument location (Map 1). The first of these, Stela 6, covers two and a half k'atuns of Caracol's history: the accession of Knot Ajaw's father, Yajaw Te' K'inich II, on 9.5.19.1.2 (A.D. 553); the period endings 9.6.0.0.0, 9.7.0.0.0, and 9.8.0.0.0 (at A.D. 554, A.D. 573, and A.D. 593); Knot Ajaw's own accession on 9.8.5.16.12 (A.D. 599); and finally his 'scattering' on the period ending 9.8.10.0.0 (A.D. 603, half a k'atun after Stela 1; Harris 2000a). The stela is unusual for featuring Yajaw (Ruler III) on the back and Knot Ajaw (Ruler

IV) on the front, both accompanied by a dwarf (Figures 11, 12; unfortunately, insufficient relief remains to detect whether the front and back show the same dwarf). On the lajuntun (half-k'atun) ending celebrated by Stela 6, Knot Ajaw had ruled Caracol for over four tuns. He is displayed holding the ceremonial bar of rulership.

Stela 5. Knot Ajaw set Stela 5 next to Stela 6, 15 m away, half a k'atun later (Map 1). He had been born on 9.7.2.0.3 (A.D. 575) to Yajaw Te' K'inich II (Ruler III) and Lady 1. Kan II (Ruler V) was born on 9.7.14.10.8 (A.D. 588) to Yajaw Te' K'inich II and a junior wife, Lady Batz' Ek'. Thus, Caracol Rulers IV and V were half brothers, born 12 years apart. Discussing Stela 5, Martin and Grube (2000:91) note "this scene" portrayed a dynastic genealogy" (see also Coggins 1994:36-39). Knot Ajaw may have commissioned Stela 5 illustrating his younger half brother and heir to Caracol's throne kneeling submissively at his right side, a well-dressed dwarf at his left (Figure 10). It commemorates the k'atun ending 9.9.0.0.0 (A.D. 613); on that day, Knot Ajaw (Ruler IV) would have been 37 years old and his half brother, Kan II (Ruler V), 25 years old. One k'atun later, Kan II returned this dubious honor by omitting his older half brother's reign entirely from the record on Altar 21 (Beetz and Satterthwaite 1981:120-129; Grube 1994a:106-108; Harris 2000a:39-41; 2000b:34, 39-40; Houston 1987:90-99; Martin 2005a:2;

Martin and Grube 2000:90-91; Schele and Freidel 1990:174, 449; Stone et al. 1985:272).

When it comes to the identities of the secondary figures, however, the evidence is insufficiently preserved to determine if these early depictions of the dwarves of Caracol are all one person. Based on nothing more than the hands of the dwarves on Stelae 1 and 4, half a k'atun apart, there is nothing to contradict that the same person is shown, especially as both monuments render only three fingers on each hand. Based on this evidence, as discussed in Chapter 4, it is unlikely that the dwarf on Stela 1 is the same person as that on the back of Stela 6, though nothing rules out the same person being portrayed on both sides of Stela 6. The profile of the dwarf on Stela 5 is sufficiently distinct that he is probably not pictured on the front of Stela 6. His apparel most resembles that of the Stela 1 dwarf, one k'atun earlier (Figures 8-12).

Stela 5, on the north end of the row of three stelae in front of Structure A13, was balanced by Stela 7 on the south end (Map 1). Beetz and Satterthwaite (1981:36), assuming that all three marked period endings, propose a date of 9.9.0.0.0, 9.9.10.0.0, or 9.10.0.0.0, placing Stela 7 within the reign of Knot Ajaw or his younger half brother and successor, Kan II. Having acceded to power on 9.9.4.16.2 (A.D. 618) and ruled for two k'atuns, Kan II is not known to have erected any monuments representing the dwarf motif. Stela 7 was found in

fragments, erosion having erased almost all traces of carving (Beetz and Satterthwaite 1981:36; Grube 1994a:108; Martin and Grube 2000:91-92; Sharer and Traxler 2006:365). In review, then, the early dwarf-motif monuments of Caracol were erected every half k'atun, two adjacent and one within the same building group but not the same specific structure (Maps 1, 2).

Caracol's Hiatus: Stela 21

As will be addressed in the next chapter, the three k'atuns between 9.10.10.0.0 (A.D. 642) and 9.13.10.0.0 (A.D. 702), observed by Stela 21, were turbulent times for Caracol and, in fact, the entire region. Though its original location is unknown, Stela 21 was probably associated with the same platform as Stela 1 (Maps 1, 2). Two earlier, nondwarf monuments, Stelae 3 and 22, had reversed the southward trend in monument erection slightly. His sole surviving monument the broken slate Stela 21, a Caracol lord known only as Ruler VII reached back at least four and a half to perhaps six k'atuns to imitate earlier Caracol stelae. Stela 21 repeats from Stelae 4, 5, and 6 such characteristics as the ruler between a captive and a dwarf as well as a basal panel read by rows across the columns (Beetz and Satterthwaite 1981:75). The captive was probably lord of an unknown settlement. The dwarf, however, is attired and adorned quite differently from those on Caracol's early monuments (Figures 9-12, 16). Dated 9.13.10.0.0 (A.D. 702), Stela 21 was erected after

a gap of three and a half k'atuns, the first dwarf-motif monument in four and a half k'atuns, and the last for another five k'atuns (A. Chase 1991:36-37; A. Chase and D. Chase 1987:61; Grube 1994a:108; Martin and Grube 1994:13, 2000:94-95; Proskouriakoff 1993:78; Sharer and Traxler 2006:389, 415). Did its retro styling and position reflect Ruler VII's longing to return to Caracol's glory days?

Late Dwarf-Motif Monuments: Stelae 11, 9, 8, 19

Stela 11. Five k'atuns later, K'inich Joy K'awiil (Caracol Ruler IX, Mahk'ina God K, K'inich Hok' K'awiil) presided over a Caracol revival (A. Chase and D. Chase 1987:61; Grube 1994a:109; Helmke et al. 2006; Martin and Grube 2000:96-97; Sharer and Traxler 2006:415). As at its beginning, the dwarf motif at Caracol came to an end on four stelae put up most likely within a k'atun or two. The first three, Stelae 11, 9, and 8, line up, together with Stela 10, on the north-south axis of Court A1, terminating at the same structure with which Stelae 1 and 21 were associated (Maps 1, 2). K'inich Joy K'awiil situated the northernmost, Stela 11, celebrating the lajuntun ending 9.18.10.0.0 (A.D. 800). Paired with giant-ajaw Altar 19, Stela 11 mentions Tum Yohl K'inich (Caracol Ruler VIII). The return of the dwarf motif after five k'atuns seems to have been part of a Caracol renaissance, both military and monumental.

Stela 11 is unique in illustrating a person possibly with spondyloepiphyseal dysplasia (Figure 2d; William G. Mackenzie, personal

communication April 2006). As redrawn by Houston (1987:Figure 71a), the dwarf is more simply clothed than those on Caracol's early dwarfmotif stelae, though he does sport a tall, peaked headdress as well as both front and back masks (Figure 14). If Stela 11 does depict a nonachondroplastic type of disproportionate dwarfism, then the other monuments at Caracol from this time period, Stelae 8, 9, and 19, must show at least one other dwarf, suggesting that more than one lived at Caracol at this time. As noted in Chapter 2 (see Etiology, Risk Factors, and Frequency under Achondroplasia), when their hinterlands are included, Calakmul, Caracol, and Tikal would each have had sufficient populations to produce two people with achondroplasia in each generation (although spondyloepiphyseal dysplasia is not as common and assuming that modern rates of mutation can be projected into the ancient, nonindustrial past; A. Chase and D. Chase 1996:67, 68; Folan et al. 1995:310, 313, 330; Harrison 1999:9, 180; Haviland 2003:129; Sharer and Traxler 2006:356, 364, 688). Unfortunately, insufficient evidence survives to determine if Stelae 8, 9, and 19 all render the same primary figure or the same secondary figure (Figures 13-15).

Stela 9. At some unknown time between A.D. 803 and A.D. 810, K'inich Joy K'awiil was succeeded by K'inich Toob'il Yopaat (or Yoaat, Caracol Ruler X, Ruler XI, Lord Quincunx; Beetz and Satterthwaite 1981:37; Grube 1994a:109; Helmke et al. 2006:6, 20; Martin and Grube

2000:98; Sharer and Traxler 2006:366). Caracol Altar 13 preserves some evidence that K'inich Toob'il Yopaat might have acceded on 9.18.13.10.19 (A.D. 804), but its eroded condition makes the date unreliable (Simon Martin, personal communication January 2007). Because the date of the central dwarf-motif monument on the Court A1 north-south axial line, Stela 9, can only be estimated to fall somewhere between 9.18.0.0.0 and 10.0.0.0 (A.D. 790 and A.D. 830), it is only tentatively ascribed to K'inich Joy K'awiil's reign (Maps 1, 2; Beetz and Satterthwaite 1981:40-41; Martin and Grube 2000:96). Like Stela 11 and Altar 19, Stela 9 is paired with giant-ajaw Altar 4, about 15 m south of Stela 11. Although its fallen position, underneath a road used by mahogany trucks, threatened details of the dwarf's outfit, they resemble those of the dwarf on Stela 11, suggesting that Stela 9 was indeed placed by K'inich Joy K'awiil (Figures 13, 14).

Stela 8. The southernmost monument in the line of four on the north-south axis of Court A1, Stela 8, was broken and eroded when discovered, without good evidence for an associated altar (Maps 1, 2; Beetz and Satterthwaite 1981:37). The only two remaining glyph blocks show 9 bak'tuns and 19 k'atuns, assumed to be the k'atun ending 9.19.0.0.0 (A.D. 810), which suggests that K'inich Toob'il Yopaat raised it (compare, however, Grube 1994a:112; Houston 1987:100); if so, Toob'il Yopaat finished out the line of stelae on the north-south axis of Court A1

begun by Joy K'awiil. Only its proximity in both time and space to Stelae 9 and 11 (roughly 17 m south of Stela 9), together with the few traces of surviving relief, allow the reconstruction of a dwarf. It is unfortunate that this scene is lost, as it would have been interesting to see how the "stylistic changes typical of this period ('conversational' scenes and other thematic innovations)" affect the dwarf motif, by that time over 11 k'atuns old (Martin and Grube 2000:98). The fourth monument in line, Stela 10, set up either two and a half or four k'atuns later, is entirely glyphic (Beetz and Satterthwaite 1981:42-43; Martin and Grube 2000:99).

Stela 19. If K'inich Toob'il Yopaat did, in fact, finish out the line of stelae begun on the north-south axis of Court A1 by his predecessor, he then shifted, half a k'atun later, some 360 m across the site to the northeast. There, K'inich Toob'il Yopaat located Stela 19, dated 9.19.10.0.0 (A.D. 820), in front of Structure B5, on the south side of the plaza bounded on the north by the huge Caana complex (Map 1). Once standing 3.7 m tall from the plaza floor, Stela 19 had fallen and broken into many pieces when discovered in 1951 (Beetz and Satterthwaite 1981:69-71; Martin and Grube 2000:98). As reconstructed by Grube (1994a:93-95), there are traces of what might be a dwarf, wearing a mask and holding a scepter in an upraised arm, to the right of K'inich Toob'il Yopaat (Figure 15).

Summary

The monuments of Caracol that picture the dwarf motif exhibit several patterns: a set of stelae closely associated in both time and space, for example, Stelae 11, 9, and 8 (Figures 13, 14, Map 2); a series erected every half k'atun, loosely associated with an architectural group, such as Stelae 4, 1, 6, and 5 (Figures 8-12, Maps 1, 2); as well as monuments isolated in time, such as Stela 21, and in space, such as Stela 19 (Figures 15, 16, Maps 1, 2). At least five Caracol lords put up dwarf-motif stelae there.

Of the 23 stelae known thus far from Caracol, 16 have reasonably secure dates (Beetz and Satterthwaite 1981:112, Grube 1994a:111-112). Of these 16 dated monuments, one has a full, five-place Long Count and the other 15 have period endings: 10 k'atun endings and 5 lajuntun endings. (Although some, like Stelae 3 and 6, record more than one period ending, for the purpose of this analysis, only the latest date is considered.) Seven of the ten stelae celebrating k'atun endings do not represent the dwarf motif, and three do. All five of those celebrating lajuntun endings portray dwarves (Stela 4, the date of which is uncertain, is counted here as a lajuntun-ending monument). Put another way, of the eight dwarf-motif monuments that are reasonably securely dated, five of them record lajuntun endings, and three record k'atun endings; these do not appear to cluster chronologically. This suggests that, at Caracol at

least, the dwarf motif is associated with the lajuntun, or half-k'atun, ending. As Wichmann (2004:327-329) shows, the half-period glyphs probably read something like 'to diminish by half'. The ancient Caracoleños, who pioneered the dwarf motif, may have thought that a person whose height was reduced by half was an appropriate icon for the celebration of half a time period.

Calakmul

Introduction

As several others have lamented, Calakmul has well over a hundred monuments, but so poorly preserved that what should be the rich history of the place its inhabitants called Ox Te' Tuun is sadly diminished (Braswell et al. 2004:167; Folan et al. 1995:325; Marcus 1987:vi, 4; Martin 2000a:40, 41; 2005b:5; Martin and Grube 1994:17, 2000:101; Morley 1933:195; Proskouriakoff 1950:128, 1993:78-79; Sharer and Traxler 2006:356, 358). Three stelae there, 16, 29, and 89, preserve evidence of the dwarf motif, while others, such as Stela 27, retain faint traces that could represent a dwarf, but are too far eroded to be conclusive (Marcus 1987:92, 111; Morley 1933:198; Proskouriakoff 1993:107). Ruppert and Denison describe Stela 27 as "in very bad condition" and do not record a "subsidiary figure" as they do for Stelae 16, 29, and 89. On the other

hand, their notes for Stela 53 include "in the lower left corner a small subsidiary figure"; by the time the Corpus for Maya Hieroglyphic Inscriptions (CMHI) project recorded that stela, however, no evidence of a human form there remained (Ruppert and Denison 1943:103, 105, 112, 121, Plate 51b). Calakmul Stela 43 does have an unusual, short individual, apparently standing to the primary figure's right in addition to the conventional bound captive below, but there are indications that he, too, is bound and none that he is pathologically short-statured or disproportionate (Folan et al. 1995:Figure 15; Pincemin et al. 1998:Figure 9). In addition, at least two of Calakmul's satellite sites, Oxpemul and Uxul, erected stelae showing the dwarf motif, so the Calakmul polity may have as many as seven examples.

The three stelae on which the dwarf motif does survive at Calakmul proper are widely distributed in time; spatially, the first and last are on the Central Plaza, and the intermediate one is in the Southeast Group. As the field drawings are processed, and as excavation at Calakmul and its satellites continues, more examples of the motif will hopefully be discovered (Martin 2005b:10; see Appendix A for the list of monuments available for analysis at this time). In the meantime, the discussion below relies on Morley (1933); Ruppert and Denison (1943); Proskouriakoff (1950, 1993); Marcus (1987); Folan et al. (1995); Martin and Grube (2000); Braswell et al. (2004); as well as Sharer and Traxler (2006).

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Stela 29

Calakmul had already weathered a gap in monument placement of five and a half k'atuns when a pair of stelae, displaying a royal couple, was put up celebrating the lajuntun ending 9.9.10.0.0 (A.D. 623). They were located on the north side of Structure V; at that time, there were no other stelae in that location nor had the Central Plaza yet come to be. If a stairway implies the front of a building, then Stelae 28 and 29 stood at what became the back of Structure V (Marcus 1987:25, 71-72, 75, 98; Morley 1933:198, 199-201; Ruppert and Denison 1943:105). Based on its date, Stela 29 may have been raised by Tajoom Uk'ab' K'ak' (Calakmul Ruler 2, Ta Batz'), though his name is known only from texts at Naranjo and Caracol. He is featured with a dwarf to his right as he makes the 'scattering' gesture (Figure 6). Although Stelae 28 and 29 are the only two that date to Tajoom's short reign, Calakmul's ascendance, marked in part by increased monumental activity, began at this point in time (Folan et al. 1995:327; Martin 2005b:7; Martin and Grube 2000:106). Yet, like Stela 21 at Caracol nearly four k'atuns later, Stela 29 was one of the first two monuments at Calakmul after a gap of five and a half k'atuns, and it would be another five and a half k'atuns until the next monument there would bear the dwarf motif.

Stela 89

When, after another five and a half k'atuns, the dwarf motif reappears at Calakmul, it is on just one of a set of at least six stelae celebrating the k'atun ending 9.15.0.0.0 (A.D. 731; Coggins 1994:38-39; Marcus 1987:26, 87-88; Morley 1933:198, 201; Proskouriakoff 1993:80-81; Ruppert and Denison 1943:110-113, 121). The lord thought responsible for their location, Yuknoom Took' K'awiil (Calakmul Ruler 5, 6, 7), had set up groups of monuments first on the east side of the Central Plaza, then on its south side, then about 330 m off to the West Group in front of Structure XVI, before coming back about 620 m southeast to Structure I in the Southeast Group (Martin and Grube 2000:112-113). According to Marcus (1987:146-147), the group of stelae (48, 52-55, 89) includes a male and female pair, both holding the K'awiil scepter. Ruppert and Denison describe one of the monuments in this set, Stela 53, as illustrating "in the lower left corner a small subsidiary figure," but no evidence of a human form remains there (CMHI field drawing courtesy of Ian Graham; Ruppert and Denison 1943:112).

As befitting its position at the summit of Structure I, Stela 89, dated 9.15.0.0.14 (A.D. 731), was once a most impressive monument (Figure 7). Though few details of the dwarf's clothing survive, the tail of an animal pelt and fringed, backed sandals are clear. As discussed in Chapter 4, secondary figures wear the Z-shaped headdress in several

scenes, but only here does the primary figure wear it as well, a lock of his thick, straight hair, wrapped with a band, flowing smoothly out from under the ties at the back. In contrast, Yuknoom Took' K'awiil, depicted on Stela 51 (274 days after Stela 89), has round, full, "cascading curls" of hair (Proskouriakoff 1950:128; see also Martin and Grube 2000:113; Proskouriakoff 1993:81; Sharer and Traxler 2006:414). If Stela 51 shows the curly-haired Yuknoom Took' K'awiil, and Stela 89 shows one of his straight-haired lieutenants, or, as Coggins (1994:38) proposes, one of his kinsmen, why was the ruler's monument at the base of Structure I and the other man's at the summit?

Paired with a stela dated five tuns after this k'atun ending (9.15.5.0.0, A.D. 736), Altar 9 at Tikal, though its text is eroded, most likely identifies Calakmul as the source of the bound captive portrayed thereon (Jones and Satterthwaite 1982:46-48, Figure 32; Martin 2005b:11-12; Martin and Grube 1994:15, 2000:48-49, 113; Sharer and Traxler 2006:400). Might the recording of the captive's thick, straight hair, wrapped at its base with two bands and flipped back up over the top of his head, be additional evidence that Tikal's prisoner is not curly-haired Took' himself, but one of his lieutenants? Perhaps the hapless Calakmul captive on Tikal Altar 9 is the man with the dwarf on Calakmul Stela 89, and his stela was placed at the summit of Structure I after Yik'in Chan K'awiil oversaw his sacrifice at Tikal.

Stela 16

Four k'atuns went by before the third and final monument picturing the dwarf motif was set up at Calakmul. Though Stela 16 was erected 435 m northwest of Stela 89, the second dwarf-motif stela at Calakmul, it was only 75 m from the first dwarf-motif monument, Stela 29, positioned nine and a half k'atuns earlier on an adjacent side of the Central Plaza. Stelae 15 and 16 continue a north-south line of five stelae. the central line of three such lines, in front (west) of Structure IVb, the east side of the Central Plaza (Marcus 1987:23; Morley 1933:198; Ruppert and Denison 1943:103). The northernmost two in line had already been standing for seven k'atuns when the next two in line, Stelae 15 and 16, were situated in honor of the k'atun ending 9.19.0.0.0 in A.D. 810. According to Marcus (1987:94), Calakmul Ruler 10 placed Stelae 15 and 16, together with Stela 63, Stela 64 (which possibly also bears a date of 9.19.0.0.0), and Stela 65 (dated by style to somewhere around 9.19.10.0.0 or A.D. 820), all in the West Group. Stela 14, next to Stela 16 and southernmost in line in front of Structure IVb, is not datable. Stela 16, the latest dwarf-motif monument, resembles the earliest not only in location but also in what survives of the dwarf's garments, the elaborate headdress worn by the primary figure, and the captive beneath his feet. Other elements, however, such as the dwarf's headdress and the primary figure's shield and scepter, which Schele and Freidel (1990:384) identify

as representing K'awiil, more closely resemble Stela 89 (Figure 7).

Although Calakmul monuments are dated stylistically to later periods,

Stelae 16 and 64 record the last period ending expressed as a Long Count date there (Braswell et al. 2004:180).

Summary

Compared to Caracol, at which over half the monuments that preserve sufficient evidence represent the dwarf motif, Calakmul has a very small number of dwarf-motif stelae, widely dispersed in both time and space, relative to a very large monumental corpus. Thus, dwarf-motif scenes are associated with nondwarf scenes, either as one of a pair, as Stelae 28 and 29, or as one of a larger, contemporaneous set, as Stela 89, or as one of a series over time, as in Stela 16. It is most likely that three different Calakmul sovereigns were responsible for raising dwarf-motif monuments there. According to Morley (1933:200), Calakmul is unique for setting up multiple monuments to witness the ending of a single period. In fact, just as many lajuntun endings are memorialized at Calakmul as k'atun endings, with almost as many stelae: 23 erected on k'atun endings and 21 on lajuntun endings (known so far; Marcus 1987:57-58). In addition to the three dwarf-motif stelae at Calakmul is at least one monument at each of two satellite sites: Oxperiul and Uxul. Of these, only one stela at Calakmul and one altar at Uxul were put up on lajuntun endings, and the stela from Oxpemul marks a hotun (quarterk'atun) ending. This suggests that the association of the dwarf motif with the lajuntun ending is limited to Caracol (although Calakmul Stela 27, which might have at one time featured a dwarf, is part of a set honoring a lajuntun ending). It is to be hoped that more examples of the dwarf motif will soon be forthcoming as investigation of Calakmul and its dependencies continues.

Xultun

Introduction

If the poor quality of limestone and the prevalence of theft at Calakmul are lamentable, the damage to 450 years of monumental iconography from Xultun is tragic. As at Calakmul 10 years later, the great pioneer Mayanist Sylvanus Griswold Morley explored, named, mapped, photographed, and published the site of Xultun in the 1920s. By the time reconnaissance was done in the 1970s, it had been heavily looted, and no sustained program of scientific excavation has ever taken place.

Monuments from Xultun date from the beginning of Bak'tun Nine, perhaps earlier, through Bak'tun Ten (Garrison and Stuart 2004:851; Houston 1986:8; V. Miller 1985:148; Morley 1922:362; Schele and Freidel 1990:392; Sharer and Traxler 2006:317). A total of 24 stelae were found

in two main plazas, which Morley named Group A, to the southwest, and Group B, to the northeast (*CMHI* 5:9-10; Morley 1921:322, 1937-1938:1:385). All the dwarf-motif stelae are paired with plain round altars associated with Group A, in the southwestern part of Xultun (Map 3). Some occurrences of the dwarf motif there, such as Stela 23, are barely visible, while Stela 15 is an example of a scene that might have at one time illustrated a dwarf, but is now too badly weathered to be conclusive. The lack of reliable chronology limits what can be reconstructed of the iconography of Xultun; efforts to this point, which inform the discussion below, have been made by Morley (1921, 1922, 1937-1938); Proskouriakoff (1950, 1965, 1993); von Euw and I. Graham (*CMHI* 5); Houston (1986); Schele and Freidel (1990); Grube (1992a); Coggins (1994); as well as Garrison and Stuart (2004).

Early Dwarf-Motif Monuments: Stelae 7 and 22

Stela 7. Like Calakmul, at which no monuments were erected between 9.4.0.0.0 (A.D. 514) and the first dwarf-motif stela at 9.9.10.0.0 (A.D. 623), no monuments were erected at Xultun between 9.3.7.0.0 (A.D. 501) and the first dwarf-motif stela at 9.10.10.0.0 (A.D. 642; Garrison and Stuart 2004:853; Houston 1986:8). Fronted by a plain round altar, Stela 7 was placed off-center to the north in front (west) of Structure A-4, one of two buildings forming the east side of the Group A plaza (Maps 3, 4; *CMHI* 5:7, 9; Morley 1921:Figure 1, 1937-1938:I:395). Stelae 6 and 7

represent something of a shift in monument location to the southwest, the earliest one, Stela 20, having been sited in Group B, some 520 m to the northeast (*CMHI* 5:6-7; Morley 1937-1938:I:387-388). Having identified what could be a lajuntun sign on the right side of Stela 7, Morley (1937-1938:I:395) offers a reading "for this extremely fragmentary text" of 9.7.10.0.0?? (A.D. 583). Proskouriakoff (1993:185) considers Stela 7 "too badly eroded to be judged by its style" (see also 1950:110, 112). Houston (1986:8) reads a date of 9.10.10.0.0 (A.D. 642), while Coggins (1994:54) tentatively reconstructs two possible dates based on Initial Series inscribed on the sides: 9.10.0.0.0? and 9.11.0.0.0? (A.D. 633 and A.D. 652). Just the ghost of a secondary figure, to the primary figure's right, remains (*CMHI* 5:29).

Stela 22. Both Morley in 1920 and von Euw in 1974 observed the most unusual position of Stela 22, only 46 cm behind Stela 3 and apparently 'sharing' its altar, centered in front of Structure A-2, one of two buildings forming the north side of the Group A plaza. Stela 22 was set up some 40 m northwest of the first dwarf-motif monument at Xultun, Stela 7, within Group A across the northeast corner of the plaza (Maps 3, 4; *CMHI* 5:7, 9, 77; Morley 1937-1938:I:386, 398, 415). Although most of Stela 22 had already broken off just above the bottom panel and disappeared by the time of the Carnegie Institution's exploration, the stub preserves the lower part of a dwarf wearing a front mask and a

lower, tailed garment (*CMHI* 5:77). Morley tentatively suggests a date of 9.10.0.0.0??? (A.D. 633; 1937-1838:I:397-398, 419) and Coggins of 9.12.0.0.0?? (A.D. 672; 1994:54); for reasons explained below, 9.12.0.0.0 is probably correct.

Stelae 24, 23, and 25

In 1974, the CMHI project discovered a line of three stelae, 6 m to 10 m apart, in front (north) of Structure A-23, just outside the southeastern corner of the Group A plaza, about 130 m southeast of Stela 22. Numbered 23, 24, and 25 from west to east, each is paired with an altar (Map 3; CMHI 5:7, 9, 79-89). The central stela, 24, is the best preserved of the three, bearing traces of red paint and a clear date: 9.16.10.0.0 (A.D. 761; *CMHI* 5:85; Coggins 1994:40). Houston (1986:8) cites Stela 25 as an example of a Xultun monument "with dates that are not decipherable," but observes that it celebrates a lajuntun ending in Bak'tun Nine. Based on the three stelae's stylistic similarities and the assumption that they commemorated consecutive period endings, Coggins (1994:54) proposes that Stela 24, in the center, is the earliest, then Stela 23 to the west at 9.17.0.0.0 (A.D. 771), then Stela 25 to the east at either 9.17.10.0.0 or 9.18.10.0.0 (A.D. 780 or A.D. 800). Four and a half k'atuns separate Stela 24 from the previous dwarf-motif monument, Stela 22.

If their hypothesized dates are correct, they form a set, showing the dwarf motif, situated proximally in time and space. Stylistically, they are very much alike (Figures 37, 38). It seems reasonable to assume that all three render the same Xultun lord over a span of one or two k'atuns. Only on Stela 25 is the dwarf reasonably well preserved, wearing a headdress similar to those on dwarves at other centers, a short cape not unlike those on the dwarves of Tikal and Dos Pilas, and a spotted animal pelt, with tail, also found at Caracol, Dos Pilas, and Tikal (see Attire under Cultural Attributes in Chapter 4).

Late Dwarf-Motif Monuments: Stelae 8, 3, and 10

Stela 8. From Structure A-23, monument placement shifted back to the Group A plaza, about 90 m northwest. Stela 8 was just south of Stela 7, in front of the northwest corner of Structure A-4, on the east side of the Group A plaza (Maps 3, 4; *CMHI* 5:7, 9; Morley 1921:Figure 1, 1937-1938:I:395). Morley considers Stelae 7 and 8 to be a pair celebrating consecutive period endings and so suggests 9.8.10.0.0?? for Stela 8 (about A.D. 600; Morley 1937-1938:I:395-397, 419). Based on what little remained of its style, however (Figure 35), Proskouriakoff proposes a date between 9.18.0.0.0 and 10.2.0.0.0 (roughly A.D. 790 and A.D. 870; 1950:139-140, 198, 1993:38, 99, 142, 185). That style date brackets two dates reconstructed by Houston (1986:8): 9.19.19.7.19 and 10.0.0.0.0 (A.D. 829 and A.D. 830; see also *CMHI* 5:31-33). Thus, even though only

about 4 m separated the two stelae, if their dates are read correctly, they were put up nine and a half k'atuns apart.

Stela 3. As discussed above with reference to Stela 22, only 46 cm behind it, Stela 3 (Figure 34) was most unusually located in front (south) of Structure A-2 on the north side of the Group A plaza, a single altar for both. Structure A-2 is one of two buildings forming the north side of the main plaza of Group A (Maps 3, 4). Morley (1937-1938:I:413-414) observes that when the stela split vertically from side to side, the back half remained standing, preserving its provenience, and the front half fell forward, preserving two dates: 10.0.3.3.8 (A.D. 833) and 10.1.10.0.0 (A.D. 859; see also Proskouriakoff 1993:185, 188). Stela 3 was stolen sometime around 1971 (*CMHI* 5:7, 9-10, 15-17). The raising of Xultun Stela 3 on the north side of the Group A plaza followed that of Stela 8, about 45 m away on the east side, by a k'atun and a half.

Stela 10. Forming the adjacent, west side of the Group A plaza is Morley's Structure VI or von Euw's Structure A-14. Centered in front (east) of it was Stela 10, paired with a plain round altar (Figure 36, Maps 3, 4; *CMHI* 5:7, 9; Morley 1921:Figure 1). Like Stela 3, two dates (10.1.13.7.17, A.D. 862 and 10.3.0.0.0, A.D. 889) were preserved when the stela fell facedown (Houston 1986:8; Morley 1937-1938:I:415). It was carted off during 1974 or early 1975 (*CMHI* 5:7, 9-10, 37-38). Stela 10, on the west side, followed Stela 3, 55 m away, by a second interval of a

k'atun and a half. Because of their late dates, Proskouriakoff cites Stelae 3 and 10 as illustrating "the process of degeneration" and "decline in draftsmanship" characterizing the Terminal Classic (1950:151, 1965:488, 1993:188; compare, however, Morley 1937-1938:I:415, 418).

Stelae 8, 3, and 10 are as alike stylistically as the previous set of three, though they span three k'atuns (Figures 34-36). While not much of Stelae 8 remains, Stelae 3 and 10 almost surely picture the same Xultun ruler. Though the dwarves are poorly preserved, they, too, form a set in terms of costume. As with Stelae 23, 24, and 25, insufficient detail survives to ascertain whether these scenes represent the same dwarf; though Stelae 3 and 10 do appear to show two different dwarves, given their facial profiles and general builds, their displays are a k'atun and a half apart. Also unknown is whether Xultun would have been large and influential enough to have had two people with achondroplasia living there at one time.

Cyclical Dwarf-Motif Stela Placement

A very interesting pattern emerges when the two early dwarf-motif monuments -- Stelae 7 and 22 -- are compared with the three late dwarf-motif monuments: Stelae 8, 3, and 10. Accepting Houston's (1986:8) date of 9.10.10.0.0 (A.D. 642) for Stela 7 and Coggins's (1994:54) date of 9.12.0.0.0?? (A.D. 672) for Stela 22, these two were set up exactly one and a half k'atuns apart on the east side and north side, respectively, of the

Group A main plaza. Precisely nine and a half k'atuns after the positioning of Stela 7, on 10.0.0.0.0 (A.D. 830), Stela 8 was situated next to it, 4 m south, in front of the northwest corner of Structure A-4 (Map 4). When found by the Carnegie Institution expedition of 1920, both were lying face down, so their original orientation has been lost, but Morley reports that each was paired with a plain round altar (*CMHI* 5:29, 31; Morley 1937-1938:I:395-397).

Just as a k'atun and a half passed between the placing of Stelae 7 and 22, so a k'atun and a half passed between the placing of Stela 8 and the next dwarf-motif monument, Stela 3, which was raised directly in front of Stela 22 (only 46 cm apart; Morley 1937-1938:I:397, 415). Of these two, Morley (1937-1938:I:398) says, "It seems almost as though Stela 22 may have been broken in ancient times, and its base allowed to stand, while the monument itself was replaced by Stela 3, which was erected in front of it." While Stelae 7, 8, and 10 are each fronted by a plain round altar, Stelae 3 and 22 'share' a single altar (Morley 1937-1938:I:386). As Stelae 7 and 8 are exactly nine and a half k'atuns apart in time, we might expect Stelae 22 and 3 to duplicate that span. Stela 3 marks the lajuntun ending 10.1.10.0.0 (A.D. 859); counting back nine and a half k'atuns produces a date of 9.12.0.0.0 (A.D. 672) for Stela 22, confirming Coggins's (1994:54) proposal. Predictably, a k'atun and a half after Stela 3, Stela 10 was put up on the west side of the plaza at

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10.3.0.0.0 (A.D. 859). Neither the CIW project (Morley 1921:323, 1937-1938:I:385, 416) nor the CMHI project (5:6-7, 9, 37) found any evidence that a carved stone, other than Stela 10, had ever been placed there.

This cycle of dwarf-motif monument placement every k'atun and a half, repeated nine and a half k'atuns later, caused considerable confusion when early attempts were made to date the stelae. Morley (1937-1938:I:395-397, 421) considers Stelae 7 and 8 to be a pair, and so in a sense they are, but nine and a half k'atuns apart. Proskouriakoff, in spite of Stela 7's poor condition, separates these two monuments temporally and groups Stelae 3 and 10 together on stylistic grounds (1950:110, 112, 139-140, 151, 1965:488, 1993:38, 99, 142, 184-185, 188). Though neither Houston (1986) nor Proskouriakoff (1950, 1965, 1993) propose a date for the unprepossessing stub of Xultun Stela 22, Coggins's (1994:54) reconstruction of 9.12.0.0.0 fits perfectly into this cyclical pattern of dwarf-motif monument placement.

The triadic east-north-west configuration in Maya spatial patterning is certainly well attested through Ashmore's work (1986:40-43, 1989:272-273, 1991:200-201, 1992:174; see also A. Chase 1991:38; Coggins 1980:728-729; Robin 2001:213-216; Tate 1992:37, 142). A counterclockwise ritual circuit and monument erection characterizes the ceremony of the turning of the *may*, or 13-k'atun cycle, documented in the early Colonial period and proposed for the Classic period by Rice and

Rice (2004:88-90). Chapter 4 (see Relative Positions of Primary and Secondary Figures under Cultural Attributes) notes the ethnographic evidence from one community of Tzotzil Maya in the central Chiapas highlands for a ritual circuit beginning in the east and moving north, then west (Gossen 1972:138-140). It is clear that this circuit of dwarf-motif monument placement in the Group A main plaza of Xultun also began in the east, moved to the north, and concluded in the west, not just once, but twice over a period of 12.5 k'atuns (though the earlier cycle apparently did not complete the western placement). More research is certainly called for to test whether this pattern of monument erection is unique to Xultun.

Summary

Even in Xultun's impoverished iconographic record, we have a variety of stela placements. Of the 24 stelae there, 14, including the 8 bearing the dwarf motif, were found in Group A, to the southwest; the other 10, including the first monument erected at Xultun, were discovered in Group B, to the northeast. The early dwarf-motif stelae, 7 and 22, were positioned one and a half k'atuns apart after a hiatus of over seven k'atuns. After another four and a half k'atuns and a move outside the plaza, a row of three was erected (Map 3); though we can only guess how much actual time passed between them, they probably were placed on consecutive period endings. Finally, three late monuments,

Stelae 8, 3, and 10, reproduced the location of the early stelae both temporally and spatially (Map 4). Spatial, temporal, and stylistic evidence indicates that Stelae 23, 24, and 25 feature the sovereign of Xultun between 9.16.10.0.0 and 9.17.10.0.0 or 9.18.10.0.0 (A.D. 761 and A.D. 781 or A.D. 800; Figures 37, 38), and that Stelae 3, 8, and 10 illustrate a long-lived lord who reigned from the start of Bak'tun Ten to its K'atun Three (A.D. 830 to A.D. 889; Figures 34-36).

According to Houston (1986:8), fifteen monuments at Xultun commemorate period endings, including not just one, but two bak'tun endings, five k'atun endings, seven lajuntun endings, and one tun ending. Two of the five k'atun-ending stelae depict the dwarf motif, while four of the seven lajuntun-ending stelae show dwarves. Although these tip the balance in favor of an association between the dwarf motif and the lajuntun ending, as suggested by the data from Caracol, the sample size is small, and the statistical significance is hardly overwhelming.

Tikal

Introduction

Maudslay (1889-1902:III) and Morley (1937-1938:I) first presented to the world the elaborate, detailed lintels of Tikal, followed by the University of Pennsylvania Tikal Project (W. Coe et al. 1961; Jones 1977;

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Jones and Satterthwaite 1982; Shook 1958). In addition to these sources, I have drawn on the ideas of Proskouriakoff (1950, 1993); Harrison (1970, 1999, 2003); Coggins (1975); A. Miller (1986); Harris (1989a, 1898b); Schele and Freidel (1990); Sanchez (1997, 2005); Martin and Grube (Martin 2000b:113-122, 2003:30-31, Martin and Grube 2000); as well as Sharer and Traxler (2006). Among Maya sites, Tikal, called by its builders Mutul, is unique not only for having preserved wooden lintels, but for rendering the dwarf motif on these lintels and not on stelae. At every other polity, dwarves are found on stelae in open, relatively accessible plazas, while at Tikal, portrayals of dwarves are restricted to the lintels and facades of relatively inaccessible structures, as will be discussed further below.

Another way in which Tikal differs from other centers portraying the dwarf motif is that for most monuments, we assume that the periodending date inscribed thereon is the date on which it was erected, probably with ceremony in honor of the completion of a calendric cycle (see W. Coe et al. 1961:48-49, 59-60; Harris 1989b:131-132; exceptions are Caracol Stela 5 as well as Dos Pilas Stelae 14 and 15, which bear an additional date after a period ending). For the lintels of Structure 5D-1 (Temple I) at least, however, this assumption is not supported. As discussed by Jones and Satterthwaite (1982:98, 103), the identification of Burial 116 as that of the Tikal ruler pictured on the scene above "compelled a reassessment of the temple date and the DD [dedicatory

datel of the lintels." Archaeological evidence makes clear that although the latest dates in the Lintel 3 text record events during Tun Three of K'atun Thirteen (A.D. 695), it was not installed in Structure 5D-1 until after the death and entombment of Jasaw Chan K'awiil I (Tikal Ruler A. Ah Cacao), some one and a half to two k'atuns later. The date on the lintel in Structure 5D-52 reads 9.15.10.0.0 (A.D. 741), but the wood yields a C-14 date of A.D. 621 ± 36 , suggesting that a lintel could be carved five k'atuns after the wood was cut, or that a lintel could be installed five k'atuns after being carved, or some combination (Harrison 1970:30-31, 1999:130, 156-157; Jones 1977:42, 44, 52; Satterthwaite 1967; Sharer and Traxler 2006:114). Thus, even lintely bearing clear hieroglyphic dates are not chronologically straightforward, complicating the attempt to trace the dwarf motif through the iconographic record of Tikal. Finally, Tikal is unique in having five dwarves in four scenes without associated hieroglyphic texts; other sites lacking glyphs referring to dwarves have only one, at most two, dwarf-motif scenes (see Epigraphy in Chapter 7).

Structure 5D-1 (Temple I) Lintel 3

Although this lintel records the accession date of the sovereign that oversaw Tikal's great revival, Jasaw Chan K'awiil I, it was not the first one he situated. The honor of breaking Tikal's monumental silence goes to the Stela 30 and Altar 14 pair, which denote the k'atun ending 9.13.0.0.0 (A.D. 692), half a k'atun into Jasaw's reign. They were placed in

an enclosure in Twin-pyramid Group 3D-1 (Complex M), some 800 m north of the Great Plaza. Altar 14 bears a giant ajaw glyph in the style of Caracol, a partner in the forces that appear to have caused Tikal's infamous hiatus (Coggins 1975:370-371; Harrison 1999:128; Haviland 1992:76, 78, 1994:269; Jones 1977:36-37, 1991:118; Jones and Satterthwaite 1982:63-64; Proskouriakoff 1993:66; Schele and Freidel 1990:204-205; Sharer and Traxler 2006:391-393; Stone et al. 1985:267). Although the relationships between settlements representing the dwarf motif will be discussed in the next chapter, here it may be appropriate to speculate why the first altar positioned after Tikal's long period of supposed domination by the Calakmul-Caracol alliance would bear a motif identified with Caracol.

Haviland (1992:73-74, 1994:269-270) presents evidence for a break with tradition and an introduction of foreign influence, most likely from the direction of Calakmul, on central Tikal architecture between 9.8.0.0.0 (A.D. 593, the tomb of Tikal lord Animal Skull) and 9.12.9.17.16 (A.D. 682, the accession of Jasaw Chan K'awiil I). Upon Jasaw's taking the throne, the source of foreign influence at Tikal shifted to the direction of Caracol (Haviland 1992:76, 78, 1994:269; Stone et al. 1985:267; compare, however, Coggins 1975:387). The influence of Caracol on the burials of this period is noted in Chapter 2 (see Tikal Burial 24 under The New World: Central America; Coggins 1975:371, 374, 377-379, 385, 446).

Jones and Satterthwaite (1982:75) identify Caracol as the possible source of a shale stela, stylistically dated to this time span, found in the debris at the base of Structure 5D-2 (Temple II). Harrison (1999:128) suggests that the occupants of Tikal may simply have become accustomed to Caracol motifs during this period. Schele and Freidel (1990:205) conjecture that Jasaw Chan K'awiil I's pairing of a Caracol-style altar with his stela portrait, in the mode of the Tikal ruler vanquished by the Calakmul-Caracol alliance over six and a half k'atuns ago, somehow served to "neutralize the shame" of defeat (see also Freidel 1998:192-193; Harrison 1997:87; Sharer and Traxler 2006:393). It seems that, whatever Tikaleños may have felt about Calakmul during the wars of 9.6.8.4.2 and 9.11.4.5.14 (A.D. 562 and A.D. 657), they were not averse to elements of Caracol style by the time Jasaw Chan K'awiil I came to power a generation later. Indeed, as pointed out above in the review of the dwarf motif at Caracol, that site put up only a single stela from the time Jasaw became Tikal's sovereign for over the next six k'atuns; if monumental activity is any indication of a polity's strength, then Caracol was no threat to Tikal.

The monument pair of Stela 30 and Altar 14 is relevant in two ways to the lintels of Structure 5D-1. First, like Altar 14, Lintel 3 of Structure 5D-1 features a motif most commonly found at Caracol, in this case, a dwarf. Second, although, as noted above, we have no way to tell when those lintels were actually carved, the events they record overlap Stela 30

and Altar 14 chronologically. Freidel and Schele (Freidel et al. 1993:312; Schele and Freidel 1990:205-207) suggest that construction of the enclosure for the Stela 30 Altar 14 monument pair was contemporaneous with that of Structure 5D-33 on Tikal's North Acropolis, and that the conjuring by bloodletting described on Lintel 3 was part of the dedication of that structure (see also Harris 1989a:120; Harrison 1999:128).

Structure 5D-1 Lintel 2 bears an unintelligible date. Freidel and Schele, as well as Grube and Martin, point out its Mexican iconography (Freidel et al. 1993:311-312; Martin and Grube 2000:45; Schele and Freidel 1990:210). Structure 5D-1 Lintel 3 (Figure 28) represents a new medium for the dwarf motif, permitting a new configuration: Jasaw Chan K'awiil I, enthroned atop a palanquin, faces the dwarf, who is standing on the level on which the palanquin rests; both are seen in profile. Previously, dwarves were shown in profile standing at the feet of a front-facing lord or lady. As befits the momentous occasion, what survives of the dwarf is lavishly dressed in beaded jewelry, fringed collar, jaguar pelt trimmed with plumes, and back mask. Other elements, such as water birds (as at Dos Pilas) or plants of some sort held by the dwarf, may have been present on the now-missing parts of the lintel.

Lintels 2 and 3 of Structure 5D-1 celebrate the military victory that reversed Tikal's fortunes. The text of Lintel 3 begins with the tun ending 9.13.3.0.0 (A.D. 695), three tuns after Stela 30 and Altar 14 were set up.

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Just 158 days into Tun Three, a war event took place against Yuknoom Yich'aak K'ak' (Jaguar Paw) of Calakmul on 9.13.3.7.18. Two winals (40 days) later, Jasaw Chan K'awiil I conjured a deity by letting blood from his tongue in a dedication ceremony on the Great Plaza on 9.13.3.9.18 (both A.D. 695). The narrative then reaches back in time over 13 tuns to recall that on 9.12.9.17.16 (A.D. 682), Jasaw was seated on Tikal's throne. Though we have no contemporaneous record of that event, this retrospective mention on Lintel 3 is the earliest inscribed date after Tikal's hiatus (Boot 2002b:9; Braswell et al. 2004:169; Harris 1989a:120, 1989b:131, 133, 2006:36; Harrison 1999:120, 130-133; Jones and Satterthwaite 1982:100; Martin and Grube 2000:44-45; Proskouriakoff 1993:66, 69; Schele and Freidel 1990:205-211; Schele and Mathews 1998:86-87; Sharer and Traxler 2006:303, 393, 413).

On the next k'atun ending, Jasaw Chan K'awiil I located the Stela 16 and Altar 5 pair (9.14.0.0.0 or A.D. 711) in Twin-pyramid Group 5C-1 (Complex N), about 525 m west of North Acropolis Structure 5D-33 (Harrison 1999:133-139; Jones and Satterthwaite 1982:37-38, 64; Martin and Grube 2000:44-46; Proskouriakoff 1993:67; Schele and Freidel 1990:213; Sharer and Traxler 2006:395). Harrison (1997) documents the geometrical relationship between this monument pair and Structures 5D-1 and 5D-2. A carved lintel may have been installed in Structure 5D-2 at this time, but no firm date survives (W. Coe et al. 1961:51-53, 77-78;

Jones and Satterthwaite 1982:100; Proskouriakoff 1993:69; Sharer and Traxler 2006:395). Similarly, Twin-pyramid Group 4D-1 (Complex O), approximately 350 m north of the Great Plaza (nearly midway from the Great Plaza to Jasaw's first twin-pyramid group), witnessed the k'atun ending 9.15.0.0.0 with a plain stela and altar pair (A.D. 731; Harrison 1999:140; Jones 1977:44; Martin and Grube 2000:46; Schele and Freidel 1990:213; Sharer and Traxler 2006:397).

Jasaw Chan K'awiil I's son succeeded him on Tikal's throne on 9.15.3.6.8 (A.D. 734). He probably installed the lintels in Structure 5D-1 at some point between 9.14.16.0.0 and 9.15.5.0.0 (A.D. 727 and A.D. 736), over an offering of marine materials (Adams and Trik 1961:118; Harrison 1999:140, 142; Jones 1977:44; Martin and Grube 2000:47). The inner sanctum of the mortuary shrine, venerating the dynasty and capping the tomb of Jasaw Chan K'awiil I, was an appropriate place for Lintels 2 and 3, celebrating visually and textually his triumph over Calakmul. Although Jasaw Chan K'awiil I enjoyed a reign of over two and a half k'atuns, dedicated a new ball court as well as three twin-pyramid groups on three k'atun endings, and left his mark on the North Acropolis, the Great Plaza, and the Central Acropolis, at the end of his life, the defeat of his kingdom's nemesis and the vindication of his dynastic forebears was given (literally) the highest place (Martin and Grube 2000:44-46; Schele and Freidel 1990:205; Sharer and Traxler 2006:393-395).

Structure 5D-52 Lintel

Christopher Jones (1977:45) suggests that Yik'in Chan K'awiil (Tikal Ruler B, Yaxkin Caan Chac) was so eager to raise an inaugural monument that he couldn't wait for the K'atun Sixteen ending, but celebrated the hotun ending 9.15.5.0.0 (A.D. 736) instead, the only quarter-k'atun ending memorialized at Tikal. Stela 21, paired with Altar 9, stood in front of Structure 6F-27 (Temple VI or the Temple of the Inscriptions), for which it apparently provides the dedication date (Harrison 1999:148, 159-160; Jones 1977:34-35; Jones and Satterthwaite 1982:48; Martin and Grube 2000:48; Proskouriakoff 1993:74, 95; Sharer and Traxler 2006:304, 313, 400; for discussion of Tikal Altar 9, see Calakmul Stela 89, above and under Expansion of the Dwarf Motif in Chapter 6).

Having made his mark on the Great Plaza with his father's mortuary monument, as well as some 1,200 m far off to the southeast with his first stela-altar pair, Yik'in Chan K'awiil turned to the Central Acropolis. There, as Harrison (1999:149) relates, he blocked the view over the largest reservoir from Structure 5D-57, his father's palace, with a one-story, two-roomed building on the opposite side of Court 5D-3. Over time, floors were added and rooms were divided; the complex came to be known as Maler's Five-Story Palace and as Tozzer's Structure 10. The only lintel known to have been carved (Figure 30) spanned the doorway

into the central, rear room. W. Coe et al. (1961:72-73) and Harrison (1970:30) point out the parallel placement of this lintel to those in Structures 5D-1, 5D-2, 5D-3, and 5C-4 (Temples I through IV), while Jones and Satterthwaite (1982:104) observe that this is the only carved lintel in a nontemple setting at Tikal (the siting of the dwarf motif in the Central Acropolis is discussed below).

As its short inscription is much damaged, a single date reads 9.15.10.0.0 (A.D. 741). The lintel was removed sometime in the early 1900s. As of 1961, two beams were in the American Museum of Natural History in New York; wood from these beams was C-14 dated to A.D. 621 \pm 36 (Harrison 1970:30-31; see also Satterthwaite 1967).

As Jones and Satterthwaite (1982:105) observe, "at first glance, the main figure appears to be wearing a feminine robe." Proskouriakoff (1993:97) also writes of this lintel, "I suspect it may depict a woman, although the shield, manikin, and bag are normally items of male accoutrement." These accessories, held by the primary figure on the Structure 5D-52 lintel, are most like those held by Yik'in Chan K'awiil on Lintel 2 of Structure 5C-4 (Temple IV). Based on their comparisons with Lintel 2, Stela 5, and Stela 20, all positioned by Yik'in, Jones and Satterthwaite propose that the Structure 5D-52 lintel displays him as well, though "there does not seem to be any trace of Ruler B's name glyphs in the inscription" (1982:105). In an earlier paper, Jones (1977:52) points

out, in the Structure 5D-52 text at B1 and C1, the bird-head glyphs that might spell out the name of the wife of Jasaw Chan K'awiil I and mother of Yik'in Chan K'awiil. This woman, Kalajuun Une' Mo' (Lady Twelve Macaw Tails), might appear on Lintel 2 of Structure 5D-2 (Coggins 1975:549-550; Harrison 1999:141-142; Jones and Satterthwaite 1982:100; Martin and Grube 2000:46; Proskouriakoff 1993:69; Sharer and Traxler 2006:395-397). While the dress of the woman on Lintel 2 of Structure 5D-2 does differ from that on the Structure 5D-52 lintel, note the small, backward-curling lock of hair just above the primary figures' earspools on both lintels. As mentioned above, the head of the primary figure on the lintel from Structure 5D-52 at Tikal is almost a quarter of his or her height, which approaches the dwarves' proportions. It would be interesting to test whether depictions of men and women vary in the proportions of head to body.

Yik'in Chan K'awiil's Structure 5D-52 lintel repeats the configuration of Jasaw Chan K'awiil I's Lintel 3 of Structure 5D-1: the dwarf and the primary figure, who holds a K'awiil scepter in the right hand and a shield in the left, face each other, both in profile (Figures 28, 30). The two scenes would be mirror images, were not the primary figure on the Structure 5D-1 lintel seated on a raised platform, nor the secondary figure on the Structure 5D-52 lintel accompanied by water birds. The Structure 5D-52 dwarf, like his predecessor on Lintel 3, is

richly garbed in a headdress that ties in back, beads, earspool, short, fringed cape, back mask, and spotted animal pelt. His *ex* knots below a round belly, and he holds what might be leaves and water lily blossoms. For all the detail preserved in this beautiful carving, these are not yet botanically identified. The water-bird motif is found first at Dos Pilas; Harrison (1999:151) suggests that the cormorants may be part of Yik'in Chan K'awiil's "personal livery" (see Water Birds under Other Secondary Figures in Chapter 4). Presumably, as the two monuments share a date, the dwarf illustrated on the Structure 5D-52 lintel is one of the two on Lintel 3 of Structure 5C-4 (Figures 29, 30).

Structure 5C-4 (Temple IV) Lintel 3

The opening passages of both Lintels 2 and 3 of Structure 5C-4 name the same lajuntun ending as the Structure 5D-52 lintel, about 845 m east. They are also connected to Lintels 2 and 3 of Structure 5D-1 by parallel iconography: just as 5D-1 Lintels 2 and 3 depict a giant, overhanging serpent and jaguar, respectively, 5C-4 Lintels 2 and 3 show jaguar and serpent imagery (W. Coe et al. 1961:39-40, 65; Harrison 1999:155-156; Jones and Satterthwaite 1982:100, 103; Proskouriakoff 1965:485, 1993:97). As Harrison (1999:155) points out, because the temples face opposite directions, the serpent motif is to the east in both cases, the jaguar to the west. The texts are also parallel: Lintels 3 of both 5D-1 and 5C-4 record a military victory, over Calakmul in 5D-1 and over

El Peru in 5C-4 (Harrison 1999:155-156; Sharer and Traxler 2006:304). Yet, it seems largely unremarked upon that, just as Jasaw Chan K'awiil I faces a dwarf on Lintel 3 of 5D-1, so two dwarves face each other, in front of Yik'in Chan K'awiil's throne, on Lintel 3 of 5C-4 (Figure 29). Lintels 2 of both 5D-1 and 5C-4 are incompletely preserved, so they may have at one time portrayed dwarves, but this motif was likely reserved for the innermost rooms of both Great Temples.

One reason for the dwarves' nonrecognition is that Lintel 3 of Structure 5C-4, like that of Structure 5D-1, presents a new configuration: two dwarves face each other in front of a primary figure, shown frontally. Another reason is that full-head animal masks, with tufts of hair, large ear, and skeletal jaw, cover the dwarves' heads, and only the back half of one of them is preserved. It is regrettable that most details are gone; conceivably, the two dwarves on Structure 5C-4 could be the one on Structure 5D-52 and the one on Structure 5D-141 (Figures 29-31). As discussed in Chapter 2 (see Etiology, Risk Factors, and Frequency under Achondroplasia) and with reference to Caracol Stela 11 (above), when the hinterlands of Calakmul, Caracol, and Tikal are included, each would have had sufficient populations to produce two people with achondroplasia in each generation (assuming that modern rates of mutation can be projected into the ancient, nonindustrial past; A. Chase and D. Chase 1996:67, 68; Folan et al. 1995:310, 313, 330; Harrison

1999:9, 180; Haviland 2003:129; Hoffman 1976:83; Ortner and Putschar 1985:330; Sampsell 2001:71, 73 Note 43; Sharer and Traxler 2006:356, 364, 688).

While the configuration of Yik'in Chan K'awiil's Structure 5C-4 Lintel 3 is unique, other elements are repeated from his father's mortuary lintel: the lord sits on a throne atop a raised structure, and the dwarves stand on the level on which it rests. What remains of their attire is consistent with that of the previous Tikal dwarf-motif monuments, particularly the anklet and short, fringed cape. As described in Chapter 3, on both sides of the short stairway up to the throne, there appear to be narrow, diagonal shafts beneath the dwarves' elbows, as though they each carried a staff, the butts resting on the floor behind them and the tips meeting or crossing in front of the stairway. In rare convergence, the iconography of Lintel 3 of Structure 5C-4 is related by M. Coe (1978:96) to an unprovenienced polychrome cylindrical vase in Holmul style (Faivre Vase AIC 1986,1081 # 127 / K 633 / MS 1374 / P 14) and that of Lintel 3 of Structure 5D-1 by Kerr (2001-2002:6579) to a scene molded in clay in Jaina style. The maize tendrils that sprout from the ceremonial bars on early dwarf-motif monuments from Caracol here find full expression in luxuriant foliage, especially curling around the serpent heads on Structure 5C-4 Lintel 3 but also on Structure 5D-1 Lintel 3 and the Structure 5D-52 lintel (Figures 28-30; Spinden 1913:89-90).

The Lintel 3 narrative begins with the lajuntun ending 9.15.10.0.0 (A.D. 741) and continues with a military victory over El Peru by Yik'in Chan K'awiil on 9.15.12.2.2 (A.D. 743), resulting in the capture of a palanquin bearing the image of a spiritual patron of El Peru. The next day, 9.15.12.2.3, saw some kind of ritual - perhaps deactivation or decommission - performed on it. On the three-tun anniversary of the ritual, 9.15.15.2.3 (A.D. 746), Yik'in again performed some ceremony, rode in the palanquin with its god image, now presumably wielding its spiritual power for Tikal, and danced in the Great Plaza (Grube 1992a:212; Harris 1989b:134-135, 2006:38; Harrison 1999:155-156; Jones and Satterthwaite 1982:102; Proskouriakoff 1993:97; Sharer and Traxler 2006:400-401). As an historical aside, in a paper published at the turn of the twentieth century, Eduard Seler presciently observes that the poles, lashed together at the base of the three steps atop which Yik'in is enthroned, "may indicate that the entire terraced structure with all upon it was intended to be portable and to be carried in a procession to or from the temple" (Seler 1939 [1900]:1). After recording Yik'in Chan K'awiil's great military triumphs, the Lintel 3 text concludes by naming his parents (Jones and Satterthwaite 1982:102-103). Once installed, the lintels of Structure 5C-4 occupied an even higher point than those of Yik'in's father, Jasaw Chan K'awiil.

Just as the Structure 5D-1 lintels, celebrating Jasaw Chan K'awiil I's victory over Calakmul, chronologically overlap Stela 30 and Altar 14, so the Structure 5C-4 lintels, celebrating Yik'in Chan K'awiil's victory over El Peru and Naranjo, chronologically overlap Stela 5 and Altar 2. Approximately one tun after Yik'in performed the first ritual involving the effigy of El Peru's patron spirit, and about two tuns before the second ritual, he situated Stela 5 and Altar 2 west of the stair in front of Structure 5D-33 on the North Acropolis. As Jones (1977:45) observes, again he did not wait for the turning of the k'atun, but marked the tun ending 9.15.13.0.0 (A.D. 744). Stela 5's text is consistent with that of faroff Stela 21, eight tuns earlier, and both its text and location honor Yik'in's father, Jasaw Chan K'awiil. The image, however, makes clear that Yik'in himself is the captor of the Naranjo lord, as the text of Lintel 2 of Structure 5C-4 also records (Harrison 1999:149, 156; Jones and Satterthwaite 1982:17-18; Martin and Grube 2000:49; Proskouriakoff 1993:96; Sharer and Traxler 2006:313).

From a 'four batab k'atun' statement on Lintel 3 of Structure 5C-4, Jones (1977:53; Jones and Satterthwaite 1982:102-103) deduces that it had to have been carved after 9.16.0.0.0 (A.D. 751), about five tuns after the last date recorded there. This makes the lintel possibly contemporaneous with Stela 20 and Altar 8. Both Jones and Satterthwaite (1982:46), as well as Martin and Grube (2000:50), express

doubts whether this monument pair should be attributed to Yik'in Chan K'awiil or to his successor. Whichever sovereign was responsible, he marked the k'atun ending 9.16.0.0.0 (A.D. 751) by constructing a twin-pyramid group (3D-2) only about 135 m northeast of the first monument pair placed after Tikal's hiatus, Stela 30 and Altar 14, some 935 m north of the Great Plaza (Harrison 1999:158; Jones 1977:45; Jones and Satterthwaite 1982:45-46; Sharer and Traxler 2006:304, 403-404). It is possible that Yik'in Chan K'awiil's successor positioned Stela 20 and Altar 8 contemporaneously with the lintels of Structure 5C-4, honoring his predecessor, in the same way that Yik'in himself positioned Stela 21 and Altar 9 together with the lintels of Structure 5D-1, honoring his own father.

Structure 5D-141 Facade

In 1965, exploration of the northeast corner of Tikal's Central Acropolis revealed "a spectacular example of Maya art in stone and thin plaster" on the exterior wall of a structure, thought to be L-shaped, labeled 5D-44 (W. Coe 1967:70). Two years later, when the building was excavated, it turned out to be two separate structures, so the east wing was renumbered 5D-141 (Harrison 1970:6-8, 13). It was preserved by the addition to Structure 5D-46, immediately to the south, of a northern patio that abutted the south wall of Structure 5D-141. That building and its façade can be dated by stratigraphy only to the Late Classic period (A.D.

600 to A.D. 800), though Harrison (2003:191) describes it as more or less contemporaneous with the first story of Structure 5D-52: 9.15.10.0.0 (A.D. 741), known to have been the work of Yik'in Chan K'awiil. Though we may assume that Yik'in is the primary figure on the 5D-141 façade, no hieroglyphic caption elucidates the scene.

This frieze is unique on several levels. As addressed in Chapter 2, only a handful of renditions of dwarves do not conform to the characteristics of achondroplasia. Of those, two appear to be other types of disproportionate short stature: Caracol Stela 11, a possible case of spondyloepiphyseal dysplasia, and this example (Figures 14, 31). While the body of the dwarf on Structure 5D-141 is typical of a person with achondroplasia, the profile, with its overhanging forehead, deeply depressed nasal bridge, long, sharp nose, and thick, protuberant lips, might indicate another, additional type of chondrodystrophy.

This dwarf is quite distinct in cultural attributes as well. In spite of suggestions correlating the imagery of dwarfism to that of the Maya ball game (Benavides C. 1998:543; Mayer 1986:223; Piña Chan 1997:10; Prager 2002:50; G. Stuart 1981:235; Taladoire and Colsenet 1991:172), the monumental evidence for an association is limited to La Milpa and Yaxchilan (see The Ball Game under Other Associations in Chapter 4). Although Grube and Hammond (1998:129) identify the dwarves on La Milpa Stela 4 as having ball-game gear, only the dwarf on Tikal Structure

5D-141 might actually be wearing a ball-player's yoke (Figures 21, 22, 31, 39). Furthermore, while the three dwarves on Tikal lintels wear fringed collars or short capes, this one appears to wear neither upper garment nor animal-skin hip drape. His headwear is quite singular, though perhaps not unlike that of the dwarves on the panel from the Santa Rosa Xtampak palace and the west column from Sayil Structure 4B1 (Figures 25, 27). One element common to this façade and the lintels of Tikal Structures 5D-1 and 5D-52 is the masks, with knotted hairdos, found on the throne of the primary figure of this scene as well as on the backs of the two dwarves on the lintels (Figures 28, 30).

In addition to this frieze, the only other monuments that picture a dwarf to the primary figure's left and an average-proportioned, secondary figure, who is not a bound captive, to the right are Caracol Stela 5 and Motul de San José Stela 2 (Figure 10). Only one other scene in stone, El Peru Stela 34, features a dwarf together with an average-statured woman (Figure 19). What could be the meaning of the gesture that both secondary figures are making, the lady with her right arm and the dwarf with his left, on either side of this Tikal lord? Like the lintels of Structures 5C-4 and 5D-1, the primary figure of this façade is seated on a throne, but all the other dwarf-motif scenes in which the primary figure holds a ceremonial bar are from earlier times at Caracol (Stelae 1, 5, 6, and 21, from 9.8.0.0.0 to 9.13.10.0.0 or A.D. 593 to A.D. 702; ceremonial

bars had not been a feature of monumental art at Tikal since even earlier, the times of Stelae 1, 2, and 28).

The location of the frieze is unique as well. While the placement of the dwarf-motif lintel in Structure 5D-52, in the Central Acropolis, is parallel in some ways to those in Structures 5D-1 and 5C-4, the setting of the dwarf motif on a structural façade is, thus far, without counterpart at any Maya center (W. Coe et al. 1961:72-73; Harrison 1970:30; Jones and Satterthwaite 1982:104; the closest correlate would be the wall panel at Santa Rosa Xtampak, probably a secondary provenience). Other than approximate contemporaneity, the frieze of Structure 5D-141 lacks a precise chronological relationship with the other two dwarf-motif monuments ascribed to Yik'in Chan K'awiil, so the transfer of the motif from lintel to façade cannot be fixed in time. Nor are there, as yet, any architectural clues to why Structure 5D-141, a two-room building on the northeast corner of Court 5D-6, tucked between Structures 5D-44 and -46, is decorated with this royal court scene. It may be significant that Structure 5D-44, perpendicular to 5D-141, provided access from the East Plaza to Court 5D-6 of the Central Acropolis until the Late Classic, when access was closed (Harrison 1999:186). Alternatively, perhaps Harrison's identification of Structure 5D-46, adjoining and protecting the south wall of 5D-141, as Jaguar Claw's clan house holds the explanation (Harrison 1999:76-78, 114, 196, 2003:178, 200-201). As Harrison (1999:149) says

of Structure 5D-52, the other edifice in the Central Acropolis to display a dwarf, "The function of the new building must be the key and to this we can only guess."

A broader question is: Why did Yik'in Chan K'awiil place two of his three dwarf-motif monuments in the Central Acropolis? Harrison finds no evidence that Structure 5D-52 was ever a permanent family residence. Rather, he proposes, "the attributes of the building suggest a temporary residence or retreat house - a house of meditation" (Harrison 1999:149). A lintel with a simple, dated text, representing a lord or lady with scepter and shield, facing two water birds and a dwarf, does somehow seem to fit a place for pondering (Jones and Satterthwaite 1982:104-105; Proskouriakoff 1993:70, 97). On the other hand, Structure 5D-141, by its size and position, seems more suited for other of the various functions hypothesized for the Central Acropolis: an administrative or judicial reception area, an ancestral shrine, even storage of large ceremonial paraphernalia (Harrison 1999:73, 183, 2003:195, 204-205). Could it be that the bigger spoils of two generations of wars - palanquins and patron effigies from Calakmul, El Peru, and Naranjo, for example - were housed here? At a larger level, the two examples of the dwarf motif in Tikal's Great Temples accompany texts that celebrate victory over enemies, transcribe rituals of dedication and transformation sanctified by blood, and describe procession and dance. If props for such pageantry were

stored in the Central Acropolis, then architectural ornament illustrating elements appropriated by Tikal from defeated adversaries would be altogether appropriate.

Summary

A. Miller comments on the shift, after Jasaw Chan K'awiil I's first monument pair in 9.13.0.0.0 (A.D. 692), from hieroglyphic texts on stela, focused on the rulers themselves, to texts on temples, dealing more broadly with matters of lineage and power: "architecture [and] imagery ... were refined and ingeniously transformed for real political ends, where issues of control over peoples and territories ... were immediately at stake" (A. Miller 1986:74, 90). Tikal's adoption of the dwarf motif apparently reflects this process. One thing is clear: the dwarf motif is treated quite differently at Tikal than at any other southern lowland Maya site. Tate (1992:141-143) describes how one Maya polity, Yaxchilan, developed its own unique style using symbols shared broadly across the Maya lowlands. In much the same way, post-hiatus Tikal artists creatively combined the familiar, the borrowed, and the new. The lintels of Structures 5D-1, 5D-52, and 5C-4 integrate images of the monarchs, as of the staff kings of pre-hiatus days, with adopted elements, such as the dwarf motif, in innovative configurations: sitting on thrones, for example, overhung by giant patron-spirit effigies (Figures 28-30). Even the scene on Structure 5D-141 combines an ancient motif -- the lord holding a

ceremonial bar -- with a unique dwarf, perhaps by then a familiar image at Tikal, in an unusual architectural situation.

Rather than erecting these images on stelae in plazas as at other Maya centers, Tikal sovereigns put them in relatively inaccessible architectural contexts. Based on her study of Mesoamerican iconography, Marcus (1992:439) asks: Why are some sociopolitical actions and events for public viewing in some ancient Mesoamerican societies but for private viewing in others? Sanchez (1997:192, 123-124) notes that rituals displayed publicly at other sites are restricted to private view at Tikal. Similarly, we might ask: Why are dwarves only on public display at other southern lowland Maya sites, but only for relatively private viewing at Tikal? As mentioned above, the two examples of the dwarf motif in Tikal's Great Temples accompany texts that seem to describe rituals first deactivating or neutralizing objects and architectural loci (such as royal palanquins, patron-spirit effigies, and the locus of Structure 5D-33) that had been owned or occupied by Tikal's enemies, then, by means including sacrificial blood, reactivating their spiritual power and consecrating them for service to Jasaw Chan K'awiil I and his dynasty. In the absence of fact, perhaps some speculation might be permitted: could it be that the dwarf or dwarves themselves fell into the category of 'guilty by association' with Tikal's enemies and were themselves living parts of the ceremonies that exorcised the negative influences of Calakmul and El

Peru, then reclaimed whatever cosmic forces were available for Tikal? If, as suggested at the conclusion to Chapter 4, the dwarf motif expresses the liminality that was so central to Maya ideology, their presence on monumental representations of transformation would be not just appropriate, but inspired (Ablon 1984:169-170; Inomata 2001:36-40, 49).

Dos Pilas

Although the dwarf motif at Dos Pilas is limited to two stelae, the Dos Pilas lord who set them up, Itzamnaaj K'awiil (Dos Pilas Ruler 2, Shield God K), "has an unusually complete historical record" (Houston 1993:110; see, for example, Boot 2002a, 2002b; Demarest et al. 1991; Fahsen 2002; Grube 1992a:209; Guenter 2003; Houston 1989:58-59, 1993; Martin and Grube 2000; Mathews and Willey 1991; G. Stuart and G. Stuart 1983:19-20). Itzamnaaj K'awiil positioned his first stela, celebrating the hotun (quarter-k'atun) ending 9.13.15.0.0 (A.D. 706), in the western part of the site, on the west side of the main plaza; it shows a water bird holding a fish in its beak on Itzamnaaj K'awiil's left, but no dwarf (Greene Robertson 1995:D23743.PCT; Houston 1993:72). Itzamnaaj then moved his monumental program some 950 m to the east. On a large hilltop, terraced and capped with a building, he erected the remaining six stelae ascribed to his reign: Stelae 11, 12, and 13 in front of the structure at the

summit; Stelae 14 and 15, about 7.4 m apart, on the third terrace down from the structure, in front of it; and Stela 16 behind it. Stelae 11 and 14 have dates that overlap. Stela 14, which renders a dwarf, denotes the previous k'atun ending 9.14.0.0.0 (A.D. 711). Stela 11 then honors the hotun ending 9.14.5.0.0 (A.D. 716). Stela 14 refers to a shell-star battle waged 64 days later by Itzamnaaj K'awiil against an unknown polity on 9.14.5.3.4 (A.D. 717). If the date of Stela 16 is reconstructed correctly, Itzamnaaj situated it next behind Structure 7, then Stela 15 in front. Like Stela 14, 15 portrays a dwarf while its text refers to a battle on 9.14.9.10.13, the lajuntun ending 9.14.10.0.0, and some event four winals later (A.D. 721; Houston 1989:59, 1993:72, 105-106, 111; Martin and Grube 2000:58; Sharer and Traxler 2006:386, 406).

Today the southeastern part of Dos Pilas, dominated by the terraced hilltop, structure, and monuments, is called 'El Duende' for the two dwarf-motif stelae there. The degree of iconographic similarity of these two stelae is equivalent to that of the monument sets from Xultun (Figures 17, 18, 34-38). The few details of clothing visible on the dwarf on Stela 15 do not differ significantly from those on Stela 14 (though the Stela 15 dwarf appears to wear backed sandals). The Stela 14 dwarf is clothed like those of Tikal, in short, fringed cape and jaguar pelt. Both wear the Z-shaped headdress worn by dwarves at other centers. These two stelae are the earliest monumental example of the water bird

accompanying the dwarf, later found at La Milpa and Tikal (Figures 17, 18, 21, 22, 30; see Water Birds under Other Secondary Figures in Chapter 4).

Stelae 14 and 15 were placed at Dos Pilas side by side, five tuns apart, yet they are also part of a group associated with a specific architectural complex over a relatively brief period of time, as at Calakmul. Like the two sets of three monuments from Xultun, the two Dos Pilas stelae picture a single sovereign, here confirmed by hieroglyphic text.

Summary

The methodological review of Chapter 1 emphasizes the importance of grounding the analysis of artifacts, including symbols, firmly in their archaeological context. Marcus (1987:62-63, 1992:81, 84, 438-440) stresses the importance of the archaeological context of both text and image to understanding the content; iconography found in less accessible settings, such as lintels, for example, was more concerned with ritual than was iconography in public settings, such as stelae on plazas. Sanchez (1997:4, 2005:261-262, 274) contrasts the imagery, on monuments accessible to the public, of an individual, powerful ruler with the imagery, on monuments associated with temples, of the supernatural

and cosmological. Robin (2001:204, 211-217) discusses the meaning that architectural placement contributes to both text and image as part of the spatial and temporal discourse structure. Observations such as these aim to illuminate some of the cultural paradigms underlying behavior.

A wide variety of patterns is evident in the contexts of monuments representing dwarves in terms of temporal and spatial relationships. A few sites feature dwarves in pairs. At both Caracol and La Milpa, single stelae illustrate one dwarf on each side (Figures 11, 12, 21, 22). The two columns of Structure 4B1 at Sayil, each depicting a dwarf, are assumed to have been installed simultaneously in a single building (Figures 26, 27). Itzamnaaj K'awiil erected Stelae 14 and 15 at Dos Pilas, the only dwarfmotif scenes in stone there, only five tuns and a few meters apart (Figures 17, 18). Calakmul Stela 29 (Figure 6) was paired with a nondwarf stela, however, and no others showed dwarves there for five and a half k'atuns. The first two dwarf-motif monuments at Xultun, Stelae 7 and 22, might be considered a pair, though situated a k'atun and a half apart on two sides of a main plaza.

Both Xultun and Caracol, the two polities with the most dwarf-motif monuments, raised them in sets. Probably set up by a single lord, Xultun Stelae 23, 24, and 25 stood in a row, most likely celebrating consecutive period endings (Figures 37, 38). Beginning either one and a half or two and a half k'atuns later, Stelae 3, 8, and 10 were erected, every

k'atun and a half, around three sides of a single plaza, Stelae 8 and 3, likely the work of a single lord, replicating the locations of Stelae 7 and 22 (Figures 34-36, Maps 3, 4). At Caracol, Stelae 1, 4, 5, and 6 were situated every half k'atun, but only 5 and 6 were adjacent, placed by Knot Ajaw (Figures 8-12). Nine and a half k'atuns later, Caracol Stelae 8, 9, 11, and 19 likely witnessed consecutive period endings; while 8, 9, and 11 were side by side, Stela 19 stood in an entirely different architectural group (Figures 13-15, Maps 1, 2).

The situation at Tikal is complicated by one set of dates from the texts of dwarf-motif lintels and another, reconstructed set for their installation. After the death of Jasaw Chan K'awiil I, his son Yik'in Chan K'awiil installed a single dwarf-motif monument in his memory, then placed two contemporaneously dated lintels in two very different architectural contexts. A third example, spatially proximal to one of the prior monuments but in a unique setting, bears no date at all. Calakmul, with relatively few dwarf-motif stelae, also exhibits a unique monument placement: one dwarf-motif stela in a contemporaneous set of six yet isolated from other dwarf-motif monuments in both time and space. Nine and a half k'atuns later, the last dwarf-motif stela was erected on the same plaza as the first had been. Finally, during Caracol's hiatus in monument placement, a single stela rendering a dwarf was erected, associated with the same structure as an early dwarf-motif stela, but

temporally separated by four and a half k'atuns before and five k'atuns after.

Spatial and Temporal Patterns

Coggins (1994:41) proposes that dwarf-motif monuments tend to be located in the southern, specifically southwestern, areas of architectural groups and of sites. This is certainly true at Xultun, where all the stelae bearing the dwarf motif are found in the southwestern group. At Caracol, the dwarf motif does begin in the southwestern part of the site, but over time becomes more evenly distributed; insecure proveniences for some dwarf-motif stelae complicate a reconstruction. At Calakmul, one dwarf-motif stela stands atop a structure in the southeastern corner of the site, while two others are in the central plaza, somewhat toward the east. At Tikal, three of the four dwarf-motif scenes are in the southern part of the site center, and one is to its west. As Caracol and Xultun are the only two sites at which dwarf-motif monuments make up a significant portion of the iconographic record, a spatial association is difficult to reconstruct. An affiliation of the dwarf motif for the south would seem to emphasize a secular role for dwarves, far from the supernatural interpretation that many have suggested, but a western aspect could argue for their alleged connection with the underworld. It is also balanced by the dwarves' position on the rulers' right on most stelae (see The Supernatural and the Underworld under

Other Associations as well as Relative Positions of Primary and Secondary Figures, both under Cultural Attributes in Chapter 4).

A temporal pattern is hinted at by the data from Caracol, where the dwarf motif correlates with the lajuntun, or half-k'atun, ending.

Although the data from Xultun tentatively support this correlation, because of small population size and only slight statistical significance, like Coggins's suggested affiliation of the dwarf motif with the south, the geographical range of this association is speculative for now. If, as suggested in Chapter 4, dwarves represent liminality, it seems to have been integral to Caracol's conception of the cyclical nature of time itself (Ablon 1984:169-170; Inomata 2001:36-40, 49).

A connection between the dwarf motif and demarcation of both time and space is clearly demonstrated at Xultun, where stelae bearing the dwarf motif were erected in a counterclockwise, triadic pattern, at calendric intervals, twice over 12.5 k'atuns. As the association of the dwarf motif with the lajuntun ending is apparently confined to Caracol, however, this pattern seems to be limited to Xultun. More research is certainly needed, both to investigate these suggestions and to uncover more examples of the dwarf motif.

The review of archaeological methods of interpreting iconography (Chapter 1) points out that although most motifs visually changed little over long periods, their meanings likely changed both through time and

across space (Proskouriakoff 1950:2, 182; Tate 1992:xii). The variety of archaeological contexts for the dwarf motif confirms that once it was established at Caracol, artists at other cities employed it with flexibility. That the dwarf motif was in use for at least 15 k'atuns demonstrates its mutability, adapted over time to iconographic innovation. What the sitelevel data seem to show is that, as Tate (1992:141-143) described for Yaxchilan, Classic Maya artists adjusted regional symbols to their unique settings, giving a motif a local 'spin' within a larger iconographic canon. The dwarf-motif monuments of Xultun, for example, while upholding the position of dwarves at the ruler's right hand, a configuration shared across the region, occur overwhelmingly in the southern part of the site. Both Caracol and Xultun employed the dwarf motif to express calendrical concepts: at Caracol, and perhaps at Xultun, dwarf-motif stelae were usually erected on lajuntun endings, while at Xultun, it was the cyclical nature of time that was expressed, both spatially and temporally, by the dwarf motif. For both Tikal and Caracol, the motif was part of a military and monumental renaissance. Tikal adapted the motif to its own iconographic program, giving it both literally and figuratively a place of great height but limited visibility. How did these polity-level behaviors play out on the larger stage of the Maya lowlands? To this we turn, in Chapter 6.

CHAPTER 6

ANALYSIS OF THE DWARF MOTIF AT THE REGIONAL LEVEL

Introduction

The two-part goal of this work is to generate a definition of the dwarf motif that provides a common base of understanding for future discussion, then to begin such a discussion on what the meaning, for the Classic Maya, of the dwarf motif might include. As Coggins (1994:45) states, "The chronological and geographical distribution of the dwarf motif remains unexplained." Having identified some significant elements of dwarf-motif iconography, some possible cosmological symbolism, and some association with calendrical ritual, I answer this challenge by analyzing the data in their broader context, at the regional level (see Table 1 for dwarf-motif monuments in chronological order).

Development of the Dwarf Motif

Caracol Stelae 4, 1, 6, and 5

As Caracol Stela 6 tells us, on 9.5.19.1.2 (A.D. 553), Yajaw Te'

K'inich II (Caracol Ruler III, Lord Water, Lord Muluc, Kan Cross I) acceded

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to the throne of Caracol, under the authority of Wak Chan K'awiil, sovereign of Tikal, some 75 km away. As the two sites would be in armed conflict just three tuns later, Harrison (1999:121) suggests that Tikal's installation of a Caracol lord was "likely a failed attempt at control without warfare." According to Caracol Altar 21, on 9.6.2.1.11 (A.D. 556), Tikal committed an act of aggression, perhaps sentencing to death a Caracol lord, and Yajaw Te' K'inich II responded by declaring war on Tikal. Six tuns later, on 9.6.8.4.2 (A.D. 562), Yajaw Te' K'inich II declared victory over Wak Chan K'awiil of Tikal, likely by means of support from Calakmul (Grube 1994a:106; Harris 2000a:38-39; Harrison 1999:102, 119, 121-122, 131; Martin and Grube 1994:7, 11, 18, 2000:39, 89-91, 104; Schele and Freidel 1990:173; Sharer and Traxler 2006:361-362).

The early monuments that illustrate the dwarf motif, Caracol Stela 4 (tentatively dated to 9.7.10.0.0 or A.D. 583), Stela 1 (9.8.0.0.0 or A.D. 593), Stela 6 (9.8.10.0.0 or A.D. 603), and Stela 5 (9.9.0.0.0 or A.D. 613), document the relationship between Caracol and Calakmul during this period. If its date is reconstructed correctly, Caracol Stela 4 (Figure 9), the first dwarf-motif monument, was erected by Yajaw Te' K'inich II and refers to the Calakmul ruler of the day directing an event (Martin and Grube 2000:90, 105). Yajaw Te' K'inich II erected the second dwarf-motif monument, Caracol Stela 1, half a k'atun later and Caracol Stela 6, which also portrays the dwarf motif, after another half a k'atun (Figures 8, 11,

12). His junior wife, Lady Batz' Ek', may have come from a site controlled by Calakmul; she became the mother of Kan II (Caracol Ruler V; Folan et al. 1995:326; Martin and Grube 1994:11). Caracol Stela 5 likely represents Yajaw's older son and successor, Knot Ajaw (Caracol Ruler IV, Flaming Ajaw), with a young Kan II on his right and a dwarf on his left, the last dwarf-motif monument at Caracol for four and a half k'atuns (Figure 10).

As a group, the dwarves on these early monuments vary somewhat. Though the earliest occurrence of the dwarf motif preserves no details of attire, apparently only one of the five wears a spotted animal pelt, though its trimming of beaded fringe or plumes is also found on the last stela of this group. Another dwarf wears a lower garment of striped fabric. The few remaining details of headdress also show variable design. Jewelry of strands of beads, however, is common. On three of the five monuments, the dwarf stands to the sovereign's right; on the earliest and latest monuments, the dwarf is displaced to his left, on the earliest stela by a captive and on the latest stela by another secondary figure, perhaps the sovereign's younger half brother. At this early point, the dwarf motif is variable and experimental, during a period of prosperity for Caracol (A. Chase 1991:33).

Calakmul Stela 29

Within one tun of inheriting his father's throne from his half brother, Kan II of Caracol formalized an alliance with Calakmul, an

impressive 170 km to the northwest, on 9.9.5.13.8 (A.D. 619; Map 5). On the next period ending, less than five tuns later, the first dwarf-motif monument was put in place at Calakmul, ending a gap in monument placement of five and a half k'atuns. One of a pair, Stela 29, based on its date of 9.9.10.0.0 (A.D. 623), may have been placed by Tajoom Uk'ab' K'ak' (Calakmul Ruler 2, Ta Batz'; Figure 6). Although only Stelae 28 and 29 date to Tajoom's short reign, Calakmul's ascendance, marked in part by increased monumental activity, began at this point in time. Stela 29 was the last monument depicting the dwarf motif at Calakmul, however, for the next five and a half k'atuns (Folan et al. 1995:327; Martin 2005b:7; Martin and Grube 1994:11, 2000:106; Schele and Freidel 1990:174).

Uxul Altar 2

Most of what is known of this site, just about 30 km southwest of Calakmul, comes from a Carnegie Institution expedition of 1934 (Ruppert and Denison 1943:74, 76, 149) and ongoing research (Folan et al. 2001:242-243; see also Proskouriakoff 1993:38, 52). Like Oxpemul, Uxul is a dependency of Calakmul (Map 5). On the south side of a structure in the North Group stood a rectangular altar, the top covered with a lengthy hieroglyphic text which includes three dates: 9.9.9.9.18 (A.D. 622), 9.10.9.17.0, and the lajuntun (half-k'atun) ending 9.10.10.0.0 (both A.D. 642; the site of Xultun situated its first dwarf-motif stela on the same lajuntun ending). Marcus (1987:120-121) speculates that the Uxul Altar 2

text might refer to a couple represented on Uxul Stelae 2 and 3, perhaps a sister of Tajoom Uk'ab' K'ak' married to an Uxul lord.

On the front panel of Uxul Altar 2, a dwarf stands on the viewer's right of the scene, while at least three average-sized figures, probably ball players, kneel (Figure 33). The scene is strikingly like that on Step VII of Hieroglyph Stair 2 at Yaxchilan (Figure 39). The Uxul altar has only one dwarf where the Yaxchilan step has two; a glyph panel is in the center of the Uxul altar where Bird Jaguar IV (Bird Jaguar the Great, Yaxun Balam IV) is on the Yaxchilan step; and two probable ball players kneel on the Uxul altar where the Yaxchilan step renders the side view of a staircase. The Yaxchilan step has a much longer glyphic text than the front of the Uxul altar, though whatever image the latter may have presented beside the glyph panel at the center of the altar scene -- perhaps a captive in the form of a ball? -- is now gone. How did a dwarf-motif monument at this minor site presage a scene at the great center of Yaxchilan, five k'atuns later and 155 km away?

Xultun Stelae 7 and 22

Like Calakmul and Tikal, Xultun, about 40 km northeast of Tikal, experienced a gap in monument siting between Stela 6 and Stela 7. Houston (1986:8) dates Stela 6 to 9.3.7.0.0 (A.D. 501), while Martin (2001:12) tentatively dates Stela 6 half a k'atun later. Stela 7 is dated 9.10.10.0.0 (A.D. 642). At Calakmul, the hiatus began slightly later, at

9.4.0.0.0 (A.D. 514), and ended one k'atun sooner, at 9.9.10.0.0 (A.D. 623). In both cases, the first stela raised shows the dwarf motif (one of a pair at Calakmul). Tikal's hiatus began later, but lasted longer, until 9.13.0.0.0 (A.D. 692). Xultun Stela 6, the last monument raised there before its hiatus, mentions Tikal in connection with an event that could have been the accession of a ruler, as the monument features a jaguar throne (Garrison and Stuart 2004:852). In celebration of the k'atun ending 9.5.0.0.0 (A.D. 534), Kan I of Caracol raised Stela 16 there, naming a royal woman of Xultun. After another k'atun, on 9.6.3.9.15 (A.D. 557), the last stela raised at Tikal before its hiatus names a Xultun lord (Garrison and Stuart 2004:852, 854; Houston 1986:8; Jones and Satterthwaite 1982:119; Marcus 1987:57-58; Martin 2001:11; Martin and Grube 1994:18, 2000:87).

Could references to Xultun by both Tikal and Caracol, together with the cessation of monument siting there, indicate that Xultun was caught in the power struggle between Tikal and Calakmul? Geographically, Xultun would be a logical target for the Calakmul-Caracol alliance, located as it is roughly between those two sites and only 40 km from Tikal (Map 6). If it were, the presence of the dwarf motif on Xultun Stela 7 and Stela 22 (probably sited on 9.12.0.0.0 or A.D. 672) could be evidence that Calakmul won Xultun's allegiance. It is most unfortunate that so little of the iconography of these monuments remains, as it would have been interesting to compare how conventional the style of the dwarf

motif appears, relative to the later, more unconventional style of Tikal, say, or Yaxchilan. Summarizing this period, from the earliest dwarf-motif monuments at Caracol until Tikal's defeat of Calakmul, the motif is fairly consistent in style and is found only at sites in Calakmul's sphere of influence.

El Peru Stela 34

Indeed, the lord of the next site to picture the dwarf motif, El Peru (now also known by what might be its original name, Waka'), had been inaugurated under the oversight of Yuknoom Ch'een II (Yuknoom the Great) of Calakmul, roughly 110 km away (Map 5). As reconstructed by Wanyerka (1997:82-89), the badly damaged hieroglyphic text on El Peru Stela 34's right side records the hotun (quarter-period) ending 9.12.5.0.0 (A.D. 677) and counts forward to 9.12.7.17.4 (A.D. 680), referring to a Calakmul lord. The text on the front gives the accession date for Yuknoom Yich'aak K'ak' (Jaguar Paw, successor to Yuknoom Ch'een II) of Calakmul: 9.12.13.17.7 (A.D. 686) and the dedication date for the monument: 9.13.0.0.0 (A.D. 692). El Peru Stela 34 (Figure 19) illustrates a dwarf accompanying K'ab'il (or K'ab'el), Na Kan Ajaw 'royal woman of the snake head polity', who left Calakmul to marry K'inich Balam II, lord of El Peru. An unprovenienced text refers to the arrival of a royal Calakmul woman on 9.12.6.16.17 (A.D. 679), possibly Lady K'ab'il, at El Peru (Folan et al. 1995:327; Freidel and Escobedo 2004:267, 269, 2005:2-3; Martin and Grube 1994:14-15, 2000:109-110; Schele and Freidel 1990:181; Wanyerka 1997:78, 81-82).

In spite of clear references to Calakmul by the royal couple, Lady K'ab'il and Lord K'inich Balam II, some iconographic elements of the dwarf motif on Stela 34 (such as accompanying a royal woman, the multistrand, beaded collar and cuffs, the square object tied on the front, and the horizontally striped hem) are completely unique to El Peru (though compare the square object on the back of one dwarf from Santa Rosa Xtampak; Figure 25). Other elements, such as the Z-shaped headdress, the round earspool with central, projecting tube, the objects held by the dwarf which look like leaves or petals, and the backed sandals, are found first on this monument, then with dwarves elsewhere. It is possible that this is simply the result of the poor preservation of earlier dwarf-motif stelae, for instance, Calakmul Stela 29 (Figure 6) or of the lack of conclusive data from El Peru. Stela 22 there, for instance, might depict a dwarf, but not enough relief survives to tell. It is also possible, however, that this is the beginning of the expansion of the dwarf motif out of the narrow conventions of Calakmul's control and into the wider iconographic repertoire of the eastern Peten, exemplified by the dwarf-motif monuments of Tikal.

Expansion of the Dwarf Motif

Tikal Structure 5D-1 (Temple I) Lintel 3

The history of Tikal up to the point that the dwarf motif is shown there is a turbulent one. Here it is not necessary to narrate the ongoing conflict between Tikal and Calakmul (see, for example, Freidel 1998:192-193; Harris 2003; Harrison 1999:92, 119-124; Haviland 1992:74, 1994:269-270; Martin and Grube 2000:40-43, 108-111; Sharer and Traxler 2006:377-387), except to note the founding of Dos Pilas, about 115 km southwest of Tikal, during the early A.D. seventh century (Map 6). The first ruler of Dos Pilas, B'alaj Chan K'awiil (Flint Sky), was a vassal of Calakmul; whether because his father was placed on Tikal's throne by Calakmul or because of military defeat, the result was the same. B'alaj Chan K'awiil of Dos Pilas traveled to Calakmul to commemorate the lajuntun ending 9.12.10.0.0 (A.D. 682) and to witness the accession of the next ruler, while engaging in a series of battles, likely with Calakmul's backing, against his own Tikal kinsmen (Boot 2002a:19, 2002b:9; Folan et al. 1995:327; Guenter 2003:3-4, 6, 13-16, 19-20; Harrison 1999:123, 126; Houston 1993:108; Houston and Mathews 1985:9; Martin and Grube 1994:9, 12, 2000:42, 57, 109-110; Mathews and Willey 1991:61-62; Pincemin et al. 1998:323; Schele and Freidel 1990:181, 212; Sharer and Traxler 2006:312, 383-384, 387, 403, 405).

Martin and Grube (1994:14-15 note 12) remark on the occurrence of two events on the day 9.12.6.16.17 (A.D. 679): the fall of the Tikal sovereign Nuun Ujol Chaak (Shield Skull, father of Jasaw Chan K'awiil I) to B'alaj Chan K'awiil of Dos Pilas, supported by Calakmul; and the probable arrival at El Peru of K'ab'il, Na Kan Ajaw, kinswoman of Calakmul sovereign Yuknoom Yich'aak K'ak' and wife of El Peru lord K'inich Balam II. At Dos Pilas, Step III of the western section of Hieroglyphic Stairway 2 recorded Tikal's defeat in powerful and dramatic language, but their victory was not to last (Boot 2002a:15; see also Fahsen 2002; Harris 2001:58; Houston 1993:100, 105, 108). The arrival of a royal Calakmul woman on the same day was recorded on a small, unprovenienced altar; it may refer to Lady K'ab'il's coming to El Peru (Guenter 2003:25; Wanyerka 1997:81-82). The meaning of these two events on the day 9.12.6.16.17 (A.D. 679) is not clear. The royal Calakmul woman's arrival was 13 tuns before Lady K'ab'il, Na Kan Ajaw's stela went up at El Peru.

Just about three tuns after Nuun Ujol Chaak fell, at Dos Pilas, to the Calakmul hegemony, his son, Jasaw Chan K'awiil I (Tikal Ruler A, Ah Cacao), acceded to Tikal's throne. His positioning of the first monuments after Tikal's hiatus and their use of motifs borrowed from Caracol are covered in Chapter 5 (see Structure 5D-1 Lintel 3 under Tikal). Eventually installed in Structure 5D-1 (Temple I), Lintel 3 memorializes Jasaw Chan

K'awiil I's vengeance against Yuknoom Yich'aak K'ak' of Calakmul on 9.13.3.7.18 (A.D. 695; Harris 1989a; Harrison 1999:131; Martin and Grube 1994:14, 2000:44; Schele and Freidel 1990:211; Schele and Mathews 1998:86-87; Sharer and Traxler 2006:393, 413) and presents a dwarf in a new configuration and context (Figure 28). Unless the lintel was on public view during the k'atun or two between the victory it records and the royal interment it surmounts, few saw it. The iconography of the dwarf introduces some innovations: he faces Jasaw Chan K'awiil I, in profile on his throne, directly. Details of his headdress are not preserved, but he wears a fringed collar or short cape. While dwarves at Caracol were first to wear the back mask and the animal pelt, trimmed with plumes, with the tail hanging down behind that the dwarf also wears here, the mask on this dwarf is in the style of Tikal (found on Structures 5D-52 and -141), and his hip drape is clearly of jaguar fur. This is the first rendition of the dwarf motif clearly outside the Calakmul hegemony, combining some familiar elements with some new ones.

Caracol Stela 21

At the time of Tikal's defeat of Calakmul, Caracol had not set up a monument for over three k'atuns. Like Stela 4 perhaps six k'atuns ago, Stela 21 is made of slate and portrays a captive on the ruler's right and a dwarf on the left (Figure 16). The clothing of the dwarf is unique; only his headdress resembles that of earlier dwarves. Although the captive is

not identified, Grube and Martin do not rule out a connection with Tikal (Grube 1994a:108; Martin and Grube 1994:13, 2000:94). In somewhat retro style, Stela 21 marks the lajuntun ending 9.13.10.0.0 (A.D. 702), the last monument set up at Caracol for the next five k'atuns (A. Chase and D. Chase 1987:61; Grube 1994a:108; Martin and Grube 2000:95; Proskouriakoff 1993:78; Sharer and Traxler 2006:389, 415).

Dos Pilas Stelae 14 and 15

However much Jasaw Chan K'awiil I of Tikal made of his victory over Yuknoom Yich'aak K'ak' of Calakmul, within a few tuns that site, unlike Caracol, began again to erect monuments and oversee sites such as Dos Pilas and El Peru, although likely under new leadership. At Dos Pilas, B'alaj Chan K'awiil (probably brother or half brother to Nuun Ujol Chaak of Tikal) was succeeded by his son, Itzamnaaj K'awiil (Dos Pilas Ruler 2, Shield God K), on 9.13.6.2.0 (A.D. 698), who kept up the family tradition of battling with Tikal. As described in Chapter 5, he erected six stelae on an eastern hilltop, two of which pictured the dwarf motif: Stela 14, celebrating the k'atun ending 9.14.0.0.0 (A.D. 711) and a military victory on 9.14.5.3.14 (A.D. 717), and Stela 15, celebrating a battle on 9.14.9.10.13 and the lajuntun ending on 9.14.10.0.0 (A.D. 721; Figures 17, 18). A hint of the relationship between the two sites is a record, found in the Tikal tomb of his distant cousin Jasaw Chan K'awiil I, of Itzamnaaj K'awiil's death on 9.14.15.1.19 (A.D. 726; Boot 2002a:3, 17; Braswell et al.

2004:189; Folan et al. 1995:327; Harrison 1999:140; Houston 1993:110; Houston and Mathews 1985:15; Martin and Grube 1994:13-14, 112, 2000:58; Schele and Freidel 1990:214; Sharer and Traxler 2006:384, 395, 405-406, 413-415).

Another hint of the relationship between Dos Pilas, Tikal, and the Calakmul hegemony is the two Dos Pilas dwarves, especially the wellpreserved Stela 14 dwarf (the one on Stela 15 is barely visible behind Itzamnaaj's elaborate legwear; Figures 17, 18). The dwarf on Stela 14 combines apparel elements of those that went before. His headdress has a soft peak like that of the dwarf on poorly preserved Calakmul Stela 29. but the top is folded back like that of the El Peru Stela 34 dwarf, and the base is wrapped with a band that ties in the back like that of the dwarf on Caracol Stela 1 (Figures 6, 8, 17, 19). The headdress of the Dos Pilas Stela 15 dwarf especially resembles the headdress of the El Peru dwarf (Figures 18, 19). The Dos Pilas Stela 14 dwarf wears the fringed collar or short cape of the dwarves of Tikal, but not the back mask. His lower garment is of trimmed animal pelt with the tail hanging down, and the pattern of spots seems more like the jaguar fur on the dwarf in Tikal Structure 5D-1 than like the small spots on the Caracol Stela 1 dwarf's lower garment (Figures 8, 17, 28). Like the dwarf from El Peru, he holds something that looks as though it were hafted and could be botanical (Figures 17, 19). Water birds, present on both Stelae 14 and 15, are also found on the first

stela situated by Itzamnaaj K'awiil, on the other side of the main plaza. It seems as though these dwarves are honoring their Tikal roots in some ways, while acknowledging the influence of Caracol and Calakmul in other ways.

Motul de San José Stela 4

Only approximately 35 km southwest of Tikal is Motul de San José, from which two dwarf-motif monuments are already known and more perhaps await discovery by ongoing excavations there (Map 6; Foias 2003a, 2003b, 2004). The only date available at this time for the earlier dwarf-motif stela, Motul de San José Stela 4, is a suggestion by Coggins (1994:54) of 9.14.10.0.0?? (about A.D. 720), based on its style. While I would judge this to be slightly on the early side for a depiction of the dwarf motif, Jasaw Chan K'awiil I of Tikal claimed lordship over the ruler of Motul de San José in A.D. 711, and Dos Pilas ruler K'awiil Chan K'inich claimed to have captured a lord of Motul de San José in A.D. 745 (Foias 2003a:19, 2004:527; Houston 1993:123-124; Martin 2003:30; Martin and Grube 1994:18, 2000:45-46; Sharer and Traxler 2006:384). As both Tikal and Dos Pilas installed monuments representing the dwarf motif during this period of contact with Motul de San José, that site may have done the same. Like the early dwarf stelae from Xultun, it is discouraging that so little of this monument remains, as the dwarf iconography, depending on its style, might have supported the interpretation of a closer alliance with

the Calakmul polity than with Tikal by Motul de San José, as Foias (2003a:19, 2004:527) proposed.

A privately collected, ceramic vessel (Australia National Gallery 82.2292 / K 1453) features a lord captioned Sihyaj K'awiil from Motul de San José gazing into a mirror that is part of what M. Miller and Martin (2004:43) identify as a piece of furniture, a wooden effigy of a dwarf as mirror-holder. A live dwarf, at the foot of the platform on which the lord sits, drinks from a bowl. As this vase is unprovenienced, it cannot help establish a date for the presence of the dwarf motif at Motul de San José (see Australia National Gallery 82.2292 / K 1453 under Unprovenienced Ceramic Vessels in Appendix C for references).

Calakmul Stela 89

To the north, Calakmul, recovering from its defeat by Tikal, oversaw an accession at El Peru during this period. As described in Chapter 5, at least six stela honor the K'atun Fifteen ending at Calakmul, probably placed by Yuknoom Took' K'awiil (Calakmul Ruler 5, 6, 7; Coggins 1994:38-39; Marcus 1987:26, 87-88, 146-147; Martin and Grube 1994:8, 2000:112-113; Morley 1933:198, 201; Proskouriakoff 1993:80-81; Ruppert and Denison 1943:110-113, 121). One of the set is the beautiful Stela 89, dated 9.15.0.0.14 (A.D. 731), illustrating a dwarf wearing the Z-shaped headdress worn by the dwarves on both Dos Pilas stelae and the El Peru stela (Figures 7, 17-19). Though most clothing details are eroded,

he wears a lower garment with a tail hanging down, like dwarves from Caracol, Xultun, Tikal, Dos Pilas, and Motul de San José, and carries something that might be leaves or flowers, like dwarves from El Peru, Tikal, Dos Pilas, and Xultun (Figures 8, 17, 19, 28, 30, 34, 36, 38).

For reasons explained in Chapter 5, the primary figure, the only one to wear the Z-shaped headdress common to dwarves, may not be Yuknoom Took' K'awiil, but perhaps one of his kin or court. He might also be shown on Tikal Altar 9, one of the first monument pair put up by Yik'in Chan K'awiil (Tikal Ruler B, Yaxkin Caan Chac), son and heir of Jasaw Chan K'awiil I, within two tuns of coming to power. For sometime between Yik'in Chan K'awiil's accession on 9.15.3.6.8 (A.D. 734) and the hotun ending 9.15.5.0.0 (A.D. 736), like his father before him, Yik'in attacked and defeated Calakmul (Jones and Satterthwaite 1982:48; Martin 2005b:11-12; Martin and Grube 1994:15, 2000:48-49, 113; Sharer and Traxler 2006:400, 415).

Tikal Structures 5D-52, 5C-4 (Temple IV), and 5D-141

The later three depictions of the dwarf motif at Tikal are considered at this point in chronological time, although, as discussed in Chapter 5, the actual date of their installation can only be estimated. Lintels of both Structures 5D-52 and 5C-4 (Temple IV) name a single lajuntun ending, 9.15.10.0.0 (A.D. 741); Lintel 3 of Structure 5C-4 goes on to record Yik'in Chan K'awiil's victory over El Peru on 9.15.12.2.2 (A.D.

743) as well as resulting ceremonies the next day and on the three-tun anniversary (Harris 1989b:134-135, 2006:38; Harrison 1999:155-156; Jones and Satterthwaite 1982:102; Martin and Grube 1994:15, 2000:49; Proskouriakoff 1993:97; Sharer and Traxler 2006:400-401).

As discussed in Chapter 5, the Structure 5D-52 lintel, put in place by Yik'in Chan K'awiil, is nearly a mirror image of Lintel 3 of Structure 5D-1, put in place by Jasaw Chan K'awiil I; each primary figure, holding a K'awiil scepter in the right hand and a shield in the left, faces a dwarf, both in profile (Figures 28, 30). The water birds that accompany the dwarf on the Structure 5D-52 lintel are a motif found first at Dos Pilas. Although the dwarf's headdress and whatever he might have been holding are not preserved on Structure 5D-1 Lintel 3, and so are impossible to compare, the dwarf on the Structure 5D-52 lintel wears a similar fringed collar or short cape. His headdress, with a soft peak, is like that of dwarves at Dos Pilas and possibly Calakmul; like dwarves at El Peru, Dos Pilas, and Calakmul, he is holding something like foliage in both hands. The Structure 5D-52 dwarf probably wears an animal skin with small spots, more like those of Caracol Stela 1 and Dos Pilas Stela 14 than like Tikal Structure 5D-1 (Figures 8, 17, 28, 30).

Up until this point in time, the dwarf motif had been fairly consistent in its presentation. Structure 5D-1 Lintel 3 and the Structure 5D-52 lintel introduce the unique configuration of primary and secondary

figures facing each other in profile. Lintel 3 of Structure 5C-4 and the façade of Structure 5D-141, whenever that may have been created, were truly innovative, however, so much so that the dwarves at the foot of the palanquin, on which Yik'in Chan K'awiil sits at the top of Structure 5C-4, sometimes fail to be recognized (Figure 29). It is the only monument to feature two dwarves in one scene, their heads covered by animal masks, in front of a seated, primary figure shown frontally. Though the configuration of the Structure 5D-141 façade -- a dwarf on the left, balanced by another secondary figure on the right of a primary figure holding a ceremonial bar -- is not unlike Caracol Stela 5, the physiognomy and garb of the Tikal dwarf are unique, as is the architectural context of the scene (Figure 31). It is as though Jasaw Chan K'awiil I, and more especially his son Yik'in, having freed themselves of the Calakmul polity's domination, likewise freed the artists in their employ to creatively adapt borrowed themes to express Tikal's newly won independence. Whatever the dwarf motif did express at Tikal, it did so merely for the three k'atuns between 9.12.9.17.16 and 9.15.15.2.3 (A.D. 692 and A.D. 746).

Yaxchilan Hieroglyphic Stair 2 Step VII

A similar lack of convention also characterizes the only presentation of the dwarf motif at Yaxchilan, about 150 km southwest of Tikal (Figure 39, Map 6). Just how Yaxchilan fits into the conflict between the Tikal and Calakmul polities at the point in time that the dwarf motif

is shown there is not quite clear. About 12 k'atuns before the dwarf motif appeared at Yaxchilan, and nearly four k'atuns before it appeared anywhere (as far as we now know), Yaxchilan sovereigns claimed to have taken captives from Tikal (on 9.3.13.12.19 or A.D. 508) and later from Calakmul (on 9.5.2.10.6 or A.D. 537). Over five k'atuns later, on 9.10.10.0.0 (A.D. 642), when the dwarf motif was found only at Caracol and Calakmul, Uxul, a dependency of the latter, produced an altar with a scene remarkably like the only dwarf-motif monument at Yaxchilan (Figure 33). Over four k'atuns before the dwarf motif's appearance at Yaxchilan, Nuun Ujol Chaak of Tikal attacked Bird Jaguar III of Yaxchilan (on 9.11.6.16.11 or A.D. 659), at that time under the influence of Calakmul (Harris 2001:56, 2003:28; Harrison 1999:125; Martin and Grube 2000:120-122; Sharer and Traxler 2006:358, 360, 366, 432-434). The display of the dwarf motif at Yaxchilan is especially interesting in that it takes place both in historical space and time as well as in mythological space and time.

In historical space, the scene is on the riser of the seventh and central of thirteen blocks that form a single, wide step (Hieroglyphic Stair 2) across the top of the Structure 33 platform. Structure 33 is at the top of a grand staircase, more or less central to the site. Sanchez (1997:161) points out that this architectural context, while still somewhat public, is more restricted than that of an open, accessible plaza. On Step VII, Bird

Jaguar IV, like his father and grandfather on adjoining panels, sacrifices a captive in a mock ball game. The adjacent text says that blood was let, probably through decapitation sacrifice, to ritually consecrate the stairway surmounted by the hieroglyphic step and Structure 33. The ballgame motif likely indicates that the stair itself is being dedicated as the means of sacrifice (Mathews 1989:210; M. Miller and Houston 1987:53-55; Schele and Freidel 1991:294; Tate 1992:97, 131; see The Ball Game under Other Associations in Chapter 4).

In historical time, the date above the two dwarves' heads on Step VII is 9.15.13.6.9 (A.D. 744), over two tuns after the death of Yaxchilan lord Itzamnaaj Balam II (Shield Jaguar II) on 9.15.10.17.14 (A.D. 742) but less than eight tuns before the accession of his son, Bird Jaguar IV, on 9.16.1.0.0 (A.D. 752). This scene thus takes place during an interregnal period of uncertainty over the dynastic succession, perhaps having to do in part with Bird Jaguar IV's maternity; his mother was Lady Ik' Skull, a royal woman from Calakmul, but a junior wife not mentioned on Itzamnaaj Balam II's monuments (Freidel et al. 1993:358-361, 485; Martin and Grube 2000:126-130; Mathews 1989:204, 215-217, 227; Sharer and Traxler 2006:436, 440, 442; Tate 1992:131, 133).

As the text also makes clear, however, the ball game is being played in mythological space as well. It tells an ancient story of three self-decapitations, probably by underworld deities, that take place in the

portal between worlds. The panels portraying dead ancestors playing ball, the Venus signs behind the arms of the dwarves, the references to sacrifice, and the location of the step itself as the nethermost layer in a three-layer cosmogram all reinforce the otherworld location of the action. As Bird Jaguar IV plays ball with reference to this ancient myth, the stairway of Structure 33 becomes the portal to the otherworld (Freidel et al. 1993:358; Martin and Grube 2000:130; Mathews 1989:210; Schele and Freidel 1990:283, 1991:291, 293; Schele and Miller 1986:249; Tate 1992:97).

On Step VII, two paunchy dwarves observe Bird Jaguar IV playing ball. The dwarf nearest Bird Jaguar seems to wear a cap with a plume coming out the top, while the far dwarf has a forehead band and a snake coming out the top (similar to the snake head next to the dwarf on Caracol Stela 4; Figures 9, 39). Tate (1992:131) identifies the earplug of the near dwarf as a shell, which she associates with the Palenque-triad deity GI and Freidel and Schele (Freidel et al. 1993:360-361, 486) with the deity Chaak. The far dwarf wears an earspool with a central, tubular, projecting element. Their bead necklaces, bracelets, and anklets are most like those on the dwarf on the back of Caracol Stela 6 (Figures 12, 39); in contrast to most other dwarves, they seem to be naked but for loincloths. Of the inscribed lines behind the dwarves that look like tails, Proskouriakoff (1993:119) muses, "One is tempted to wonder if they are symbolic of comets," while Houston (1992:527) asks "Could these markings represent flatulence?"

Several authors note the Venus signs behind the dwarves' arms, which reinforce the cosmic or astral setting of the ball-game sacrifice (Coggins 1994:152; Cohodas 1991:269; de la Garza and Izquierdo 1992:348, 350; Freidel et al. 1993:360-361, 486; Mathews 1989:210; Milbrath 1999:267-268; M. Miller and Houston 1987:54; Proskouriakoff 1993:119; Schele and Miller 1986:249; see Epigraphy in Chapter 7). Tate (1992:131) speculates, "Perhaps, as Venus was called the sweeper of the

path of the sun, the Venus sign identifies them as the sweepers of the path for Bird Jaguar as he journeyed to confront the Lords of the Underworld in their ballcourt." This scene is often cited as an example of dwarves associated with the ball game and thus with the underworld. In my opinion, however, the evidence -- one scene in clay from Jaina, this scene in stone from Yaxchilan together with one from Uxul, and three inconclusive cases (La Milpa Stela 4 and the Tikal Structure 5D-141 lintel) -- linking dwarves with the ball game is quite tenuous (see The Ball Game under Other Associations in Chapter 4; Figures 21, 22, 31, 33, 39).

Like the dwarf scene on the façade of Structure 5D-141 at Tikal, this panel is unique on several levels (though this may be an accident of differential preservation). The destruction of the dwarves' physiognomies and their crouching postures preclude direct physical comparisons with other representations of disproportionate short stature. Though their proportions are in general consistent with achondroplasia, the fingers of the dwarf on the viewer's right are longer than most others', and the shape of his head is unique (Tate 1992:51). As pointed out above, the dwarves' headdresses, garments (or lack thereof), Venus signs, and tails also appear here only. This is one of three, possibly four dwarf-motif scenes in which both the primary figure and the dwarf or dwarves face in the same direction, and this and the Uxul altar are the only cases in which the dwarves are actually behind the

primary figure (Figures 25, 26, 33, 39). Like Stelae 4 and 21 from Caracol, a captive on one side of the primary figure balances the dwarves on the other (Figures 9, 16, 39). According to Martin and Grube, the prisoner whose body forms the ball is a lord from Lakamtuun, a polity attacked at least twice by Yaxchilan (2000:21, 121, 130, 135). Finally, the setting itself is singular, operating as it does on a literal spatiotemporal level as well as on a mythological, cosmic, spatiotemporal level. Yet, Altar 2 at Uxul, a satellite of Calakmul, presaged this scene five k'atuns before and 155 km away (Figure 33).

Tate (1992:141-143) describes how Yaxchilan developed its own unique style using symbols shared broadly across the Maya lowlands. Preoccupied with his own dynastic struggles, Bird Jaguar IV seems to have been inspired by an earlier scene from an outlier of his mother's home, Calakmul (Figure 33). Was she, Lady Ik' Skull, a descendant of the couple celebrated on Uxul Stelae 2 and 3, an Uxul lord married to perhaps a sister of Tajoom Uk'ab' K'ak' (Marcus 1987:120-121)? If, as suggested in Chapter 4, the dwarf motif expresses liminality (Ablon 1984:169-170; Inomata 2001:36-40, 49), then this time and place could well be the most appropriate in all of Yaxchilan. This scene (Figure 39) appears to record the dedication of a staircase to captive sacrifice by means of a mock ball game, designed to open the portal to the otherworld, the very essence of liminal space. The step itself is between this staircase and the temple

above. Finally, it would be difficult to find a more liminal situation than that of Bird Jaguar IV during the interregnum.

Step VII is part of a series of scenes showing Bird Jaguar IV, his father, and his grandfather playing ball with the bodies of captives.

Mathews (1989:210) and Tate (1992:97) suggest that Bird Jaguar IV played ball and sacrificed a captive, as depicted on the step of Structure 33, in memory of his father. And just as the lintels of Tikal Structure 5D-1 were installed by a son and successor in memory of his father, Martin and Grube (2000:132) propose that Structure 33 may have been completed by Bird Jaguar IV's son, honoring, in turn, his father who worked so hard to ensure his succession.

The reign of that son, Itzamnaaj Balam III (Shield Jaguar III), seems characterized by increasing warfare and decreasing security and stability, not just at Yaxchilan but across the southern lowlands as well. One of his monuments, for instance, claims to have taken a captive from Motul de San José, the home of two of his father's wives (Martin and Grube 2000:134-135; Schele and Freidel 1990:291; Sharer and Traxler 2006:440, 442, 447). According to I. Graham and Von Euw (*CMHI* 3:155), the carving on Step VII, atop the Structure 33 platform, was found "in a nearly pristine state." The profiles of both dwarves are effaced, however, as are those of Bird Jaguar IV and his captive, leading to speculation that the

damage might be intentional, as Tate (1992:138) proposes for the monuments of Itzamnaaj Balam II (see also Sharer and Traxler 2006:447).

Oxpemul Stela 19

Oxpemul, at which monuments began to be raised at K'atun Fifteen, is known mainly as a dependency of Calakmul, only approximately 20 km to the south (Map 6; Folan et al. 2001:241, 243; Marcus 1987:114, 116-117; Martin 2005b:10, 12). There is some indication, around the beginning of K'atun Sixteen, that Oxpernul began to identify more with Tikal than with Calakmul and may even have been at war with Calakmul (Martin and Grube 2000:115; Robichaux and Pruett 2005:34). Robichaux and Pruett (2005:33-34) interpret Stela 19 (Figure 24) as one of a pair, with Stela 18, celebrating the accession of an Oxperior on 9.16.5.0.0 (A.D. 756); their primary figures are turned to face each other (Stela 18 to the west, Stela 19 to the east; see also Marcus 1987:122-123; Robichaux and Pruett 2005:34; Ruppert and Denison 1943:142). This may explain why the secondary figure's body is facing away from the primary figure, toward the other stela, but his head is turned back over his shoulder to face the primary figure, as would be expected if the secondary figure were to follow the conventional pose for dwarves. The unconventional pose of the Oxpemul dwarf may, alternatively, result from influence by Tikal.

With customary thoroughness, Ruppert and Denison (1943:142) note "a small subsidiary figure in the left corner" of Oxpemul Stela 19. A k'atun and a quarter before it was erected, Stela 89 was erected at Calakmul, presumably the polity capital for Oxpemul. It features the backward-pointing, Z-shaped headdress worn by both the primary and secondary figures, while on Oxpemul Stela 19, the secondary figure wears a version that projects frontward instead of backward (Figures 7, 24). Secondary figures on both Calakmul Stela 89 and Oxpemul Stela 19 have round costume elements at their waists that, in the case of Calakmul Stela 89, appear to be fabric knots. Proskouriakoff (1950:128-129) noted "a late tendency to simplify and distort" among the sculpture of Oxpemul, and Stela 19 there looks indeed like a provincial imitation of Stela 89 from Calakmul.

Xultun Stelae 24, 23, and 25

The three stelae in a line in Group A at Xultun are a good example of a set erected by a single ruler likely on consecutive period endings (Figures 37, 38). If the dates Coggins (1994:54) proposes are correct, the central stela, 24, which carries a clear date of 9.16.10.0.0 (A.D. 761), is the earliest, then Stela 23 to the west at 9.17.0.0.0 (A.D. 771), then Stela 25 to the east at either 9.17.10.0.0 or 9.18.10.0.0 (A.D. 780 or A.D. 800). As described in Chapter 5, based on their temporal, spatial, and stylistic proximity, it seems reasonable to assume that all three illustrate the

same Xultun lord over a span of perhaps one and a half to two k'atuns. Only the dwarf on Stela 25 is reasonably well preserved. His headdress is like those worn by dwarves at several other sites, while his spotted animal pelt, with tail, is also found at Caracol, Dos Pilas, and Tikal. While the monuments are fairly conventional, there are innovative elements, such as the creatures held by the primary figures. Unfortunately, not enough of the iconography of the dwarf motif remains to discern whether it might be more influenced by the Calakmul polity, on the decline at this point in time, or by Tikal.

Motul de San José Stela 2

When last heard from, in A.D. 745, Motul de San José was thought to have been under the control of Dos Pilas (Sharer and Traxler 2006:384). The second dwarf-motif scene known thus far from Motul de San José is on the front, or west, side of Stela 2, in Group B. Only a style date is available of $9.17.0.0.0 \pm 2$ k'atuns (approximately A.D. 770; Proskouriakoff 1950:142, 191, 1993:150-151). This monument, with Caracol Stela 5 (Figure 10) and the façade of Tikal Structure 5D-141, is unusual for the dwarf having been displaced to the ruler's left by an average-statured figure on his right and uniquely retains evidence that both those figures are in a 'dancing' pose. Based on what iconography survives, this dwarf wears the familiar Z-shaped headdress and holds something that might be foliage, but damage precludes further

comparisons. Motul de San José is mentioned on Seibal Stela 10 as late as 10.1.0.0.0 (A.D. 849); perhaps ongoing research there will reveal more of its role in the Late and Terminal Classic (Foias 2003a, 2003b, 2004; Sharer and Traxler 2006:523).

La Milpa Stelae 12 and 4

At the same time that the dwarf motif seems to have spread north into Yucatan, the influence of the two great, Late Classic, southern lowland powers, Calakmul and Tikal, seems to have ceased expanding. Whereas this regional-level analysis has emphasized the connections between southern lowland sites and the ways in which polities borrow the dwarf motif for reinterpretation, La Milpa appears to be a site depicting dwarf iconography in relative isolation. Rediscovered recently, La Milpa is equidistant from the two power centers, 90 km northeast of Tikal and the same distance southeast of Calakmul (Map 6; Grube 1994b:217; Kidder 1938:153; Tourtellot et al. 1993:104).

Unhappily, the monuments of La Milpa are poorly preserved. One of at least 16 stelae along the east side of the main plaza, Stela 12 is thought to be the younger of the two possible dwarf-motif monuments, dated stylistically to the Late Classic (A.D. 600 to A.D. 780; Figure 23; Grube 1994b:217-218, 220; Tourtellot et al. 1993:104). Although Grube (1994b:200) notes, "A small secondary figure, probably a dwarf, but now totally eroded, is under the shield," Stela 12 would be the only dwarf on a

sovereign's left with no corresponding figure on his right nor any carving on the back as well as the only sovereign turned to his own right, away from the dwarf (see also Yaeger 1991:30-31). Nor are any of the expected elements – the peaked or Z-shaped headdress, the hands held out in front, the dangling sash ends – detectable in what traces remain. One speculative explanation could be the lack of familiarity with dwarf-motif iconography by the artists of La Milpa. If Stela 12 does, in fact, show a dwarf, and if it predates Tikal Structure 5D-1 Lintel 3 at 9.13.3.0.0 (A.D. 695), then, like Xultun Stelae 7 and 22, it might reveal Calakmul's influence. Thus far, it is impossible to tell from its eroded monumental record whether Calakmul or Tikal ever held sway over La Milpa.

Stela 4, retrieved in 1996 from under looter's rubble, is stylistically dated to about 9.17.10.0.0 (A.D. 780; Grube 1994b:218; Grube and Hammond 1998:131; Tourtellot et al. 1993:104). Like Caracol Stela 6, both sides of La Milpa Stela 4 present a dwarf; like the columns of Structure 4B-1 at Sayil and Lintel 3 of Structure 5C-4 at Tikal, the two scenes are nearly mirror images (Figures 11, 12, 21, 22, 26, 27, 29; Grube and Hammond 1998:130; Hammond et al. 1996:90). Grube and Hammond (1998:129-130; Hammond et al. 1996:90) identify the dwarf's apparel as that of a ball player and point out the large bird between the primary figure's legs (the association of the dwarf motif with water-bird and ball-game iconography is discussed in Chapter 4).

Although the back of La Milpa Stela 4 depicts the disproportionality typical of achondroplasia, if the secondary figure on the front of Stela 4 were seen in isolation, out of the context of the scene, there would be no reason to suspect biological dwarfism (Figures 21, 22). Only his size and position on the monument relative to the primary figure, as well as supporting details such as the shape of his headdress and the presence of a water bird, identify him as a dwarf. It seems as though La Milpa, roughly equidistant from both Calakmul and Tikal, situated dwarf-motif monuments at a time during which the influence of both powers was no longer growing, and smaller sites no longer imitated their iconography with any fidelity. From their analysis of its architecture and sculpture, Tourtellot, Clarke, and Hammond describe La Milpa as the northeastern limit of Peten regional culture (Tourtellot et al. 1993:107). The iconoclastic rendition of the dwarf motif supports this identification of La Milpa as something of an outpost.

The Northern Lowlands

By the last half of the A.D. eighth century, the dwarf motif had reached its maximum distribution, spreading all the way into the Puuc and Chenes regions of the northern lowlands of Yucatan. As with the many representations of the dwarf motif painted on ceramic vessels and modeled in clay, the several portraits of dwarves on columns from the lowlands to the north of the Maya heartland are beyond the scope of this

work. Appendix C compiles some of the more well-documented occurrences; see also Music and Dance under Other Associations in Chapter 4. Also like vessels and figurines, a large percentage is unprovenienced.

Acanmul Structure 9 Column. Research is ongoing at Acanmul, located 20 to 25 km northeast of the modern town of Campeche (Map 6). Of the five carved columns that once decorated Structure 9, on the north side of a plaza there, only one, now in the Campeche Museo Arqueologico, Etnografico y Historico, retains significant relief. Pollock (1980:541) notes "a small subsidiary figure at the feet of the principal figure" which Mayer (1981:13) describes as "apparently a dwarf." Prager (2002:47) identifies the figure as a "representación de enanismo proporcionado." In the absence of an accurate reproduction of the scene, a drawing of the dwarf, created by digitally enhancing the relief in the photograph (Figure 5a) and rendering it as line, appears as Figure 5b. The only date available is a terminus post quem, by Proskouriakoff, of 9.16.0.0.0 (A.D. 751) or "Classic" in style (1950:167).

One way in which dwarf-motif monuments from the northern lowlands appear to differ from those of the southern lowlands is in the relative positions of the primary and secondary figures. While dwarves are consistently found at the right hand of the primary figure in lowland scenes, on the Acanmul column, the dwarf is on the primary figure's left,

much like the west column from Sayil Structure 4B1, on which the dwarf stands on the primary figure's left, and the figures face each other (Figures 5, 27). The Acanmul scene was likely balanced by either another secondary figure on the primary figure's right or by another column with a secondary figure on the primary figure's right. Though the Structure 9 column is badly eroded, dwarf's headwear apparently includes a twisted textile band, as on the Santa Rosa Xtampak panel and the Tikal Structure 5D-141 facade (Figures 5, 25, 31). His jewelry – a single-stranded bead necklace, a disk-with-tube earspool, and a cuff-style bracelet – resembles that of lowland dwarves.

Sayil Structure 4B-1 Columns. At the site of Sayil, 230 km north of Calakmul, the east and west columns of Structure 4B-1 picture dwarves carved in Puuc style (Figures 26, 27, Map 6; Gendrop 1998:146-147; V. Miller 1985:146; Pollock 1980:121, 123; Proskouriakoff 1950:168, Figure 102f, g, 1965:Figure 12d). As of 1981, Mayer (1981:20) reports their whereabouts as unknown. The east column is the only case in which a dwarf stands on the right of a primary figure, yet faces away from him. But for the dwarves both facing the same direction, the two monuments are mirror images of each other, a design not without precedent in the southern lowlands (see the front and back of La Milpa Stela 4 as well as Lintel 3 of Tikal Structure 5C-4; Figures 21, 22, 29). These two dwarves are clothed more simply than most others, but again, southern lowland

examples can be found (possibly Caracol Stela 11 as well as the front of Stela 4 at La Milpa and the riser of Step VII of Yaxchilan's Hieroglyphic Stair 2; Figures 14, 21, 39). While their headdresses are unusual, they are not unlike those worn by dwarves on the façade of Tikal Structure 5D-141 and on Tzum Stela 5 (Figures 31, 32). The pectoral ornaments worn by the two dwarves from Sayil might represent bivalve seashells, like that worn by the dwarf on Caracol Stela 21 (Figure 16).

The two Sayil dwarves do have some physical differences. The head of the dwarf on the east column is larger, in proportion to his body, than that of the dwarf on the west column, and his arms are long for a person with achondroplasia, while the dwarf's arms on the west column are more typical of a person with achondroplasia. The dwarf on the east column might thus have an achondroplasia-related condition, such as hypochondroplasia or pseudoachondroplasia (Figure 2). As Sayil's population is estimated at 4,000 to 10,000 people occupying the settlement, perhaps 15,000 to 17,000 including the hinterland, a single case of achondroplasia, at most, would be expected at any one time (Carmean 1990:16; Nemours 2003-2006; Sharer and Traxler 2006:545, 688; Tourtellot and Sabloff 1994:77). It is possible that the local artist was attempting to portray a person with short-limbed dwarfism without access to a model.

Santa Rosa Xtampak Palace panel. Santa Rosa Xtampak is located at the northernmost extent of the Chenes region, about 190 km north of Calakmul and 40 km south of Sayil (Map 6). The singular situation of the panel on the north side of the so-called Palace, just west of the central plaza of Santa Rosa Xtampak, and the challenges of reconstruction it presents are described in Chapter 3. Almost all of the stones of the panel had been removed by 1992. Proskouriakoff dates the Santa Rosa Xtampak sculpture from 9.15.0.0.0 (about A.D. 730) to 10.4.0.0.0 (about A.D. 910) based on style, especially comparable to the columns of Savil Structure 4B1 (Figures 26, 27; Proskouriakoff 1950:165-166, Figure 94a; see also Andrews 1997:307, 319, Figure 41, 1999:7, 21, Figure 29; Maler 1997 [1891]:213-216, 293, Figure 173; Mayer 1986:214; V. Miller 1985:146; Pollock 1970:54-55; Ruz Lhuillier 1945:37-38; Stamps 1970:60). There appears to be an average-statured, secondary figure in addition to two dwarves, but their positions are difficult to reconstruct (Figure 25). Although details of the dwarves' clothing are likewise not discernible, their headbands, seemingly of twisted fabric, are much like that of the dwarf on the façade of Tikal Structure 5D-141; like those of the dwarves at the other northern lowland sites, their headbands hold long plumes (Figures 31, 32).

Tzum Stela 5. All the monuments known from Tzum, located about 40 km southwest of Sayil and the same distance northwest of Santa

Rosa Xtampak (Map 6), were with an architectural group on a platform at the terminus of a sacbe at the site's northeastern extent. Although fragments of Stela 5 were found in front of the largest building, on the eastern side of the group's plaza, looting has destroyed its provenience both in time and space (*CMHI* 4:47, 59).

Stela 5 presents several unique elements (Figure 32). It is the only dwarf-motif monument on which the dwarf stands to the primary figure's right and an average-statured, secondary figure is seated to his left. On other dwarf-motif monuments that feature an additional secondary figure, such as Stela 5 at Caracol, Stela 2 at Motul de San José, and Structure 5D-141 at Tikal, he or she displaces the dwarf from the primary figure's right to the left (Figure 10). Furthermore, unlike other illustrations of dwarves, there is no evidence of a loincloth (though the stone is badly worn), and the garment this dwarf wears seems rather long and full. It is possible that this could be the only instance, thus far, of a female dwarf. The object held by the dwarf is also unique, perhaps a rattle, given the 'dancing' posture of the primary figure (Foncerrada de Molina 1976:50-52; Mayer 1986:213; Prager 2002:52).

From what scant details survive, one of the few elements that the dwarf on Tzum Stela 5 shares with others is the form of headdress. The band around the base, of striped fabric or rectangular panels, is similar to that on Stela 5 from Caracol and the columns of Structure 4B1 from Sayil

(Figures 10, 26, 27, 32). Like this dwarf, those on the Santa Rosa Xtampak palace, the Sayil Structure 4B1 columns, and the Tikal Structure 5D-141 façade all wear headdresses with feathers sticking out (Figures 25-27, 31, 32). It is possible that a headdress consisting of long plumes extending from a striped or barred headband is common for dwarves of the Chenes and Puuc regions, though we have only five provenienced examples.

Although we only have six occurrences at four sites to work with — three dwarves on Puuc-style columns, two in a Chenes-style scene, and one on a southern-style stela — the dwarf motif underwent some interesting transformations as it spread north into Yucatan. Dwarves there do not stand in the traditional spatial relationship to the primary figure. While some evidence survives for a lower garment worn by the dwarf from Acanmul, those on the monuments from Santa Rosa Xtampak and Sayil appear to wear only loincloths, while the garment of the Tzum dwarf is long and full. The only costume element that shows any consistency appears to be the headdress, which, unlike the peaked or Z-shaped style of the Peten, here consists of a fabric or paneled headband, sometimes with plumes protruding (Figures 5, 25-27, 32). At this point in time, the popularity of the dwarf motif has peaked, and its geographical distribution soon begins to shrink.

Recession of the Dwarf Motif

Caracol Stelae 11, 9, 8, and 19

Although the beginning of the A.D. ninth century brought the onset of the Terminal Classic, at Caracol, where no monuments had been placed for five k'atuns, a revival of sorts was happening (Martin and Grube 2000:85, 226-227; Sharer and Traxler 2006:500). Two lords, K'inich Joy K'awiil (Caracol Ruler IX, Mahk'ina God K, K'inich Hok' K'awiil) and his successor, K'inich Toob'il Yopaat (or Yoaat, Caracol Ruler X, Ruler XI, Lord Quincunx), placed a line of four monuments, three displaying the dwarf motif, in the plaza of Group A. The northernmost in line, Stela 11, paired with giant-ajaw Altar 19, denotes the lajuntum ending 9.18.10.0.0 (A.D. 800; Figure 14). The southernmost, Stela 8, probably witnessed the k'atun ending 9.19.0.0.0 (A.D. 810; compare, however, Grube 1994a:112; Houston 1987:100). The central monument, Stela 9, paired with giantajaw Altar 4, can only be estimated to fall somewhere between 9.18.0.0.0 and 10.0.0.0.0 (A.D. 790 and A.D. 830; Figure 13; Beetz and Satterthwaite 1981:37, 40-41, 104, 106-107; Grube 1994a:109; Helmke et al. 2006:6, 20; Martin and Grube 2000:96-98; Sharer and Traxler 2006:366).

Although Stela 8 preserves only the merest traces of a dwarf, those on Stelae 9 and 11 carry on the Caracol tradition of holding up scepters, probably illustrating K'awiil, as dwarves at Caracol did for at least 10

k'atuns. This tradition is unique to Caracol; at no other site do dwarves carry the scepter. And while dwarves at other sites carry something that looks like foliage (Calakmul, Dos Pilas, El Peru, Motul de San José, Tikal, and Xultun), with the possible exception of Stela 1, no dwarves from Caracol do so. The dwarf on Caracol Stela 11 wears both front and back masks, like Caracol Stela 1, 10.5 k'atuns earlier. While evidence for the lower garment from this time at Caracol is equivocal, the peaked headdress is retained. The dwarf iconography on this last set of stelae is thus quite conservative, perhaps an attempt to reach back to Caracol's glory days, while the signs of decline loom on the horizon.

What might be the last dwarf-motif monument at Caracol is in such poor shape that it is necessary to rely on Grube's (1994a:93) identification of a dwarf to the right of the lord K'inich Toob'il Yopaat (Figure 15). Half a k'atun after Stela 8, he put up Stela 19, in the northeastern part of the site, on the lajuntun ending 9.19.10.0.0 (A.D. 820; Beetz and Satterthwaite 1982:69-71; Grube 1994a:93-95; Martin and Grube 2000:98). If Caracol Stelae 4 and 19 are reconstructed correctly, then nine stelae depict ten dwarves there over a period of 12 k'atuns.

Calakmul Stela 16

Calakmul located at least two, possibly three monuments in the Central Plaza on the k'atun ending 9.19.0.0.0 (A.D. 810), though only one bears the dwarf motif, and the name of the ruler responsible is not

known (Marcus 1987:18-19, 58, 94, 111; Schele and Freidel 1990:384). This dwarf retains some clothing elements from earlier presentations of the motif, such as the short garment with the tail hanging down the back. Caracol Stela 1, raised 11 k'atuns before, as well as possibly Caracol Stela 21 and Xultun Stela 24, based on their similarity, show a dwarf wearing a peaked headdress with a flower bud tied around it (Figures 8, 16, 37), and several other sites portray dwarves holding what could be flowers, but only this monument has both. Like the set of dwarf-motif stelae at Caracol, the dwarf iconography on Calakmul Stela 16 is somewhat conservative in its resemblance to that of Stela 89, raised at Calakmul four k'atuns before (Figure 7). In spite of Calakmul's loss of power, as Folan et al. (1995:327) and Braswell et al. (2004:180, 189) point out, it continued to serve as a regional capital well into Bak'tun Ten.

Xultun Stelae 8, 3, and 10

The final dwarf-motif stelae that we know of at this time were set up at the site of Xultun, around three sides of the Group A plaza. On the east side stood Stela 8, celebrating the bak'tun ending 10.0.0.0.0 (A.D. 830); on the north side stood Stela 3, celebrating the lajuntun ending 10.1.10.0.0 (A.D. 859); on the west side stood Stela 10, celebrating the k'atun ending 10.3.0.0.0 (A.D. 889; Figures 34-36). The two later monuments were stolen in the early 1970s (*CMHI* 5:7, 9-10, 15, 37; Morley 1921:322, 324, 1922:362, 1937-1938:I:385, 395-397, 413-421;

Proskouriakoff 1950:110-112, 139-140, 151, 198, 1965:488, 1993:38, 99, 142, 184-185, 188; Schele and Freidel 1990:392; Sharer 1994:653). This set of stelae has in common a lack of adornment, such as necklaces, wristlets, and anklets worn by the dwarves, in contrast to nearly every other dwarf-motif stela (see Jewelry under Cultural Attributes in Chapter 4). Could it be that dwarves somehow became devalued at this point in the Terminal Classic, or does their austerity reflect hard times in general?

As described in Chapter 5, an interesting pattern of stela placement characterizes the very last set of dwarf-motif monuments. If their dates have been reconstructed correctly, Stela 7 and 22 were positioned on the east and north sides of the plaza, respectively, a k'atun and a half apart. Stelae 8, 3, and 10 were positioned on the east, north, and west sides of the plaza, a k'atun and a half apart, beginning exactly nine and a half k'atuns after the first monument positioned, Stela 7. This pattern of triadic, counterclockwise movement, well documented both ethnographically (for example, Gossen 1972:138-140) and archaeologically (Ashmore 1986:40-43, 1989:272-273, 1991:200-201, 1992:174; A. Chase 1991:38; Coggins 1980:728-729; Robin 2001:213-216; Tate 1992:37, 142), certainly calls for further, comparative research.

Summary

Development

Why does the dwarf motif begin at Caracol? We will probably never know. At this point in the development of the dwarf motif, from perhaps as early as 9.7.10.0.0 (A.D. 583) to 9.9.0.0.0 (A.D. 613), its iconography was variable and found only at Caracol. On 9.9.5.13.8 (A.D. 619), Kan II of Caracol and Yuknoom Chan of Calakmul performed a joint ritual. Less than five tuns later, on 9.9.10.0.0 (A.D. 623), a stela pair included the first dwarf-motif monument erected at Calakmul, part of a resurgence in monumental activity there (Folan et al. 1995:326-327; Martin 2005b:7; Martin and Grube 2000:91-92, 106; Schele and Freidel 1990:174; Sharer and Traxler 2006:361-362, 365). Although Stela 29 (Figure 6) was the last to render a dwarf at Calakmul for the next five and a half k'atuns, other. smaller sites in that hegemony, such as Uxul and El Peru, picked up the motif. An altar at the minor site of Uxul, celebrating the lajuntun ending 9.10.10.0.0 (A.D. 642), presaged by five k'atuns a scene at the major site of Yaxchilan, 155 km away (Figures 33, 39). Based on a single case from El Peru, erected on 9.13.0.0.0 (A.D. 692; Figure 19), the position of the dwarf at the right hand of the ruler, the peaked or Z-shaped headdress, the short, lower garment, bead jewelry, and objects held that look like leaves or blossoms are consistent elements of the dwarf motif that are

conventionalized at this time and continue throughout the iconographic record.

Two dwarf-motif stelae were placed at Xultun during this period, when the motif is otherwise not found outside Caracol, Calakmul, and sites controlled by Calakmul, such as Uxul and El Peru (Map 5). They were Stela 7, mostly likely placed on the lajuntun ending 9.10.10.0.0 (A.D. 642), and Stela 22, most likely celebrating the k'atun ending 9.12.0.0.0 (A.D. 672; Coggins 1994:32-33, 54; Garrison and Stuart 2004:854; Houston 1986:8). It is disappointing that so little remains of these first dwarf-motif monuments at Xultun, as it would have been interesting to compare the variability of dwarf iconography at this point in space and time. As discussed above, it is tempting to interpret the presence of the dwarf motif as evidence that Xultun was under the influence, if not the control, of the Calakmul polity, but the data at this point will not support much beyond theorizing.

After 9.11.0.0.0 (A.D. 652), Caracol underwent a hiatus in monument placement, putting up only a single monument, Stela 21, on 9.13.10.0.0 (A.D. 702) and not another until Stela 11 on 9.18.10.0.0 (A.D. 800); both picture dwarves (Figures 14, 16). Within a few tuns after the victory of Jasaw Chan K'awiil I of Tikal over Yuknoom Yich'aak K'ak' of Calakmul on 9.13.3.7.18 (A.D. 695), however, the latter site began again to place monuments. A set of at least six stelae, probably put up by

Yuknoom Took' K'awiil, celebrate the k'atun ending 9.15.0.0.0 (A.D. 731), including Stela 89, representing a dwarf. After Yik'in Chan K'awiil of Tikal defeated Yuknoom Took' K'awiil of Calakmul, sometime close to 9.15.5.0.0 (A.D. 736), rarely more than one or two stelae commemorate each period ending. The next dwarf-motif monument at Calakmul, Stela 16, was not placed until 9.19.0.0.0 (A.D. 810; Beetz and Satterthwaite 1981:44-46, 74-76, 112, 124, 129; Braswell et al. 2004:189; Marcus 1987:57; Martin and Grube 2000:44, 111-115; Proskouriakoff 1993:108; Sharer and Traxler 2006:400, 413-415). This lack of instances of the dwarf motif from the Calakmul and Caracol polities thwarts attempts to trace its influence through the iconographic record as well as to sort sites allied with the Calakmul hegemony from sites allied with the Tikal polity based on dwarf-motif iconography.

Expansion

The first site outside the control of the Calakmul polity (excepting, perhaps, Xultun and La Milpa) to raise a dwarf-motif monument was Tikal. Lintel 3 of Structure 5D-1 records the above-mentioned victory over Calakmul and features a dwarf (Figure 28). Similarly, Lintel 3 of Structure 5C-4 records a victory by Yik'in Chan K'awiil over El Peru on 9.15.12.2.2 (A.D. 743) and illustrates two dwarves (Figure 29). The Central Acropolis holds two other contemporaneous examples of the dwarf motif, one on the lintel of Structure 5D-52 and one on the façade

of Structure 5D-141 (Figures 30, 31). These displays of the dwarf motif depart from previous occurrences most of all in their context – Tikal dwarves are not found on stelae – and in their configuration: Tikal dwarves do not stand at the sovereign's right hand. They wear a fringed collar or short cape, and the lower garment of the dwarf in Structure 5D-1 is of jaguar pelt.

Sites whose allegiances we do not know, and that change allegiance over time, now take up the dwarf motif (Map 6). Stela 12 from La Milpa, for example, may date to this time (Figure 23; Grube 1994b:218, 220). Dos Pilas was founded by Tikal but soon, voluntarily or not, came under the control of Calakmul (Boot 2002a:5, 9-10, 19, 2002b:8-9; Houston and Mathews 1985:9). The iconography of the two dwarf-motif monuments from Dos Pilas, Stelae 14 and 15 (9.14.5.3.4 or A.D. 717 and 9.14.10.4.0 or A.D. 721, respectively), combine costume elements worn by Tikal dwarves, such as the jaguar-fur hip drape and short, fringed cape, with headdresses very much like the dwarf from El Peru (Figures 17-19, 28-30). Motul de San José may be another site that was caught between Tikal, Calakmul-controlled Dos Pilas, and Yaxchilan. Stelae 4 and 2 there, each depicting a dwarf, are only vaguely dated to 9.14.10.0.0?? (approximately A.D. 720) and $9.17.0.0.0 \pm 2$ k'atuns (approximately A.D. 770), respectively, based on their style (Coggins 1994:54; Foias 2004:527; Martin and Grube 2000:45-46, 135; Proskouriakoff 1950:142, 191,

1993:150-151; Schele and Freidel 1990:291; Sharer and Traxler 2006:440). Oxpemul, originally a dependency of Calakmul, may have begun to identify more with Tikal at the time that Stela 19, set up on 9.16.5.0.0 (A.D. 756), memorializes an accession. Stela 19 may be a local artist's attempt to imitate Stela 89 from Calakmul, the polity capital, or it may show Tikal's influence (Figure 24; Marcus 1987:123; Martin and Grube 2000:115; Robichaux and Pruett 2005:33-34; Ruppert and Denison 1943:142).

as well (Figures 29, 30; Harrison 1999:125; Martin and Grube 2000:120-121, 128; Sharer and Traxler 2006:358, 366, 431-432, 436).

Two sites situating dwarf-motif monuments during this time are Xultun, apparently caught in the conflict between Tikal and the Calakmul hegemony, and La Milpa. Of the set of three stelae at Xultun erected between 9.16.10.0.0 and possibly 9.17.10.0.0 or 9.18.10.0.0 (between A.D. 761 and possibly A.D. 780 or A.D. 800), only one preserves a reasonable amount of detail, portraying dwarf-motif iconography found not just at Calakmul, Caracol, and El Peru, but Dos Pilas and Tikal as well (Figures 37, 38). This may reflect Xultun's geographical location, midway between Calakmul and Caracol as well as near Tikal. La Milpa, however, is in some ways in the opposite situation, as the northeast outpost of Peten society (Tourtellot et al. 1993:107). Stela 4's dwarf-motif iconography (Figures 21, 22) resembles that of Dos Pilas and Caracol somewhat, but also that of Sayil (Grube and Hammond 1998:129-130; Hammond et al. 1996:90). Were it not for the figure on the reverse, some elements of attire, as well as relative scale and position on the monument, the secondary figure on La Milpa Stela 4's front would not be considered a dwarf. Stylistically dated to approximately 9.17.10.0.0 (about A.D. 780), Stela 4 appears to have been situated at a time when Caracol, Calakmul, and Tikal had ceased building alliances, and sites like La Milpa no longer faithfully copied their monuments.

The dwarf motif reached maximum geographical distribution sometime between 9.16.0.0.0 and 9.19.10.0.0 (roughly A.D. 750 and A.D. 820), when cases are found at Acanmul, Santa Rosa Xtampak, Sayil, and Tzum in the northern lowlands of Yucatan (Figures 5, 25-27, 32, Map 6; several unprovenienced instances are compiled in Appendix C; see also Music and Dance under Other Associations in Chapter 4). Dwarves at Acanmul, Santa Rosa Xtampak, Sayil, and Tzum combine elements of dwarf iconography found at Tikal, La Milpa, Yaxchilan, and Caracol with the distinctive Puuc and Chenes styles. A certain style of headdress, the rarity of the short, lower garment, and greater variability of position relative to the other figures on the monument appear to characterize dwarves of this region, though the sample size is limited. After this point in time, the geographical distribution of the dwarf motif begins to shrink.

Recession

Caracol placed at least three final dwarf-motif monuments, probably celebrating consecutive period endings, between 9.18.0.0.0 and 10.0.0.0.0 (A.D. 790 and A.D. 830): Stelae 11, 9, 8, and possibly Stela 19 (9.19.10.0.0 or A.D. 820; Beetz and Satterthwaite 1982:37, 40, 44; Grube 1994a:93-95). As do the dwarves on the first four dwarf-motif monuments at Caracol some 11 k'atuns before, these vary somewhat, yet are, in general, conservative, though poor preservation (except Stela 11) precludes detailed comparisons. Like Caracol dwarves before, at least

two hold scepters but not foliage. No convincing evidence remains for the short, lower garment worn by earlier dwarves, though the peaked headdress persists (Figures 13-15). The dwarf on contemporaneous Calakmul Stela 16 (put up 9.19.0.0.0 or A.D. 810) also dresses conservatively in the peaked headdress with blossom, front mask, short, lower garment, and carrying something that might be a leaf or flower.

At Calakmul, the set of stelae marking 9.19.0.0.0 (A.D. 810), including Stela 16, records the last period ending expressed as a Long Count, although monuments dated stylistically to later periods continued to be erected into Bak'tun Ten. Tikal observed the endings of K'atuns Seventeen, Eighteen, and Nineteen, skipped the first two k'atun endings of Bak'tun Ten, then placed a final stela on 10.2.0.0.0 (A.D. 869). After Stelae 11, 8, and 19 witnessed consecutive period endings, Caracol skipped a k'atun and a half, celebrated two more period endings, skipped another k'atun and a half, and finally commemorated the k'atun ending 10.3.0.0.0 (Beetz and Satterthwaite 1981:112; Braswell et al. 2004:180; Jones and Satterthwaite 1982:119; Marcus 1987:57-58). Xultun, however, regularly continued to place dwarf-motif monuments every k'atun and a half from 10.0.0.0.0 (A.D. 830) to 10.3.0.0.0 (A.D. 889), replicating both spatially and temporally a cycle of monument placement nine and a half k'atuns before. Though the ruler (or rulers) on Stelae 3 and 10 are lavishly ornamented, if the apparel and accessories of the dwarves is

anything to judge by, precious materials had become scarce, as none wear any jewelry (Figures 34-36). At Xultun, the distinctive lower garment and peaked headdress are well represented through the final dwarf-motif monument.

Spatial and Temporal Patterns

The dwarf motif thus began, in the late A.D. sixth century, at Caracol and appears to be correlated with the alliance-building activities, both military and diplomatic, of the Calakmul polity (Map 5). Most of the evidence for the expansion of the dwarf motif, however, comes from sites other than Calakmul and Caracol, the result, in part, of the effect of Tikal's retaliation, in the late A.D. seventh century, on monument erection. Once Tikal pictured the dwarf motif in its own style, it is found at sites caught up in the conflict between the two great powers, often in the form of a combination of local and regional iconographic elements. Some sites imitated dwarf iconography with more convention than others. At its greatest geographical extent, toward the close of the A.D. seventh century, the dwarf motif was represented in the Puuc and Chenes styles in the northern lowlands of Yucatan (Map 6). With the beginning of the A.D. eighth century, however, the dwarf motif, like Peten sites themselves, began to recede, until only the sites at which it had first been featured erected monuments bearing dwarves (Map 7).

Like analysis at the site level, regional evidence reveals the flexibility of the dwarf motif, which allows each site to use broadly shared iconography to express local identity by adapting the context and the configuration. The data we have at this time will not support sorting sites by political affiliation based on their display of the dwarf motif. Rather, against a background of shifting affiliations, sites use the medium of regional iconography to address local concerns through ritual, for example, at the endings of calendrical periods. Analysis at the regional level also reveals a variety of mechanisms by which iconography is shared: military conquest in no way precludes the conquered site from illustrating motifs appearing at the site of the conquerors. In at least two cases, a borrowed motif accompanies a military and monumental renaissance. Nor is the direction of borrowing necessarily top down; in at least two cases, larger polities apparently borrowed the dwarf motif from smaller, dependent sites. There is some evidence that the convention and fidelity with which smaller sites depict the dwarf motif correlates with their involvement, militarily or diplomatically, with larger sites and their power struggles. The sites at which the dwarf motif began are also the last sites, chronologically, to show it, and these are, in many ways, the most conservative in its use. The geographical extent of the dwarf motif all the way into the northern lowlands, the variety of contexts, at all levels, in which it is found, and its time span of at least 15 k'atuns or 300

years is due to the nature of Classic Maya society: a mosaic of diverse settlements, each adapted to its own geopolitical niche yet sharing an ideology (Martin and Grube 1994:19-20; Reents-Budet et al. 2000:117; Sharer and Traxler 2006:93-96).

CHAPTER 7

EPIGRAPHY, ETHNOHISTORY, AND ETHNOGRAPHY

Epigraphy

Introduction

About half of the illustrations of the dwarf motif on Maya monuments are in direct association with hieroglyphic texts. These occur throughout the temporal duration of the motif, from the earliest firmly dated dwarf-motif monument (Caracol Stela 1; a possibly prior monument, fragmentary Caracol Stela 4, is inconclusively dated) to the latest dwarf-motif monument (Xultun Stela 10). Dwarves are accompanied by hieroglyphic texts at sites with the largest number of dwarf-motif monuments (Caracol and Xultun) as well as at sites with only one, perhaps two, examples of the dwarf motif, such as Yaxchilan and El Peru. Half the blocks that may have at one time held hieroglyphs are too eroded to be legible. Reents-Budet (1985:109) points out a small hieroglyph with a dwarf on a ceramic vessel in the Holmul style, also unreadable, that she suggests "names or somehow qualifies the dwarf."

Just as the dwarf motif begins, ends, and is most frequent at Caracol, so most of the hieroglyphic texts connected with the motif come from that site. Of the ten dwarf scenes on nine stelae at Caracol, only Stela 21 allows the conclusion that no hieroglyphs ever accompanied the dwarf (Figure 16). Stela 4, possibly the earliest of all dwarf-motif monuments yet known, and Stela 8, somewhat late in the iconographic record of the dwarf motif, are in too poor a condition to reconstruct whether or not those dwarves ever had their own texts (Figure 9). One now-empty glyph panel accompanies each secondary figure on Stela 5, and two are found above the dwarf on the front of Stela 6, erected half a k'atun apart (Figures 10, 11). An L-shaped panel may have referred to the dwarf on Stela 9, but the hieroglyphs are no longer discernable (Figure 13). Dwarves are connected to hieroglyphic texts on two early dwarfmotif monuments (Stela 1 and the back of Stela 6) and two late dwarfmotif monuments (Stela 11 and Stela 19). Only the hieroglyphs on the back of Stela 6 and on Stela 19 survive in any detail, and none of the inscriptions are decipherable (Figures 8, 12, 14, 15).

Although El Peru has only one, possibly two, stelae thus far known that display the dwarf motif, a brief but relatively detailed hieroglyphic text is found near the dwarf on Stela 34 (Figures 19, 40a). Similarly, both dwarf-motif monuments from Dos Pilas, Stelae 14 and 15, present panels of glyphs above the dwarves (Figures 17, 18, 40b). Roughly contemporaneous with Dos Pilas Stela 15 is Stela 4 from Motul de San José. Although only the feet of the principal and secondary figures

survive, in front of the dwarf is a block of two glyphs (Figure 40c). Stela 2, probably erected about two and a half k'atuns later, may also have at one time featured a text in front of the dwarf. On both the front and the back of La Milpa Stela 4 are small, two-glyph panels, but these blocks are now empty; according to Grube and Hammond (1998:130-131), they once identified the dwarf (Figures 21, 22).

Of the three dwarf-motif monuments at Calakmul, it is unlikely that Stelae 16 and 29 ever included glyph panels affiliated with the dwarves thereon (Figure 6). In front of the dwarf on Stela 89, however, is a panel enclosing two nearly erased glyphs (Figure 7). Although only one monument bears the dwarf motif at Yaxchilan, its two dwarves each have their own hieroglyphic texts (Figures 39, 40d, e). Its similarity to Altar 2 at Uxul, inscribed over five k'atuns previously, suggests that there might have at one time been a glyph panel in front of the dwarf on the Uxul altar as well (Figure 33).

Of the eight dwarf-motif stelae at Xultun, half (Stelae 7, 8, 22, 23) are too badly eroded to be able to discern whether the dwarves ever had corresponding hieroglyphic texts. Although the area above the dwarf's head on Stela 24 is largely erased, small remains of hieroglyphs survive. Stelae 25, 3, and 10 all preserve reasonably complete hieroglyphic texts just above the dwarves (Figures 34-38, 40f, g).

Only five of the sites at which the dwarf motif is found retain no evidence of associated hieroglyphic texts; these tend to be sites with very few cases of the motif. As in other characteristics, the exception is Tikal, at which five dwarves are found in four scenes. The Structure 5D-52 lintel and the Structure 5D-141 façade, in the Central Acropolis, are sufficiently well preserved to demonstrate that no glyphic texts accompanied those dwarves (Figure 30). Because parts of the innermost lintels of Structures 5D-1 and 5C-4 (Temples I and IV) are missing, however, it cannot be concluded that no glyphs ever accompanied the dwarves portrayed there (Figures 28-29). No space is left near the dwarves on the panel from the palace at Santa Rosa Xtampak or the two columns from Structure 4B1 at Sayil for hieroglyphs (Figures 25-27). Similarly, on Tzum Stela 5, a glyph panel occurs above the secondary figure to the primary figure's left but not above the dwarf, though the top of the monument is missing (Figure 32). Nor does Oxpemul Stela 19 indicate any hieroglyphs with that secondary figure (Figure 24).

Hieroglyphic Texts Associated with the Dwarf Motif

Caracol Stela 1 and the back of Stela 6. Caracol Stela 1 is dated 9.8.0.0.0 (A.D. 593; Figure 8). Above the dwarf's head is a relatively long glyph panel as well as an unenclosed glyph, labeled X and Y by Beetz and Satterthwaite, who reconstruct the last glyph in the panel as 5 Ahau, "presumably duplicating Date A of [the] main text" (1981:9, Figure 1).

Although the panel over the dwarf's head on the front of Stela 6, dated 9.8.10.0.0 (A.D. 603), is now empty, two noncalendrical glyphs remain above the dwarf's head on the back (Figures 11, 12). Neither of these texts is sufficiently preserved to be readable.

El Peru Stela 34. The reconstructed date of Stela 34 is 9.13.0.0.0 (A.D. 692). Between the headdress of the dwarf and the right sleeve of Lady K'ab'il is a two-block panel of hieroglyphs (Figures 19, 40a) designated I1-I2 by J. Miller (1974:Figure 2) and K1-K2 by Wanyerka (1997:88; see also Houston 1992:Figure 4d, not b; Prager 2002:Figure 26d). J. Miller (1974:150; see also Mayer 1980:23) attempts to assign the glyphs T numbers. According to Wanyerka (1997:88), "the last glyph block, directly over the dwarf's head, records his name (K1) as *ak* (dwarf). The dwarf title (K2) reads *mas* (goblin)."

Dos Pilas Stela 14 and Stela 15. While the text of Stela 14 commemorates the period ending 9.14.0.0.0 (A.D. 711), its last date is 9.14.5.3.14 (A.D. 717). Above the head of the dwarf is a panel enclosing Glyphs H1-H4 (Figure 17; Houston 1989:Figure 27, 1993:Figure 3-24; D. Stuart 1988:Figure 5.22). As discussed by D. Stuart (1988:192-193) and Coggins (1994:44), this text probably does not apply to the dwarf. Stela 15 commemorated the period ending half a k'atun later; its last date is 9.14.10.4.0 (A.D. 721). A panel enclosing just two glyphs, G1-G2, is directly above the dwarf's head (Figures 18, 40b; see Houston 1992:Figure

4a, 1993:Figure 3-25; Prager 2002:Figure 26a). According to Houston (1992:528), the "initial sign perhaps refers to the personal name of the dwarf, and a second represents his formal title."

Motul de San José Stela 4. Nothing survives of Stela 4 from Motul de San José except the feet of one primary and one secondary figure and two glyph panels: a larger one to the primary figure's left and a smaller one in front of the dwarf to the primary figure's right (Figure 40c; Grube 1988:67; Houston 1992:528, Figure 3; Prager 2002:Figure 26i). The only date available at this time for Motul de San José Stela 4 is a suggestion by Coggins (1994:54) of approximately 9.14.10.0.0 (about A.D. 720) based on its style.

Calakmul Stela 89. Stela 89, dated 9.15.0.0.14 (A.D. 731), is the only monument from Calakmul to preserve a glyphic text related to a dwarf (Figure 7). Ruppert and Denison (1943:121) label the two-block panel in front of the dwarf's head and headdress G1 and G2 and record a possible coefficient of nine. Houston's drawing (1992:Figure 4b, not e; reproduced by Prager 2002:Figure 26b, not c), from Ruppert and Denison's photo (1943:Plate 53b), differs significantly from Grube's drawing, reproduced by Mayer (1989:Plate 5) and Coggins (1994:Figure 11) as well as in Figure 7. Insufficient detail remains for this text to be deciphered.

Yaxchilan Hieroglyphic Stair 2 Step VII. Only one dwarf-motif monument, dated 9.15.13.6.9 (A.D. 744), has been found at Yaxchilan: Step VII of Hieroglyphic Stair 2, on which two dwarves observe Bird Jaguar IV (Bird Jaguar the Great, Yaxun Balam IV) in ball-game sacrifice (Figure 39). Both dwarves carry Venus or star signs behind their arms. The Venus signs are interpreted as possibly identifying the dwarves with the morning and evening stars (de la Garza and Izquierdo 1992:348, 350), with Virgo and Leo (Freidel et al. 1993:360-361, 486), with Gemini (M. Miller and Taube 1993:82), or with Castor and Pollux (Milbrath 1999:267). They may also set the scene of the ball-game sacrifice in the heavens or cosmos (Coggins 1994:152; Houston 1992:527; Mathews 1989:210; M. Miller and Houston 1987:54; Proskouriakoff 1993:119; Schele and Miller 1986:249; G. Stuart 1981:235) or in the underworld (Cohodas 1991:269; Tate 1992:97, 131; see Yaxchilan Hieroglyphic Stair 2 Step VII under Expansion of the Dwarf Motif in Chapter 6).

Each dwarf has his own hieroglyphic text: T1-U3 in front of the dwarf nearest Bird Jaguar (Figures 39, 40d; *CMHI* 3:160; Houston 1992:Figure 5c; Prager 2002:Figure 26h) and V-X above the dwarf behind him (Figures 39, 40e; *CMHI* 3:160; Houston 1992:Figure 5d; Prager 2002:Figure 26g). According to Grube and Hammond (1998:131), the dwarves are "identified hieroglyphically as *ch'at* 'hunchback'," though

Houston (1992:528) glosses that term as "dwarf" (see Glyph Compound T93:?:59, below).

Xultun Stela 24 and Stela 25. Although the area above the dwarf's head on Stela 24, dated 9.16.10.0.0 (A.D. 761), is largely erased, remains of small, incised hieroglyphs survive (Figure 37; *CMHI* 5:84). Houston (1992:Figure 4c) illustrates the traces of two of the three glyphs (I1-I3) opposite the dwarf, on the other side of the principal figure, and this appears to be the text, rather than the glyphs above the dwarf, that refers to him (Figure 40f; Prager 2002:Figure 26c, not b). Five to six and a half k'atuns later, glyphs above dwarves' heads on Stelae 3 and 10 are Calendar Round dates and distance numbers referring to Long Count dates on the monuments' sides, not to the dwarves below. Both texts are too eroded to be legible (Figures 34, 36). For Stela 25, Coggins proposes a date of 9.17.10.0.0 or 9.18.10.0.0 (A.D. 780 or A.D. 800; 1994:54). Over the dwarf's head is a column of six hieroglyphs, numbered 4-9; the lower three are relatively complete (Figures 38, 40g; *CMHI* 5:88; Houston 1992:Figure 4e, not d; Prager 2002:Figure 26e).

Caracol Stela 11 and Stela 19. Between K'inich Joy K'awiil (Caracol Ruler IX, Mahk'ina God K, K'inich Hok' K'awiil) and the K'awiil scepter held by the dwarf on Stela 11 (with a reconstructed date of 9.18.10.0.0 or A.D. 800; Figure 14) are two noncalendrical glyphs, designated Z by Beetz and Satterthwaite (1981:45, Figure 12) and G1-G2 by Houston

(1987:Figure 71a). Grube and Martin (2004:76) propose that these once named the dwarf. In front of the dwarf on Stela 19 (9.19.10.0.0 or A.D. 820; Figure 15), under what is probably the handle of a K'awiil scepter, is the beginning of a "formal, but short, glyphic text" that "very likely refers directly to the dwarf and his name" (Grube 1994a:95, Figure 9.6 B8). Neither text is sufficiently preserved to be interpreted.

Xultun Stela 3 and Stela 10. Between the principal figure's right elbow and the top of the dwarf's headdress on Stela 3 is a column of four well-preserved hieroglyphs (Figure 34). They record the Calendar Round date 11 Lamat 11 Xul and the distance number to reach the half-k'atun ending 10.1.10.0.0 (A.D. 859) on the side of the monument (*CMHI* 5:15, 17; Houston 1986: Table 1; Morley 1937-1938: V: Plate 10a, d, 1938: I: 413-415). On Stela 10 (Figure 36), as on Stela 3, a column of glyphs reads 6 Caban 10 Zip and the distance number to reach the k'atun ending 10.3.0.0.0 on the stela's side (A.D. 889; *CMHI* 5:37-38; Houston 1986:Table 1; Morley 1937-1938:I:416-417, 1937-1938:V:Plate 10b, e; Proskouriakoff 1993:188). In both cases, the Calendar Round date precedes the Long Count period ending by one k'atun and six tuns (1.6.14.12 for Stela 3 and 1.6.10.3 for Stela 10). These texts thus likely give the birth dates of the primary figures on the monuments and do not apply to the dwarves (Houston 1986:8; Morley 1937-1938:I:413-418; Proskouriakoff 1993:185, 188).

Therefore, although about half of the representations of the dwarf motif on Maya monuments are in direct association with hieroglyphic texts, only eight are relevant and are preserved in sufficient detail to analyze: Calakmul Stela 89, Dos Pilas Stela 15, El Peru Stela 34, Motul de San José Stela 4, Xultun Stelae 24 and 25, and Yaxchilan Hieroglyphic Stair 2 Step VII (which has two texts; Figures 7, 18, 19, 37-40). They are broadly distributed across space but tend to fall in the earlier two-thirds of the iconographic record, from 9.13.0.0.0 (A.D. 692) to 9.16.10.0.0 (A.D. 761), perhaps as late as 9.18.10.0.0 (A.D. 800). Although most scholars speculate that the texts designate the dwarves nearby, "unfortunately, the name glyphs of these dwarfs have yet to reveal their secrets" (Houston 1992:526; see also Grube 1994a:95; Grube and Hammond 1998:130-131; Grube and Martin 2004:76; Reents-Budet 1985:109; Wanyerka 1997:88).

Hieroglyphic Compounds Associated with Dwarves

Glyph Compound T24.74:564v. As mentioned in Chapter 1, a first attempt to systematically collect the hieroglyphic texts referring to dwarves and decipher them was by Houston (1992), who had earlier proposed that dwarves had their own name glyph (1989:56), followed a decade later by Prager (2002). On five of the eight dwarf-motif monuments above -- Calakmul Stela 89, Dos Pilas Stela 15, El Peru Stela 34, and Xultun Stelae 24 and 25 (Figures 7, 18, 19, 37, 38, 40a, b, f, g) -- Houston (1992:528) recognizes a glyphic compound with the prefix T24,

the superfix T74, and the main sign T564v (see also J. Miller 1974:150; Thompson 1962:43, 47, 186). According to Houston (1992:529), "the phonetic elements [of the T74 superfix and T564 main sign] would appear to spell *ma-s(u)*, *mas*, or *duende*, 'goblin, fright' in Yucatec Maya" (see also Boot 2002c; Freidel et al. 1993:462; Mathews and Biró 2005; Prager 2002:59; Schele 1997:151).

As the T24.74:564v compound forms the second glyph block of a two- or three-block panel, it might serve as the dwarf's title, the first block being the dwarf's name. In the two-block inscription near the dwarf on El Peru Stela 34 (Figures 19, 40a), however, the second part of the first glyph (K1a) reads *a-k(u)*; though usually glossed as 'turtle', as will be shown below, *ak* also means 'dwarf' in various Mayan languages (M. Coe and Van Stone 2001:162; Houston 1992:528; Prager 2002:59; Schele 1997:151; Wanyerka 1997:88).

It may or may not be significant that the dwarves correlated with this sign, except for the one on Xultun Stela 24, all wear the Z-shaped headdress (Figures 7, 18, 19, 38). The dwarf on Stela 21 from Caracol wears a headdress very similar to that of the dwarf on Stela 24 from Xultun, but no glyphs ever accompanied the Caracol dwarf (Figures 16, 37). The Z-shaped headdress is worn by the dwarf on Dos Pilas Stela 14, but the well-preserved glyph panel over his head does not include the T24.74:564v compound (Figure 17). Dwarves on the back of La Milpa

Stela 4 and on Motul de San José Stela 2 also wear the Z-shaped headdress, but the corresponding glyphs have not survived (Figure 22).

Glyph Compound T134:210v. In three texts on Motul de San José Stela 4 and Yaxchilan Hieroglyphic Stair 2 Step VII, Houston identifies a sign he calls "a dotted curlicue" (Figure 40c-e; Houston 1992:528). Prager (2002:59-60) proposes that the main sign is T210, a conch shell (or univalve shell; Thompson 1962:59) with T134 pre- and post-fixed, and that it reads *nol*. In the hieroglyphic text in front of the Yaxchilan dwarf nearest Bird Jaguar IV, the T134:210v compound has a Venus or star subfix (Figures 39, 40d). As detailed in Chapter 6, the two dwarves on the Yaxchilan stair are iconographically very different from the others. The two contrasting glyphs, the T24.74:564v compound and the T134:210v compound, might therefore describe different roles played by dwarves. It is unfortunate that not enough of Motul de San José Stela 4 remains to analyze why a different glyph designated the dwarf on this monument. Houston (1992:528, Figure 5b) and Prager (2002:Figure 26j) recognize the T134:210v compound on an unprovenienced vase as well (see references under Grolier 58 / K 5110 in Appendix C).

Glyph Compound T93:?:59. The hieroglyphic inscription at Yaxchilan over the head of the dwarf farthest from Bird Jaguar IV, glyphs V3-X3, contains a compound to which Houston (1992:528) assigns the sound value *ch'at(a)* 'dwarf' in Cholan. Prager (2002:59) labels this

compound T93:599, though I would describe it as T93:?:59 (Figures 39, 40e; see M. Coe and Van Stone 2001:157, 159; Thompson 1962:46). While this reading has been widely cited (Boot 2002c; Freidel et al. 1993:443 Note 40; Grube and Hammond 1998:131; Longhena 2000:60; Mathews and Biró 2005; M. Miller and Taube 1993:82; Montgomery 1993, 2002:76; Schele 1997:151), it does not, in fact, seem to be found in any other hieroglyphic text on a dwarf-motif monument. By contrast, the T24.74:564v compound occurs in five out of the eight provenienced hieroglyphic texts that appear to refer to dwarves, and the T134:210v sign is found in the other three. Parenthetically, the term *cha'-t'ox* means 'to split into two parts' in Tzotzil (Laughlin and Haviland 1988:I:183).

None of these three glyph compounds are found in the hieroglyphic panel a short distance above the dwarf's head on Dos Pilas Stela 14 (Figure 17). D. Stuart reads this text as a metaphorical reference to bloodletting under the auspices of Itzamnaaj K'awiil (then Shield God K; D. Stuart 1988:192-193; see also Coggins 1994:44).

Summary

In spite of hieroglyphic texts in direct association with half of the depictions of the dwarf motif on Maya monuments, only limited understanding can, at this time, be gained from them. Some examples, such as Dos Pilas Stela 14 and Xultun Stelae 3 and 10, do not appear to refer to the dwarves nearby (Figures 17, 34, 36). Five of eight

hieroglyphic texts with dwarves include a T24.74:564v compound, perhaps read *mas 'duende'* (Houston 1992:529), while the other three texts include a T134:210v compound, possibly read *nol* (Prager 2002:59-60). As two of the usages of the T134:210v compound accompany Yaxchilan dwarves in a unique context of ball-game sacrifice, presumably the two compounds refer to two different roles that dwarves filled in Classic Maya sociopolitical structure (Houston 1992:528). This inference is supported by ethnohistoric data, especially from dictionaries compiled during the contact period. Finally, based on linguistic data detailed below, the verbal root that would be expected to appear on dwarf-motif monuments, *ak*, is thus far only found on Stela 34 from El Peru (Figures 19, 40a; Wanyerka 1997:88).

Ethnohistory

Introduction

Contact-period evidence for the role of dwarves in the sociopolitical life of the Classic Maya comes from texts composed by both indigenous authors and Europeans. By command of the Holy See, one of the first responsibilities of clerics in America was to learn the local language, so Franciscans and other orders immediately set about recording word lists. These collaborations between Spanish ecclesiastical

scribes and native informants assist our attempts to decode the meanings of Classic-period hieroglyphs (Bolles 2003; Sharer and Traxler 2006:120-121, 123; Tozzer 1921:139; all references to centuries in this chapter are understood to be A.D.).

Another early collaboration was an orthography for Mayan languages based on European characters. Texts by indigenous writers in K'iche, Yukatek, Kaqchikel, and other languages include transcriptions of oral traditions as well as copies of older manuscripts, some apparently based on hieroglyphic texts. They generally present an indigenous worldview with postcontact, European influences (Edmonson 1971 [1550?-1555?]:vii; Recinos and Goetz 1953 [1600?-1650?]:4, 11; Roys 1967 [1550?-1650?]:3, 6, 8).

Beginning with Cortés's letters to his patron, Europeans in the New World, with varying degrees of familiarity with precontact culture, attempted to document what they were destroying. The earliest began 15 years after the conquest, although some had been present at Moctezuma's court before the fall of Tenochtitlan and some recorded the recollections of older members of elite Mexica society. Most discussions of ancient Maya depictions of dwarves are accompanied by mention that dwarves served in Mexica courts, based on these sources (for example, Inomata 2001:37, 38; Longhena 2000:60; Mayer 1986:221; M. Miller and

Martin 2004:25; M. Miller and Taube 1993:82; V. Miller 1985:141; Prager 2001:278, 2002:41; Sánchez Saldaña and Salas Cuesta 1975:41; Tate 1993:16).

Early Dictionaries

Tozzer's efforts to catalog sixteenth-century lexical resources caused him to remark (seemingly with some well-justified frustration), "in spite of the tremendous advantage of possessing three early Maya dictionaries it is often not possible to determine accurately the meaning of many of the words in the early texts" (1921:112). One reason is that not all copyists consistently recorded glottalization. Although four dictionaries are listed below, they almost certainly share a common source, and variability results from regional dialects and transmission over time.

The dictionaries and other manuscripts were copied during the latter half of the nineteenth century by two great linguists of Mayan: Juan Pío Pérez and Carl Hermann Berendt. Serving as the Mayan interpreter to the Secretary of State in Mérida, Pérez had access to historical Mayan manuscripts, while Berendt traveled across Central America, acquiring and transcribing early written Mayan material. Berendt copied and continued Pérez's work, and, in turn, Daniel Garrison Brinton purchased Berendt's collection, donating it to the University of Pennsylvania Museum (Tozzer 1921:143-148). Modern reconstructions of colonial-

period Yukatek, such as those compiled by Solis Alcalá (1950), Swadesh et al. (1970), Álvarez (1980), and Barrera Vásquez (1980), depend on these sources.

Bocabulario de Maya Than. Opinions vary on the authorship and date of the Bocabulario de Maya Than. Bolles (2003) presents circumstantial evidence that the Bocabulario is the earliest of the Franciscan dictionaries and was composed in Mani by Fray Gaspar Gonzålez de Nájera in the 1570s. Solis Alcalá and Barrera Vasquez believe it was compiled somewhat later, between the end of the sixteenth century and the beginning of the seventeenth. The only extant copy, made in the mideighteenth century, resides in the National Library of Vienna, which dates the original to 1670 (Barrera Vasquez 1980:22a-23a; Bolles 2003; Solis Alcalá 1950:12). Under the entry for the Spanish words for 'dwarf,' enano o enana, is listed ac uinic, ac oc, ac ximbal, and tzap uinic (Acuña 1993 [1570?-1670?]:300).

Calepino, Diccionario de Motul. Seventeenth-century sources point to the existence of a dictionary called the *Gran Diccionario ó Calepino* by Antonio de Ciudad Real, a Franciscan who lived in Mérida from 1573 to 1617. Tozzer (1921:170-171) believes that work to be lost, but Martínez Hernández (1929 [1575?-1620?]) identifies the missing *Calepino* as the dictionary that had been named the *Motul*, after the convent in which the first part was written. Recent scholarship (Bolles 2003) suggests that the

Mayan-Spanish portion of the *Motul Dictionary* is Ciudad Real's *Calepino*, but that the Spanish-Mayan portion of the *Motul* is a contemporaneous, independent copy of an earlier work. The *Motul Dictionary* is dated to between 1575 and 1620 (Arzápalo Marín 1995 [1575?-1620?]:ii; Barrera Vasquez 1980:19a-20a; Bolles 2003; Brinton 1969 [1883]:254; Martínez Hernández 1929 [1575?-1620?]; Solis Alcalá 1950:11; Tozzer 1921:141-142, 149, 170-171).

Berendt copied the *Motul Dictionary* in 1864. The 1929 edition by Martínez Hernández translated the Yukatek words *ac vinic, ac oc, ac ximbal*, and *ac pek* into the Spanish *enano* 'dwarf' and *ppuz* into 'hunched or humped' (1929 [1575?-1620?]:68, 70). Arzápalo Marín's 1995 edition, however, indicates that these terms mean *pequeño de cuerpo* 'small of body' (1995 [1575?-1620?]:4, 6).

Diccionario de San Francisco. Like the Motul, the San Francisco
Dictionary is named for the convent in which it was found. Berendt
(1870a [1600?-1700?]) believes it to be older than the Motul, while Tozzer
(1921:142, 172) considers it more recent (see also Barrera Vasquez
1980:25a-27a). Bolles (2003) hypothesizes that the San Francisco
Dictionary, the Spanish-Mayan portion of which derives from the same
source as that of the Motul, may have been compiled by Gabriel de San
Buenaventura around 1680. Pérez copied the San Francisco Dictionary in
the late 1850s or early 1860s, Berendt in 1870, and Michelon produced an

edition in 1976. Berendt (1870a [1600?-1700?]:II:164, 167) and Michelon (1976 [1600?-1700?]:2, 593) gloss *enano* 'dwarf' as *ac uinic, putum uinic,* and *tzapa uinic* and *encorvado* 'hunched' as *pupuxnac*.

Diccionario de Ticul. Though unique in bearing a date of 1690, the Ticul Dictionary, like the Motul and San Francisco, is named for the convent in which it was discovered and shares a common source with parts of those earlier works. Pérez transcribed it in 1836, arranged it in 1847, and published part in 1898; Berendt made a copy in 1870 (Barrera Vasquez 1980:27a-29a; Bolles 2003; Tozzer 1921:173). The entry for enano includes two terms not found in the other vocabularies: cuculuc and mamatac (Berendt 1870b [1690]:100).

In 1864, Berendt produced his three-volume *Diccionario de la Lengua Maya de Yucatan*, which incorporated all the dictionaries known at that time. According to Berendt's compilation, the Yukatek words *ac uinic, ac oc*, and *ac ximbal* translate as *enano*, *pequeño de cuerpo* 'dwarf, small of body', though he also includes some terms glossed simply as *enano*: *ac, ac uinic, putum uinic, tzapa, tzapa uinic, cuculuc,* and *mamatac. Ac, tzapa, cuculuc,* and *mamatac* are from the *Ticul Dictionary* (Berendt 1864 [1575?-1690?]:I:6, 494, II:73, 1327). Berendt then finished the Mayan-Spanish dictionary begun by Pérez between 1866 and 1877,

which marked glottalization and gave many forms of the stem *ach*', translated *enano* 'dwarf' (Pérez 1866-1877; Tozzer 1921:147, 170-171, 175).

Lexical Analysis

Like the various hieroglyphs associated with the dwarf motif on Classic-period monuments, Mayan vocabularies offer more than one term for 'dwarf', suggesting that more than a single concept is being expressed. The earliest Yukatek dictionaries list, for example, separate words for 'dwarf' and 'hunchback' (Berendt 1864 [1575?-1690?]:II:73, 1320, 1870a [1600?-1700?]:II:167, 1870b [1690]:66, 102; Martínez Hernández 1929 [1575?-1620?]:802). Since the colonial period, the word for 'hunchback' in Yukatek, Tzotzil, Poqom, and reconstructed proto-Cholan has consistently been some form of *p'us* or *p'uz* 'humped', 'curved', or 'bent over' (Álvarez 1980:342; Barrera Vasquez 1980:I:705; Brinton 1895:43; Feldman 2004:159; Kaufman and Norman 1984:130; Laughlin and Haviland 1988:I:293, II:388, 645; Solis Alcalá 1950:357; Swadesh et al. 1970:79). As discussed below, this word still refers to a mythological humpbacked dwarf from a prior creation.

The *Bocabulario de Maya Than*, probably the oldest dictionary that has come down to us if only by a few years, translates *enano* 'dwarf' as *ac uinic*, *ac ximbal*, *ac oc*, and *tzap uinic* (*uinic* is the word for 'man'; Acuña 1993 [1570?-1670?]:300). The Yukatek words for 'dwarf' in the *Motul*

Dictionary are the same, but with *ac pek* instead of *tzap uinic* (Martínez Hernández 1929 [1575?-1620?]:68, 70). The *Motul* editions produced by Berendt (1864 [1575?-1690?]:I:6) and Arzápalo Marín (1995 [1575?-1620?]:4, 6) gloss the first three terms, *ac uinic*, *ac oc*, and *ac ximbal* as *pequeño de cuerpo* 'small-bodied' in addition to *enano* 'dwarf'. The *San Francisco Dictionary* adds *putum* (or *p'utum*) *uinic* to *ac uinic* and *tzap(a) uinic* but gives a meaning of only *enano*, not *pequeño* (Berendt 1870a [1600?-1700?]:I:2, II:164; Michelon 1976 [1600?-1700?]:2, 593). As mentioned above, the *Ticul Dictionary* adds *cuculuc* and *mamatac* to *ac* and *tzapa* (Berendt 1870b [1690]:100).

Evidence from these early vocabularies, together with reconstructions of contact-period Yukatek and modern Mayan dictionaries, indicates two slightly overlapping sets of terms: words for 'dwarf' that are physical descriptions and words referring to mythological beings. The root generally used for physical descriptions is some form of *ak* (*ac*, *aak*), glossed as *enano* 'dwarf' with the explication *pequeño de cuerpo* 'small of body'. This root is widely documented from the earliest sources to present speech in Yukatek and Itzaj (Acuña 1993 [1570?-1670?]:300; Alvarez 1980:340-341; Arzápalo Marín 1995 [1575?-1620?]:4; Barrera Vásquez 1980:I:4-5, II:141; Berendt 1864 [1575?-1690?]:I:6, II:494, 1870a [1600?-1700?]:I:2, II:164, 1870b [1690]:100; Brinton 1895:43; Martinez Hernandez 1929 [1575?-1620?]:68, 70; Michelon 1976 [1600?-

1700?]:2, 593; Pérez 1866-1877:1; Schumann G. 1971:105; Solis Alcalá 1950:245; Swadesh et al. 1970:33). According to Edmonson (1965:7), *ak'al*, which means 'child' or 'infant' in K'iche, is a word that dates to the fifteenth century in Kaqchikel and Tz'utujil. In the Yukatek now spoken in Hokabá, one word for 'dwarf', *'akan*, simply means 'stunted' (Bricker et al. 1998:2).

The root ak is combined with other parts of speech to make the meaning clear. The formation ak (ac, al) ximbal (less commonly, xinbal) is translated as enano in the Bocabulario de Maya Than but also as 'not agile in gait or body' and 'small of body' in various editions of the *Motul* Dictionary (Acuña 1993 [1570?-1670?]:300; Álvarez 1980:341; Arzápalo Marín 1995 [1575?-1620?]:4; Barrera Vásquez 1980:I:4, 15; Berendt 1864 [1575?-1690?]:I:6; Martinez Hernandez 1929 [1575?-1620?]:68, 120; Solis Alcalá 1950:245; Swadesh et al. 1970:33). One reconstruction of contactperiod Yukatek translates ak'ab ximbal as 'to walk in darkness', implying an overlap of physical description with mythological belief (Barrera Vásquez 1980:I:8). Another well-documented combination is *ak ok*, also glossed as enano and pequeño de cuerpo (Acuña 1993 [1570?-1670?]:300; Álvarez 1980:341; Arzápalo Marín 1995 [1575?-1620?]:4; Barrera Vásquez 1980:I:4; Berendt 1864 [1575?-1690?]:I:6; Martinez Hernandez 1929 [1575?-1620?]:68; Solis Alcalá 1950:245; Swadesh et al. 1970:33). In modern Ch'orti', the root ok' means to 'break, divide, or split in two' (as

does *cha'-t'ox* in Tzotzil), perhaps related to the early occurrence of the dwarf motif on monuments marking half a k'atun (Laughlin and Haviland 1988:I:183; Wisdom and Stross 1950:117). A less common formation is *ak pek*; though translated simply as *enano* in the *Motul Dictionary*, in modern Tzotzil, the root *pek'* describes physical impairment or handicap (Arzápalo Marín 1995 [1575?-1620?]:6; Barrera Vásquez 1980:I:4; Laughlin and Haviland 1988:I:283; Martinez Hernandez 1929 [1575?-1620?]:70).

From these data, it would seem that the root ak (or ak) can mean something merely small, not necessarily disproportionately dwarfed. Pérez (1866-1877:1-3), however, with his intimate knowledge of the way that Mayan languages produce meaning by combining roots and affixes, expands on the root ak or ach in an interesting way: the meanings listed for the verb form include despachurrar, aplastar, arrugar, and deformar por compresion. Despachurrar means 'to compress, press down, contract, or squash'. Aplastar similarly means 'to flatten, crush, smash'. Arrugar means 'to crumple, corrugate, contract'. These imply that ak' refers not just to a small or short person, but also to a disproportionate type of short stature (see also Swadesh et al. 1970:33). Only one hieroglyph that can be read as ak, however, has been found associated with a monumental example of the dwarf motif: K1a on El Peru Stela 34 (above; Figures 19, 40a).

Other terms for enano from early Yukatek vocabularies, such as tzapa, are not formed with the ak root. While the Motul, San Francisco, and *Ticul Dictionary* give only the translation *enano* for *tzapa*, the Bocabulario de Maya Than offers hombre disminuido 'diminished man' for tzapan uinic (Acuña 1993 [1570?-1670?]:300; Berendt 1864 [1575?-1690?]:II:494, 1870a [1600?-1700?]:I:2, II:164, 1870b [1690]:100; Michelon 1976 [1600?-1700?]:2, 593; Pérez 1866-1877:1; Solis Alcalá 1950:245). Modern reconstructions of colonial Yukatek additionally translate tzapa as disminuirse 'to be diminished' and tsapa' as de cuerpo muy baja 'very low of body' (Álvarez 1980:341; Barrera Vásquez 1980:I:4-5, 852, II:141; Brinton 1895:43). Found only in the *Ticul Dictionary*, the word *cuculuk* is glossed there as *hombre baja o corta* 'low or short man' in addition to enano (Berendt 1864 [1575?-1690?]:II:243, 494, 1870b [1690]:100). Editions of the *Ticul* by Alvarez (1980:340) and Barrera Vásquez (1980:I:347, II:141) offer 'short and small-statured person' for kukuluk in addition to 'creeping' or 'crawling'. Similarly, mamatac (ma'ma'tak), only in the *Ticul Dictionary*, is glossed 'short or brief' as well as 'dwarf' (Álvarez 1980:341; Barrera Vásquez 1980:I:4, 492, II:141; Berendt 1864 [1575?-1690?]:II:494, 1870b [1690]:100; Solis Alcalá 1950:245). Finally, the San Francisco Dictionary includes putum (p'utum, putun) 'dwarf, small man' (Barrera Vásquez 1980:I:4, 705, II:141; Berendt 1864 [1575?-

1690?]:II:73, 494, 1327, 1870a [1600?-1700?]:II:164; Brinton 1895:43; Michelon 1976 [1600?-1700?]:2, 593).

Another set of terms apparently describes not a physically dwarfed person, but a mythological or legendary being of small size. The use of a word for 'monkey', usually specifically a spider monkey, for a person who plays tricks apparently has a long history among Yukatek speakers. Thompson (1972:42) notes that early thirteenth-century Yukatek priests received prophecies from a "max, spider monkey, a term extended to cover hobgoblins." *Maax* means 'monkey' but also *juquetón* 'playful' in a modern edition of the *Motul Dictionary* and 'duende' in a modern edition of the San Francisco Dictionary (Arzápalo Marín 1995 [1575?-1620?]:515; Barrera Vásquez 1980:I:511, II:133; Michelon 1976 [1600?-1700?]:224, 588; *duende* is considered below). According to the reconstruction of colonial Yukatek by Swadesh et al. (1970:43, 64), maax means 'monkey' but *maax chi'c* means 'naughty', 'shameless', a 'buffoon'. The Cordemex compilation of early Yukatek dictionaries glosses *mas* and *maax* as duende but ma'ax as deidades o personajes míticos zoomórficos 'deities or mythical zoomorphic personages'. When combined with ak'ab, ma'x or ma'ax means 'nocturnal monkey' (Barrera Vásquez 1980:I:8, 502, 511, 894, II:133; Pérez 1866-1877:8; Solis Alcalá 1950:233). According to Houston (1992:529), the T24.74:564v compound found on five of the eight dwarf-motif monuments on which hieroglyphic panels associated

with dwarves survive is read "mas, or duende, 'goblin, fright' in Yucatec Maya." Other related terms for duende or duende de casa in contactperiod Yukatek include ak'ab kulenkul, dzatumax or dzutumax, and manab (Acuña 1993 [1570?-1670?]:284; Barrera Vásquez 1980:I:8, 494, II:33; Solis Alcalá 1950:233).

These data suggest that when the Spanish arrived in the New World, separate sets of terms were in use to describe a person dwarfed by being hunched or bent over; a physically small or short person, perhaps disproportionate; and a small, legendary, nocturnal being who plays tricks. As addressed below, these concepts overlap somewhat today; among highland Maya, for example, both monkeys and dwarves are remnants of a previous creation (Laughlin 1977:76; Vogt 1993:13, 16).

Indigenous Texts

The Popol Vuh. Edmonson (1971 [1550?-1555?]:vii) reconstructs the source of the Popol Vuh as a transcription, "written in Santa Cruz Quiche sometime around 1550-55," based on a lost hieroglyphic text (see also Maxwell and Hill 2006 [1600?-1650?]:11). Among other things, the Popol Vuh recounts the K'iche creation story, in four cycles, by a trio of deities. The name of the second creator deity, Chipi-Caculhá or Ch'ipi Ka Kulaha, is variously translated as "small flash" of lightning (Goetz et al. 1950 [1550?-1555?]:82), "Dwarf Lightning" (Edmonson 1971 [1550?-1555?]:12), or "Newborn Thunderbolt" (D. Tedlock 1985 [1550?-

1555?]:73). Thus the claim that a dwarf was present at the K'iche creation is not entirely straightforward, as the term *ch'ipi* can simply mean 'small' (Teletor 1959:9). According to Edmonson (1965:7), *ch'utin*, which dates to the fourteenth century, means 'small' in most Mamean and Greater K'ichean languages except Tz'utujil and Kaqchikel.

The Kaqchikel Chronicles. The surviving version of the collection of documents called Annals of the Kaqchikels or Kaqchikel Chronicles was transcribed during the early seventeenth century from an older source (Maxwell and Hill 2006 [1600?-1650?]:13; Recinos and Goetz 1953 [1600?-1650?]:4, 11; B. Tedlock 1992:148). As will be explored more thoroughly in the next section, the Chronicles preserve some evidence for ancient belief in a guardian spirit of road, forest, mountain, or volcano who takes the form of a dwarf (Goetz et al. 1950 [1550?-1555?]:84; Recinos and Goetz 1953 [1600?-1650?]:61; B. Tedlock 1992:148).

Tezozomoc (1598?): Crónica Mexicana. The indigenous author Hernando Alvarado Tezozomoc served as a Nahuatl-Spanish translator. His Crónica, written in Spanish at the end of the sixteenth century, lists "los enanos y corcobados" (dwarves and hunchbacks) among the retainers and servants of Moctezuma II. Tezozomoc wrote about 75 years after the death of Moctezuma, from whom he was descended (McPheeters 1954:507; Orozco y Berra and Vigil 1878 [1598?]:668-671, 677-678, 680).

European Texts

Cortés (1520): Cartas. On October 30, 1520, Hernán Cortés sent a dispatch to Emperor Charles V of Spain, telling of a "palace" in the Mexica capital, in which lived dwarves, hunchbacks, persons with other deforming conditions, and persons to look after them (Folsom 1843 [1520]:123; Hernandez Sanchez-Barba 1963 [1520]:78; Morris 1929 [1520]:96). This is the only account contemporaneous with Mexica control of Tenochtitlan.

Motolinía (1536? - 1541?): History of the Indians of New Spain. In his History, Fray Toribio de Motolinía added the detail that the dwarves and hunchbacks in the royal court of "Moteuczoma" functioned as his servants. A Franciscan monk, Motolinía did not arrive at the capital until 1524, three years after the death of Moctezuma II. Motolinía wrote his History over a decade later (Foster 1950 [1536?-1541?]:2, 14, 212; Steck 1951 [1536?-1541?]:269).

Sahagún (1545? - 1570?): General History of the Things of New Spain. Fray Bernardino de Sahagún was also a Franciscan, arriving in the New World five years after Motolinía, in 1529. Unlike most of the other Spanish priests, he wrote in Nahuatl, then translated into Spanish. His multivolume *General History* of Mexica society, based on informant interviews, was written shortly after that of Motolinía. In addition to giving dwarves and hunchbacks the roles of attendants and musicians in

Moctezuma's court, Sahagún refers to them in a battle against the Toltecs (Anderson and Dibble 1952 [1545?-1570?]:19, 35, 1954 [1545?-1570?]:30, 49; Evans 2001:248, 264, Figure 8.5).

Díaz (1568? - 1581?): True History of the Conquest of Mexico. Bernal Díaz del Castillo was a conquistador under Cortes in 1521 and an eyewitness to the conquest. He began writing his *True History* nearly 50 years later, and it remained unpublished when he died. Díaz adds to the record that hunchbacked dwarves functioned as jesters during Moctezuma's mealtimes (Cohen 1963 [1568?-1581?]:227; García and Maudslay 1956 [1568?-1581?]:210; Keatinge 1927 [1568?-1581?]:172).

Durán (1574? - 1576?, 1581?): Book of the Gods and Rites and History of the Indies of New Spain. Fray Diego Durán's family moved from Spain to Texcoco when he was a young child, and he attended school in Mexico City before joining the Dominican order. Like Díaz del Castillo, he was fluent in Nahuatl and relied on indigenous informants to compile his Book of ... Rites (Heyden 1994 [1581?]:xxv, xxviii). From his informants, some of whom had lived through the conquest, he elicited the detail that "dwarfs or male and female hunchbacks" accompanied highborn lords and ladies to the bathhouse and assisted them in washing (Horcasitas and Heyden 1971 [1574?-1576?]:271-272). Durán's History, finished in 1581, includes an account of the funerary ceremonies for deceased noblemen:

When these rites had ended, the unfortunate slaves who were to serve the dead man in the hereafter were dressed. ... Every male or female slave the king had possessed was brought in, and so were the hunchbacks and dwarfs who had served him. All were adored with jewels, feathers, golden armbands, earrings, and rattles on their feet. ... The hunchbacks, dwarfs, and domestic servants from the palace were then addressed and were told to take great care in preparing the water for the hands of their master, to give him his clothing and his sandals, as they had done until now. They were advised to hand him his comb and the mirror they carried, and to furnish him with his blowgun or bow and arrows, should he need them. ... When all the slaves, hunchbacks, dwarfs, and female slaves had been killed (and more than fifty or sixty persons lost their lives on this occasion) and their blood had been thrown on the fire, thus extinguishing it, the buriers took the ashes [Heyden 1994 [1581?]:295-296].

It is interesting that "the mirror they carried" should be mentioned, as M. Miller and Martin (2004:25) point out: "The dwarf mirror-bearer became so standardized an ideal that it was transformed into sculptural form, in which the wooden retainer and his mirror were ever frozen in service" (see also Heyden 1994 [1581?]:296; Houston et al. 2006:196; Prager 2001:278; Australia National Gallery 82.2292 / K 1453 under Unprovenienced Ceramic Vessels in Appendix C). Taking the highest modern estimate of the frequency of achondroplasia – one case per 15,000 births – one wonders, however, how many 'dwarfs' would actually have occupied the settlements of the Mexica.

The evidence from indigenous sources, such as the *Popol Vuh* and the *Kaqchikel Chronicles*, is equivocal. For European texts, the greater the number of years that have passed since the scenes described, the greater the detail of description. Cortés, writing in 1520, mentioned only that

the physically different had their own living quarters. Twenty years later, Motolinía gave their role as servants; an additional five to thirty years later, Sahagún adds that of musicians and Díaz del Castillo that of jesters. Recorded by Durán after still another 10 years had passed, the speech given to them just before funereal sacrifice includes specific duties. Still another 20 years later, Tezozomoc mentioned dwarves only as servants and retainers. In attempting to reconstruct the role of dwarves in Classic Maya courts, it is worth remembering the observation by Rice and Rice (2004:81) that during the time these texts were being written, "European-based sociopolitical models - specifically those pertaining to a society such as existed in post-medieval Europe - were applied to the Maya, and indigenous forms of organization were misunderstood, ignored, or contorted to fit a Western mindset." As dwarves functioned in fifteenth- and sixteenth-century European courts as attendants and entertainers (O'Bryan 1991:2-14, 21-22, 65-71), their analogous status attributed to the Mexica is suspect.

Summary

It seems the frustration expressed by Tozzer (1921:112) some 85 years ago is still justified, as far as analyzing ethnohistoric data to illuminate Classic Maya iconography. Although varying terms for 'dwarf' and *duende* in contact-period sources imply that dwarves fulfilled a variety of roles in ancient Maya society, what those roles might have been

is still a mystery, especially as the accounts of Moctezuma's court, so frequently cited as analogous to Classic Maya courts, grow suspiciously rich in detail in proportion to the passage of time and conform exactly to the functions of dwarves in contemporaneous European courts (V. Miller 1985:142; O'Bryan 1991). As noted in Chapters 1 and 4, for the Classic Maya, the dwarf motif integrated mystical, social, and political ideologies. It may be that attempts to divide references to a person of disproportionate short stature from those to a mythological being are inappropriate, as the Maya themselves made no such distinction (Danien 1998:74; Sharer and Traxler 2006:730). This lack of separation between the natural and supernatural might be reflected by the variety of hieroglyphs in dwarf-motif texts and of terms subsumed by the Spanish scribe's *enano* and *duende* (Houston 1992:528).

Ethnography

Introduction

Just as most discussions of ancient Maya depictions of dwarves are accompanied by mention that dwarves served in Mexica courts (above), ethnographic recordings of dwarf-motif legends are also cited as supportive evidence for the importance of dwarves in ancient Maya society (Kurbjuhn 1985:160; Milbrath 1999:22-23; M. Miller and Taube

1993:82; V. Miller 1985:142-143; Wanyerka 1997:88). The dwarf motif in modern Maya mythology falls generally into three categories: manifestations of the spirits protecting natural features such as mountains and forests, remnants of earlier creations, and animations of archaeological artifacts of stone and clay. Although geographically overlapping somewhat, guardian spirits associated with lightning and divination tend to be found in the highlands, while dwarfed beings associated with archaeological sites tend to be found in the northern lowlands of Yucatan; all can be traced to legends of prior creations.

Dwarves as Guardian Spirits

According to some translations of the K'iche *Popol Vuh*, when animals populated the land in the third creation, they are looked after by a spirit whose name literally translates "the little man of the forest"; he also appears in the *Kaqchikel Chronicles* as a guardian spirit in the form of a dwarf (Goetz et al. 1950 [1550?-1555?]:84; Recinos and Goetz 1953 [1600?-1650?]:61; B. Tedlock 1992:148). According to B. Tedlock (1992:147-150), in addition to the K'iche and Kaqchikel, the Mam and Tz'utujil also refer to the spirit of a mountain or volcano as C'oxol 'Dwarf'. In K'iche belief, he is a dwarfed steward or gamekeeper associated with lightning, symbolized by a stone axe, by which he initiates diviners. In his analysis of The Dance of the Conquest, performed by many communities in highland Guatemala, Cook

(2000:118-121, 135-140, 195-198, 201-202, 242) describes C'oxol (also called Tzitzimit and Aj Itz) with his 'lightning hatchet' as "mediator and patron for shamanic divinatory practice" and identifies him with the Classic-period God K (see also Stone 1995:40, 153; B. Tedlock 1992:149-150). Given the monumental iconography of the dwarf motif presented herein, I question Cook's (2000:197) "epigraphic identification of K'awiil as a dwarf," although the K'awiil scepter held by rulers could symbolize their role as diviners and shamans (see also Coggins 1988; Grube 2001:96; M. Miller and Taube 1993:147; M. Miller and Martin 2004:32, 75, 293; Taube 1992:73-76). Edmonson's (1971 [1550?-1555?]:180-181) translation of the *Popol Vuh*, on the other hand, glosses Zaqi Q'oxol as 'White Demon' and describes him as a boy rather than a dwarf, though Edmonson refers to Zaqi Q'oxol's appearance in The Dance of the Conquest and his identification with Tzitzimitl.

As a parenthetical aside on the association of the dwarf as guardian spirit with lightning, M. Coe (1973a:3) reports: "... today it is commonly believed by the peoples living in the old Olmec area that there are dwarflike creatures called *chaneques*, who live in the deep forest and who bring rain and lightning" (see also Covarrubias 1942:46-47, 1957:57; M. Miller and Taube 1993:82).

Dwarves as Prior Creation: P'usob

As mentioned above, the *Popol Vuh* tells the K'iche origin myth of four creations, including unsuccessful attempts to create humans, which then were destroyed by a flood (Goetz et al. 1950 [1550?-1555?]:89-90; D. Tedlock 1985 [1550?-1555?]:83-84). Accounts of characters from an earlier creation are found throughout Yucatan, from Coba and Chan Kom in the northeast (Folan et al. 1983:11; Redfield and Villa Rojas 1962:12) and Oxkintok in the northwest (Amador Naranjo 1987:67-68) to Succotz, Belize in the southeast (W. Coe and M. Coe 1951:161; Thompson 1930:166). The legend was recorded in the early twentieth century by Thompson (1930:166), and, according to Preuss (2001:164), "contemporary Mayas still are mystified by these short men" in the twenty-first century. In his analysis of Mayan folktales, Pickands (1986:111-113) relates the legend of the dwarf of Uxmal, recorded during the midninteenth century (Stephens 1969 [1841]:II:423-425) and still popular (Maas Colli 1993:182-184; Macías García Sancho 1985), to the dwarves of a previous creation.

They are usually called *p'us* or *p'uz* (*p'usob*, *p'uzob*), a word used for 'hunchback' in Yukatek, Tzotzil, Poqom, and reconstructed proto-Cholan since at least the sixteenth century (see references under Lexical Analysis, above), as well as *saiyamwinkoob* and z*ayamuincob* 'twisted men' or 'disjointed men' (Thompson 1970:340-341; Tozzer 1907:153-

154). As the stories go, the *p'usob* are dwarves, sometimes described as hunchbacked. With magical powers, they built the structures and monuments now found in the ruins of archaeological sites. The metates found there are their stone boats, in which they drowned in a flood. In some versions, they also made the clay figurines found at archaeological sites or were turned to clay or stone by the sun. They can be malevolent and cause sickness (Amador Naranjo 1987:67-68; Brinton 1895:43; Burns 1983:30; W. Coe and M. Coe 1951:161; Folan et al. 1983:11; Preuss 2001:164; Redfield and Villa Rojas 1962:12; Thompson 1930:166, 1970:340-341).

In the highlands of Mexico, in Tzotzil and Tzeltal belief, dwarves from an earlier creation inhabit not archaeological sites, but a separate realm below the visible plane of the earth. Rather than being made of clay or inhabiting clay artifacts, these dwarves wear hats of mud to protect themselves from the heat of the sun as it passes on its overnight journey. They are variously known as *yohob*, *komkom vinik*, and *konchavetik* (Laughlin 1969:175, 1975:178, 1977:76-77, Laughlin and Haviland 1988:I:224; Laughlin and Karasik 1988:232, 273; Thompson 1970:347; Villa Rojas 1946:570-571; Vogt 1969:298, 1993:13-14). In some versions, dwarves are responsible for the passage of the sun underground (Thompson 1970:347). Together with the beliefs in guardian spirits from highland Guatemala, these highland Mexican beliefs

seem to form the basis for the interpretation of the dwarf motif in Classic Maya iconography as related to the earth, caves, the underworld, and the dead (Houston 1992:527; Kurbjuhn 1985:160; Martin and Grube 2000:16; M. Miller and Taube 1993:82; V. Miller 1985:143; Stone 1995:153-154; Wanyerka 1997:88).

Dwarves as Artifacts: Aluxob

Other legends, found as far south as southern Belize, tell of the *alux* (*aluxob*), a Yukatek term, at least as old as the colonial period, derived in part from the word for 'potters' clay', *kat* or *k'at* (Amador Naranjo 1987:67-68; Barrera Vásquez 1980:I:15, 384, II:133; Brinton 1969 [1883]:254-255; Martinez Hernandez 1929:95, 497). Related to this is a term in use around Succotz, Belize for the spirit owners of archaeological mounds: *ku kat* 'clay god' (W. Coe and M. Coe 1951:161; see also Arzápalo Marín 1995:411; Bricker et al. 1998:149; Martinez Hernandez 1929:497; Swadesh et al. 1970:57; Wisdom and Stross 1950:77). In Itzaj, spoken in the Lake Peten Itza region of Guatemala and in Succotz, a regional variant of *alux* is *arux*; *ajkat* or *ajc'at* means 'dwarf' and *arux* or *arus* means 'mythological dwarf' or *duende* (Dienhart 1989:II:201; Schumann G. 1971:5, 105).

Unlike *p'usob*, *aluxob* are described as dwarfed but not hunchbacked; rather, they resemble children, sometimes wearing large hats. *Aluxob* are clay or stone figures or incensarios that come to life at

night, or they inhabit these artifacts. They are mischievous or malicious and can produce sickness if not propitiated by offerings (Andrews 1941:22-23; Brinton 1969 [1883]:254-255; Burns 1983:31; W. Coe and M. Coe 1951:161; Gann 1925:100, 1926:55, 1971 [1924]:38; Press 1975:190; Redfield and Villa Rojas 1962:119-120, 165, 175; Steggerda 1941:59-60, 75; Thompson 1972:42-43). In one version recorded near the archaeological site Oxkintok in northwest Yucatan, *aluxob* initiate shamans and give them the translucent stone used for divination, an interesting parallel to the dwarf C'oxol initiating shamans with his 'lightning hatchet' in highland Guatemala (Amador Naranjo 1987:67-68; Cook 2000:197; B. Tedlock 1992:147-150). Maxwell and Hill (2006 [1600?-1650?]:647) translate *pus* in Kaqchikel as 'divining power.'

The *pus'ob* legend was recorded almost 50 years before that of the *aluxob*, but their geographical distributions, and some of their characteristics, overlap. In some communities, they co-exist, the *p'usob* being the ancient makers of artifacts and the *aluxob* their current inhabitants (Amador Naranjo 1987:67-68; W. Coe and M. Coe 1951:161; Redfield and Villa Rojas 1962:12, 119-120). Although some archaeologists (A. Chase and D. Chase 1994:58, for instance) cite the ethnographic research of Redfield and Villa Rojas to interpret the role of dwarves in Classic Maya society, according to Redfield and Villa Rojas themselves (1962:363), "The notion of the *alux* ... is probably chiefly a

development that has taken place since the Conquest. ... It was not, of course, an idea held by the ancient Maya" (see also Corson 1973:60; V. Miller 1985:142).

Dwarves Syncretized: Duendes

When the Spanish arrived in the sixteenth century, they brought with them from Europe a folk belief in *duendes*, using that term in their Mayan-Spanish dictionaries. According to Hagerty (1993:7; Hagerty and Gomez Parham 2000:12), *duende* comes from the Spanish words *dueño de* (guardian of, steward of, owner of, or keeper of), a concept that fit neatly with the Maya concept of an owner or guardian spirit (W. Coe and M. Coe 1951:161; Cook 2000:242; Redfield and Villa Rojas 1962:363; Reina 1966:183; B. Tedlock 1992:147-148; Thompson 1970:327). In Ch'orti', the term *ah mauh* is defined as "*duende* (dwarf god of mountains and valleys, and protector of cattle)" (Wisdom and Stross 1950:1). Thompson (1972:43) notes, "The ancient Maya *duendes* are now confused with those of Spanish origin, notably the little dwarf in a large hat." In his study of Belizean folklore, Hagerty documents how European and indigenous motifs have become blended in stories about *duendes*:

On the one hand, belief in the *duende* can be traced to fifteenth-century Spain. At the same time, the Maya of both the Yucatan and Guatemala believed in many supernatural creatures, all of which shared certain characteristics with the Spanish *duende*. From the time of the conquest to the present, and as the result of contact among these cultures, the

multitude of Maya spirits and the Spanish *duende* coalesced into one creature [Hagerty 1993:1; see also Hagerty and Gomez Parham 2000:11-12].

According to Redfield and Villa Rojas (1962:121, 165), a similar blending of the *alux* with the *balam* took place at an earlier time, and Burns (1983:30) points out that the Mayan accounts of an earlier creation, destroyed by flood, is being merged with the biblical story of Noah.

Summary

As noted above, guardian spirits tend to be found in the highlands of Guatemala and southern Mexico, among speakers of the K'ichean and Tzeltalan languages, while the hunchbacked *p'usob* and child-like *aluxob* tend to be found further north, among speakers of Yukatekan languages. Though all are generally said to be remnants of prior creations, the guardian spirits of the highlands are most often associated with natural features such as forests, mountains, and lightning, and some live under the earth, while the Yukatek *p'usob* and *aluxob* inhabit built features such as archaeological sites and artifacts. Both the southern highland characters and the northern lowland characters can be connected, at least in some localities, to shamanism, though in the case of the *alux*, it seems an ancient power is being attributed to a relatively recent figure. Finally, the mutability of these attributes is evidenced by the use of the Spanish word *duende*, especially in Yucatan and Belize but also by Poqomam

speakers (Hagerty 1993; Hagerty and Gomez Parham 2000:11-12; Reina 1966:183; Thompson 1972:42).

As early as 1895, Brinton urged caution in the use of ethnographic data to interpret the past: "it is not safe to look at such survivals as part of genuine ancient mythology" (Brinton 1895:43; see also Redfield and Villa Rojas 1962:363). As V. Miller summarizes,

The lack of early colonial sources on dwarfs limits the usefulness of ethnographic analogy in any attempt to understand their significance during the Classic period. Although most efforts at interpretation have relied to some extent on modern dwarf lore, twentieth-century myths generally shed little light on the earlier images [V. Miller 1985:142].

In his study of Jaina figurines, Corson (1973:60, 62), noting "many regional variants in mythic accounts," states "among the more compelling lessons which ethnographic analogy can offer is that of the regional diversity of many of the idea systems in the Maya area" that goes beyond what I am able to document here. Such richness and variety suggest that no single interpretation of the dwarf motif would adequately convey its meaning, especially given the differences between the mythological dwarves outlined above.

Interpreting the Dwarf Motif

Data from hieroglyphic inscriptions, sixteenth-century vocabularies, and modern legends suggest that no single term covers the meaning that Maya dwarves represent, anciently or in the ethnographic present. At least two, and likely more, glyph compounds possibly describe different roles that dwarves filled in Classic Maya sociopolitical structure (Houston 1992:528). Perhaps the reason why the verbal root *ak*, the most common term for 'dwarf' in early dictionaries, occurs on only one dwarf-motif monument is that it refers to something merely small or shortened, while the Classic Maya were concerned with quite another quality. The glyph compound most consistently connected with depictions of dwarves seems to describe a mythological character, an appropriate reference for a society that did not separate the natural from the supernatural.

The variety of roles played by dwarves in ethnographic accounts does not support interpreting them as characters of caves or the underworld, or specifically as mediators between realms, at least not to the exclusion of other qualities. The supernatural powers attributed to dwarves ethnographically come from their origins in a prior creation, not from any special favor; indeed, they are seen as remnants of the creators' failed attempt. If there is an unseen realm to which legendary dwarves

have special access, it is the past. As we cannot know how ancient the sources of these legends are, nor how they have changed over time, it seems to make more sense to interpret mythological dwarves as one way that living Maya communities interact with the evidence of the past that is all around them, than to attempt to apply modern dwarf qualities to a Classic iconographic motif.

CHAPTER 8

CONCLUSIONS

Introduction

The two-part goal of this work is to generate a definition of the dwarf motif found on Classic Maya monuments that provides a common base of understanding for future discussion, then to begin such a discussion on what the meaning, for the ancient Maya, of the dwarf motif might include. As Chapter 1 points out (see The Art of Other Societies), the dwarf motif has been widely analyzed in Classical and European art yet, in pre-Columbian art, goes almost unrecognized outside of anthropology. Although Brinton identified dwarves on Maya monuments as early as 1895, articles discussing them in the last 35 years concur in the need for further scholarly attention (see Studies of Maya Dwarf Iconography: 1970 to 2005 under The Dwarf Motif in Maya Art in Chapter 1). This study integrates data from archaeology, art history, biomedical anthropology, epigraphy, ethnography, ethnohistory, linguistics, paleopathology, and physical anthropology to offer an appropriate interpretation of a motif that resonated for a society in which cosmology, social structure, and political power were seamlessly integrated.

Defining the Dwarf Motif

Understanding the dwarf motif has been impeded by a lack of quantitative criteria by which to identify examples. A review of medical attempts to classify biological types of dwarfism makes clear that no simple scheme suffices: the medical community took a century to standardize a nomenclature, and only in the last 35 years has the most common form of disproportionate short stature been defined (Figures 1, 2; see Review of Short-Stature Classifications and Achondroplasia in Chapter 2). The single, statistically significant, behavioral risk factor that biomedical research identifies may apply to Classic Maya society, although the data are currently insufficient to test it: the practice of polygyny may have raised the incidence of disproportionate dwarfism among the Maya elite, as advanced paternal age is known to increase the rate of the mutation that produces achondroplasia (Murdoch et al. 1970; Penrose 1957; Stoll et al. 1982). Taking even the lowest estimate of the frequency of achondroplasia, at least one, possibly two persons of disproportionate short stature would be expected to have lived in each of the larger polity capitals (such as Calakmul, Caracol, and Tikal) at any one time. Paleopathological data from around the world consistently indicate that dwarves functioned within their respective societies during their

lives and were usually treated as full members of their communities in death (Figure 3; see Appendix B).

Physical Attributes

The biomedical diagnostic procedure described in Chapter 2, applied to the two-dimensional data presented in Chapter 3, identifies secondary figures, averaging about a third as tall as the primary figures and having a head-to-body ratio that is nearly twice that of the primary figures, as disproportionate dwarves. The head-to-body ratios of the secondary figures average one to three, while primary figures' head-to-body ratios average one to five (Figures 41, 42). Classic Maya artists, for the most part, accurately reproduced the proximal limb segments that are shorter than distal limb segments as well as the elbow and hand anomalies (especially fingers) that characterize achondroplasia, the most common type of disproportionate short stature. Maya artists rarely, however, accurately reproduced the facial profile typical of a person with achondroplasia. Where the profiles of both primary figures and the accompanying secondary figures that have been identified as persons with achondroplasia survive, they do contrast significantly.

Alone, a facial profile that represents the antithesis of the Classic Maya conventions of beauty is not sufficient to identify a figure as a dwarf, even if that profile resembles that of a person with achondroplasia. M. Miller (1986:132, 142, 1988:325-326, 2001:14,

2002:45), Stone (1995:153, 220, 228), Houston, Stuart, and Taube (Houston et al. 2006:196) have described figures from Bonampak, Naj Tunich, and Copan as dwarves, based on facial profile alone. Neither the physical, cultural, nor contextual evidence supports these identifications (see Caves as well as Music and Dance under Other Associations, and Facial Profiles under Other Physical Characteristics, in Chapter 4).

As the medical evidence leads us to expect, the depictions of dwarves on the monuments catalogued in Chapter 3 are consistent with a diagnosis of achondroplasia, with the exception of Caracol Stelae 11 and 21, the east column of Sayil Structure 4B1, the front of La Milpa Stela 4, and possibly the façade of Tikal Structure 5D-141. Caracol Stela 11 most likely represents an individual with spondyloepiphyseal dysplasia (Figures 2, 14; William G. Mackenzie, personal communication April 2006). The secondary figures on Caracol Stela 21 and the east column of Sayil Structure 4B1 might be cases of hypochondroplasia or pseudoachondroplasia, while the façade of Tikal Structure 5D-141 might illustrate another type of chondrodystrophy in addition to achondroplasia (Figures 2, 16, 26, 31). The secondary figure on the front of La Milpa Stela 4 might simply be a child, a youth, or just a short, proportionate person; alternatively, it might be a provincial artist's attempt to depict a dwarf without having access to a model (Figure 21; see Summary [of Physical Attributes] in Chapter 4). The mirror images of

both the front of Stela 4 from La Milpa and the east column of Structure 4B1 from Sayil (Figures 22, 27) depict persons with characteristics typical of achondroplasia; did their sculptors use the opportunity presented by the second likeness to portray the dwarf more accurately?

Cultural Attributes

Analysis of the monuments portraying secondary figures indicates that dwarves are defined iconographically, or culturally, as well. Nearly two-thirds of the dwarves on monuments stand in profile on the primary figure's right. They are usually the only secondary figure in the scene except for captives below the feet, and they are facing and being faced by the primary figure. When the dwarf stands on the left, either another secondary figure is on the right, or the scene is balanced by a mirror image. Dwarves wear distinctive headdresses, lower garments wrapped or draped over the hips (sometimes with an animal-like tail), and jewelry, especially earspools. Some cultural evidence is site-specific: dwarves at Caracol commonly hold the K'awiil scepter, for example, while those at Tikal and Dos Pilas wear a short, fringed, cape-style garment over their shoulders (Figures 9-11, 13-18, 28-30).

Contextual Attributes

In most of the cases investigated by this study (Chapter 3), dwarves are marked both anatomically and iconographically. Sometimes the classification of a secondary figure as a dwarf also rests partially on

archaeological context. Although very little of Stela 4 from Caracol survives, for instance, its hypothesized date of half a k'atun before Stela 1, also erected by Yajaw Te' K'inich II, supplements the scant iconographic evidence to permit recognition of a dwarf there (Figures 8, 9). Caracol Stela 8 forms a set with Stelae 9 and 11, allowing the reconstruction of that dwarf (Figures 13, 14). The pattern of monument erection at Xultun, cyclical in both time and space, supports the identification of dwarves in scenes with barely a trace of surviving relief, such as Xultun Stelae 7, 22, and 23. In other instances, such as Calakmul Stelae 27 and 53, Caracol Stela 19, El Peru Stela 22, La Milpa Stela 12, and Xultun Stela 15, the evidence is equivocal, and the confirmation of dwarves there must await more evidence (Figures 15, 23). The secondary figure on the front of La Milpa Stela 4 lacks the physical characteristics of achondroplasia, but cultural markers, such as headdress, adornment, size and position relative to the primary figure, and the disproportionate secondary figure on the reverse of the monument, prompt his identification as a dwarf (Figures 21, 22). Ideally, anatomical, iconographic, and contextual evidence concur.

As the first goal of this work is to generate a definition of the dwarf motif, I propose that its definition depends on three types of criteria: physical (anatomical), iconographic, and contextual. Attempts to define secondary figures as dwarves by thematic affiliations alone are not

successful. Various scholars have suggested connections between dwarves and other personages (females, rulers, the maize god); contexts (ball games, caves, underworld, supernatural); and roles (servants, ritual props-bearers, scribes, performers, counselors, diviners; see Other Associations under Cultural Attributes in Chapter 4). Evidence for any of these is generally confined to a few examples, most often from undocumented sources, rather than a set of archaeologically provenienced data. By itself, iconography is usually insufficient to define a secondary figure as a dwarf; it must be supported by anatomical and contextual evidence (see Defining the Dwarf Motif in Chapter 4).

A Test Case: La Florida Stela 7

The definition of the dwarf motif proposed here is designed to provide researchers with a set of criteria by which dwarves on monuments may be identified as well as a common basis for discussion. The site of La Florida, located about 40 km north of Yaxchilan and 50 km west of El Peru, provides an opportunity to test the procedure described above for identifying examples of the dwarf motif (Figure 20; Map 6; see La Florida in Chapter 3; Appendix C presents other ambiguous secondary figures).

In the northern part of La Florida, Stela 7 once stood in front (east) of Structure 16, with Altar E and Stela 8, bearing a date corresponding to 9.16.15.0.0 (A.D. 766; I. Graham 1970:440, 455, Figure 2; Proskouriakoff

1950:145). Morley visited La Florida in 1944; Proskouriakoff (1950:Figure 61c) reproduces his photograph and I. Graham (1970:454-455) his notes. At the time that Coggins (1969:96) reported a visit by Graham "in 1965 to check on reported illegal activity," the lower left quadrant had indeed been sawed off and stolen. Based on Morley's photograph, the only remaining record (Figure 20), I. Graham (1970:436, 440) describes "a small figure with protruding lower lip and a nose not characteristically Maya squatting at the ruler's feet" on Stela 7. V. Miller (1985:148) and Mayer (1986:213) list La Florida among sites featuring the dwarf motif (see also Grieder 1962:138, 291; Proskouriakoff 1993:106).

The top of the secondary figure's head reaches to just below the primary figure's waist. Because the stela is broken, the head-to-body ratio of the primary figure is not measurable. Although the head of the secondary figure is tilted back and so is difficult to measure, it forms about a quarter of his total height, at the lower end of head-to-body ratios for dwarves but above those for primary figures. As observed by I. Graham (1970:440), the profile of the secondary figure contrasts with that typically rendered by the Classic Maya. The nasal bridge is depressed, the nose is flat, and the lower lip protrudes (much like that of the dwarf on Oxpemul Stela 19; Figure 24). Although the hands are not preserved nor the legs visible, the limbs are short, especially the upper

arm, and some anomalies of the hands might be indicated. The discernible physical details are consistent with achondroplasia.

The secondary figure stands in profile at the right side of the primary figure, and they face each other. Like the dwarves on La Milpa Stela 4 and Xultun Stelae 3 and 10, this secondary figure wears a headdress with two peaks pointing up and forward as well as disk-shaped earspools (Figures 21, 22, 34, 36). Though details of attire are not preserved, the dwarf's garment seems long and full compared to the wrapped sashes and drapes usually worn by dwarves on monuments. Could this, like perhaps the secondary figure from Tzum (Figure 32), be an example of a female dwarf? In any case, from the physical attributes (short, disproportionate stature, distinctive facial profile, shortened limbs) and the cultural attributes (position on the monument, headdress), we may conclude that La Florida Stela 7 does, in fact, portray a dwarf. At 9.16.15.0.0 (A.D. 766), it was erected a quarter of a k'atun after Stela 24 at Xultun, some 150 km to the east (Figure 37). How La Florida fits into the regional political structure, which includes Yaxchilan and El Peru, is not yet known.

The Dwarf Motif and Maya Sociopolitical Structure

Tracing the trajectory of the dwarf motif through time and space reveals a correlation between political relationship and iconography. The earliest dwarf-motif monuments from Caracol document its affiliation with Calakmul between 9.7.10.0.0 (A.D. 583) and 9.9.0.0.0 (A.D. 613; Figures 8-12). The motif is fairly consistent in style and is found at sites in Calakmul's sphere of influence -- Caracol, Uxul, and El Peru -- suggesting that it was associated with the Calakmul polity's alliance-building (Figures 6, 19, 33; Map 5). It is tempting to interpret the presence of the dwarf motif on two stela from Xultun during this period as evidence of influence from, or alliance with, Calakmul, but the data at this point are inadequate. Two stelae from Dos Pilas appear to represent its relationship with Tikal and the Calakmul hegemony: iconographically, the dwarves honor their Tikal roots but acknowledge the influence of Caracol and Calakmul (Figures 17, 18).

For both Tikal and Caracol, the dwarf motif was part of a military and monumental renaissance. Beginning with the monument celebrating its defeat of Calakmul on 9.13.3.7.18 (A.D. 695), Tikal introduced unique configurations of the motif, such that the dwarves on Lintel 3 of Structure 5C-4 (Temple IV) have sometimes failed to be recognized (Figures 28-31). Tikal adapted the motif to its own iconographic

program, creatively combining the familiar, the borrowed, and the new, giving it both literally and figuratively a place of great height but limited visibility.

Following Tikal's victory, Caracol and Calakmul erected only a single dwarf-motif stela each from 9.13.3.0.0 (A.D. 695) to 9.18.0.0.0 (A.D. 790), precluding stylistic comparison between polities (Figures 7, 16). From 9.13.10.0.0 to 9.18.10.0.0 (roughly A.D. 700 to A.D. 800), sites with unknown or changing allegiances, such as La Milpa, Dos Pilas, Motul de San José, Yaxchilan, Oxpemul, Xultun, and La Florida display the dwarf motif, often in the form of a combination of local and regional iconographic elements (Figures 17, 18, 20-24, 37-39). By approximately 9.16.0.0.0 (about A.D. 750), the dwarf motif had reached its maximum distribution, spreading all the way into the Puuc and Chenes regions of the northern lowlands of Yucatan (Figures 5, 25-27, 32; Map 6).

Conservatism marks the dwarf motif during the Terminal Classic, as it was revived at Caracol, where it had begun, as well as at Calakmul (Figures 13-15). Dwarves on a final set of monuments at Xultun show a lack of adornment, which could indicate that they somehow became devalued at this point, or that the site in general had fallen on hard times (Figures 34-36; Map 7).

Like analysis at the site level (Chapter 5), regional evidence (Chapter 6) reveals the flexibility of the dwarf motif, which allows each

site to use broadly shared iconography to express local identity by adapting the context, the configuration, and the content of these renditions (Tate 1992:141-143). The data we have at this time will not support identifying sites' political affiliations based on their display of the dwarf motif. Rather, against a background of shifting allegiances, sites use the medium of regional iconography to address local concerns through ritual, such as on the endings of calendrical periods.

Analysis at the regional level also reveals a variety of mechanisms by which iconography is shared: military conquest does not preclude the conquered site from illustrating motifs appearing at the home of the conquerors. In at least two cases, a borrowed motif accompanies a military and monumental renaissance. Nor is the direction of borrowing necessarily one-way: in at least two instances, larger polities apparently borrow the dwarf motif from smaller, dependent sites. There is some evidence that the convention and fidelity with which smaller sites display the dwarf motif correlates with their involvement, militarily or diplomatically, with larger sites and their power struggles. Classic Maya society comprised a mosaic of diverse settlements, each adapted to its own geopolitical niche yet sharing a broad ideology (Martin and Grube 1994:19-23; Reents-Budet et al. 2000:117; Sharer and Traxler 2006:93-96; Tate 1992:141-143). This is reflected in the geographical extent of the

dwarf motif as well as by the variety of contexts, at all levels, in which it is found, over a time span of at least 15 k'atuns (300 years).

Interpreting the Dwarf Motif

As I hope I have demonstrated by use of the contextual method, many of the claims made by researchers for ancient Maya dwarves (see the Introduction of Chapter 1) are simply not defensible. In the analysis of images, as Baudez (1994:281) points out, "it is paramount correctly to identify and recognize the elements that compose the images." As Hellmuth (1971:11) asks, "How can we claim to interpret the 'meaning' of a scene before we even know what is in that scene?" Describing secondary figures as 'dwarves' without any reference to what is meant by the term is counterproductive; nor have attempts to define secondary figures as dwarves by thematic affiliations, based on a few examples from undocumented sources, succeeded. One of archaeology's contributions to the broader field of Maya studies is to improve our understanding of iconographic motifs by grounding them firmly in well-defined temporal and spatial contexts (see The Contextual Method under Archaeological Methods of Interpreting Iconography in Chapter 1).

Some of the imagery associated with the dwarf motif, based on well-provenienced, monumental, iconographic evidence, does express a

common theme of interface and transition, including captives, water birds, water lilies, and the maize god with his cycle of death and rebirth. Although there are only a few cases of each of these motifs connected to dwarves, when they are taken together, they add up to a significant percentage of dwarf illustrations. Thus, the data point to dwarves as a symbol of liminality (Ablon 1984:169-170; Inomata 2001:39, 49). The two sites with the highest number of dwarf-motif monuments, Caracol and Xultun, employed it to express calendrical concepts: at Caracol, dwarf-motif stelae were erected on half-k'atun endings, while at Xultun, it was the cyclical nature of the calendar that was expressed, both spatially and temporally, by the dwarf motif (see Spatial and Temporal Patterns in Chapter 5). Its use on monuments celebrating the turning of calendric cycles reveals that the Maya viewed these points in time as liminal, both end and beginning.

As noted in Chapter 1, for the Classic Maya, the dwarf motif integrated mystical, social, and political ideologies. As Danien (1998:74) points out, "The Western need to identify entities as one thing or the other – as human or deity – is foreign to Maya thought. ... We err when we create a forced division between natural and supernatural images and scenes." As expressed by Sharer and Traxler (2006:730), the celestial, terrestrial, and nether domains "apparently were not bounded but more like a continuum, another example of the lack of distinction between

what we view as the natural and supernatural realms." Lacking this division or boundary, the ancient Maya were likely more at home with the liminality that dwarves represent than is our own society. According to Adelson (2003-2004:8), "There is no disability that has served as such a fertile source of myths as dwarfism, also evoking complex beliefs." It is possible that our ascription of magical powers to the dwarves portrayed by the Classic Maya is our response to their liminality and says more about our need to deal with their intermediacy than about Maya ideology.

While liminality was almost surely one element of the meaning of the dwarf motif, that meaning likely changed both through time and across space (Baudez 1994:281; Proskouriakoff 1950:2, 182; Tate 1992:xii). As Danien (1998:73) puts it, "A requirement that individuals have a single significance and maintain unchanging form is in conflict with the Maya acceptance of multiplicity in form and meaning." This is supported by epigraphic data, in the form of at least two different glyph compounds, presumably referring to different roles played by dwarves in ritual witnessed by the monuments (Figure 40). Ethnohistoric data, which include various terms for the disproportionately short, and ethnographic data, consisting of at least three separate folk traditions of dwarves whose attributes shift with time and space, also support this variety of interpretations for the dwarf motif through time and across space (Chapter 7).

For Further Research

Analysis of the dwarf motif at the site level shows that its distribution follows political affiliation to some extent. The motif first appears at Caracol. Calakmul adopts the dwarf motif upon the forming of its alliance with Caracol, and thereafter dwarves are portrayed at other sites under that alliance's influence. Dwarves occur in the art of Tikal upon its defeat of the Calakmul alliance. Sites geographically or politically outside direct involvement in the struggle between the Calakmul and Tikal polities, such as Palenque, Piedras Negras, Quirigua, and Copan, are without known examples of the dwarf motif on monuments (though there may be exceptions to this pattern). The history of the site of Naranjo records oversight, including investiture and vassalage, as well as warfare, ending in both victory and defeat, with Caracol, Calakmul, Dos Pilas, and Tikal from 9.5.12.0.4 (A.D. 546) to 9.15.12.11.13 (A.D. 744; Braswell et al. 2004:162; Martin 2000a:41-43; Martin and Grube 2000:71-79; Sharer and Traxler 2006:382-383). Yet the dwarf motif has not been found there; perhaps future research will reveal why (see Naranjo Stela 5 under Monuments in Appendix C).

What are the origins of the dwarf motif? As discussed in Chapter 1, until Tate and Bendersky's (1999) identification of Olmec figurines as fetuses, they were commonly described as dwarves (Easby and Scott

1970:No. 36; Solís 1998:28; Tate 1995:60-61, for instance). On this evidence, scholars such as Covarrubias (1957:230), Proskouriakoff (1968:121), and Tate (1995:62) propose an Olmec or Pacific coast source for the dwarf motif in Maya art. As far as monumental representations are concerned, the dwarf motif appears to spring fully formed at Caracol at 9.7.10.0.0 or 9.8.0.0.0 (A.D. 583 or A.D. 593). Can it be traced back through time? And why does it appear first at Caracol?

At the other end of the temporal trajectory, what becomes of the dwarf motif when Peten sites cease to erect monuments? As recently noted in the case of one Peten site displaying the dwarf motif,

By A.D. 750 Calakmul began to forge stronger political and economic ties with polities to the north. ... We suggest that this change in external relations represents a shift away from the weakening political and economic sphere of the south, toward the vibrant and emerging system of the north [Braswell et al. 2004:190].

Between 9.16.0.0.0 and 9.19.10.0.0 (roughly A.D. 750 and A.D. 820), as described in Chapter 6, the dwarf motif began to be found at sites in the northern lowlands of Yucatan. Because most northern examples, usually on columns, are unprovenienced, how the motif spread from south to north is untraceable, though some researchers suggest that it may relate to atlantean or 'fat god' figures (Cook de Leonard 1971; Halperin 2006:4; Piña Chan 1997:10-11; Prager 2002:56, 62; see Northern Lowland Columns and Other Depictions in Appendix C). How did the meaning of

the dwarf motif change in this different environment and later time period? In addition to 'fat god' and atlantean figures, dwarves have been considered together with hunchbacks, though iconographic and linguistic evidence indicates that the ancient Maya did not equate them (see Mayer 1986:213, 216, Figure 9; V. Miller 1985:146, Figure 4; Prager 2001:278, 2002:40-41, for instance). What would an analysis of Maya representations of these other categories of figures reveal?

As Brinton (1895:43) observes early on, the Motul and San Francisco dictionaries translate ak (or a'ak or ak') as 'turtle' and 'peccary' in addition to 'dwarf' (Alvarez 1980:340-341; Arzápalo Marín 1995 [1575?-1620?]:2; Barrera Vásquez 1980:I:4-5; Berendt 1864 [1575?-1690?]:2-3, 1870a [1600?-1700?]:1-2; Martínez Hernández 1929 [1575?-1620?]:66; Pérez 1866-1877:1; Swadesh et al. 1970:33). This has led some scholars to hypothesize a connection between dwarves and a constellation the Maya referred to as Ak Ek 'turtle star' or 'peccary star' (probably either Gemini or Orion; Freidel et al. 1993:80, 82-83, 85; Milbrath 1999:176, 267; M. Miller 1986:48-50; M. Miller and Taube 1993:82; Prager 2001:279; Reents-Budet 1994:252; see also Yaxchilan Hieroglyphic Stair 2 Step VII under Hieroglyphic Texts Associated with the Dwarf Motif in Chapter 7). There is also evidence of cosmic events on the dates of dwarf-motif monuments, for example, appearances of Venus and Jupiter on the dates of Hieroglyphic Stair 2 Step VII of Yaxchilan

Structure 33 and Lintel 3 of Tikal Structure 5D-1 (Temple I) as well as a conjunction of the Pleiades on the dates of Xultun Stelae 3 and 10 (Aveni and Hotaling 1996:357, 359; Schlak 1989:269-271; Tate 1992:273). Given the Maya fondness for visual and textual puns, is there a connection between the dwarf motif, the constellation, and the symbolism associated with the turtle?

Utilizing the method of spatial analysis, this work is limited to representations of the dwarf motif on monuments. As pointed out by Foncerrada de Molina (1976:45), V. Miller (1985:141), Mayer (1986:213-218), Houston (1992), and Prager (2002), dwarf iconography is found in several ancient Maya media, from graffiti on a clay brick to gorgeous jade plaques (see Appendix C). Examples of the dwarf motif are compiled in dissertations by Grieder (1962) and Reents-Budet (1985) on ceramic vessels and by Corson (1972) and Halperin (2005, 2006) in ceramic figurines from Jaina and Motul de San José, respectively. Proskouriakoff (1974:102, Plates 44, 52, 57-58) identifies many of the jade figurines from the Cenote of Sacrifice at Chichen Itza as representations of dwarves (see also Coggins 1984:76-77, Nos. 67-69). Are these renditions in other media truly images of disproportionately short individuals, as they are on stelae, or, as I suspect in the case of the Chichen Itza Cenote of Sacrifice jade figurines, is this merely a case of the human figure formed to fit the media? What is the relationship between these various media in the

presentation of the dwarf motif? What are the broader implications for interpreting iconography across media?

Epilogue

In their review of the movie *Apocalypto*, Aimers and E. Graham (2007:106) lament "how little impact Maya archaeology has in the 'real' world." Are Classic Maya portrayals of dwarves significant to "the 'real' world" of today? Their significance was surely different for the Maya, with their fluid conceptualizations of time and reality, than it is for us, with our more rigid conceptualizations of past versus present, natural versus supernatural, in which all things must be one or the other. Based on past attempts to interpret the Classic Maya dwarf motif (see the Introduction of Chapter 1), our society seems to react to the 'otherness' of dwarves with imagination and confusion, while the Maya seem to have been able to channel the 'otherness' of dwarves into a visual metaphor for liminality (Ablon 1984:169-170; Inomata 2001:36-40, 49). Such depictions are opportunities to reveal an ancient society as the sophisticated system that it was, in which the 'other' was neither shunned nor worshipped but integrated into a complex ideology.

According to Adelson's (2005b:3) research on attitudes toward dwarfism in the past, "a historical review leads to an extraordinary

finding: the best of times for dwarfs have been the earliest period recorded – the ancient Egyptian kingdoms—and the most recent era." Although the dwarf community in America is aware of representation of dwarves by some ancient societies (Adelson 2003-2004:8-9; Kozma 2003-2004:22-23), the Maya are not among them. Hopefully, this study will begin to address this omission.

As pointed out in Chapter 1, pre-Columbian representations of dwarfism go almost unrecognized outside the discipline of anthropology (two exceptions are Ablon 1984:4 and Adelson 2005b:10, 100, 139, 143, 145). Dwarves nevertheless fascinate people, as does archaeology. It is the responsibility of anthropologists to use these popular interests to capture the attention of the public in order to educate them about the diversity of human society. "How modern people depict the ancient Maya matters because we use the past to reflect on the present and the future" (Freidel 2007:41). In other words, we illuminate the past that by its light, we may see ourselves more clearly.

APPENDIX A INVENTORY OF MONUMENTS

Introduction

Far from exhaustive, this inventory lists the monuments from which I compiled the database that comprises Chapter 3. All sites that have less than five monuments, although surveyed, have been omitted from this list, unless cross-referenced to text. The references document the form of the data available to me; photographs from the 1940s and 1950s, for example, offer only vaguely discernible outlines of relief. It is likely that there are dwarves on these monuments with insufficient records to identify them. References to Internet sites are current as of the access date in the bibliography, as these resources change constantly.

As in Chapter 3, generally speaking, the list of illustrations includes: the earliest, such as the pioneering publications of Maler, Maudslay, and Morley; 'industry-standard' monographs, such as the *Corpus of Maya Hieroglyphic Inscriptions* (*CMHI*); and classic anthologies, such as Spinden's (1913) *Study*, Ruppert and Denison's (1943) *Reconnaissance*, and Proskouriakoff's (1950) *Study*. All CMHI field drawings and photographs are generously provided by Ian Graham. Only representational scenes are included; this list does not usually include illustrations of details. In cases of both discussion and illustration, only illustration is referenced; in cases of verbal description only, of particularly obscure monuments, or of monuments having disappeared, discussion or description is sometimes cited.

I have followed the suggestion of the compilers of the *Corpus of Maya Hieroglyphic Inscriptions* and used the abbreviation *CMHI* followed directly by the complete page number, without date. The spelling of site names follows *CMHI* 6:187-189. Round parentheses enclose alternative site names, with square brackets for renumbered monuments.

Abaj Takalik

Altar 12 J. Grahan	n 1992:Figure 3; Orrego Corzo and Schieber 2001:Figure 6b
Altar 13 J. Grahar	n 1992:Figure 4; Orrego Corzo and Schieber 2001:Figure 8
Monument 1 C	assier and Ichon 1981:Figure 3; Chang Lam 1991:Figure 11;
	Orrego Corzo and Schieber 2001:Figure 2a
Monument 5 J.	Graham 1992:Figure 2
Monument 6 C	assier and Ichon 1981:Figure 4
Monument 7 C	assier and Ichon 1981:Figure 8
Monument 8 C	hang Lam 1991:Figure 15
Monument 11 O	rrego Corzo and Schieber 2001:Figure 6a
Monument 14 O	rrego Corzo and Schieber 2001:Figure 4a
Monument 16 O	rrego Corzo and Schieber 2001:Figure 3a
Monument 17 O	rrego Corzo and Schieber 2001:Figure 3a
Monument 64 O	rrego Corzo and Schieber 2001:Figure 2b
Monument 65 O	rrego Corzo and Schieber 2001:Figure 3b
Monument 66 O	rrego Corzo and Schieber 2001:Figure 12d
Monument 67 O	rrego Corzo and Schieber 2001:Figure 3c
Monument 93 O	rrego Corzo and Schieber 2001:Figure 4b
Monument 94 O	rrego Corzo and Schieber 2001:Figure 12a
Monument 99 O	rrego Corzo and Schieber 2001:Figure 12b

Monument 10	· · · · · · · · · · · · · · · · · · ·
Stela 1	Cassier and Ichon 1981:Figure 5; Chang Lam 1991:Figure 8; Orrego Corzo
	and Schieber 2001:Figure 11b; Proskouriakoff 1950:Figure 109b
Stela 2	Cassier and Ichon 1981:Figure 6; J. Graham 1992:Figure 5; Orrego Corzo
	and Schieber 2001:Figure 9a
Stela 3	Cassier and Ichon 1981:Figure 9; Greene Robertson 1995:D23961.PCT
Stela 4	Cassier and Ichon 1981:Figure 7; Chang Lam 1991:Figure 9; Orrego Corzo
	and Schieber 2001:Figure 5b
Stela 5	Chang Lam 1991:Figure 10; Orrego Corzo and Schieber 2001:Figures 9b,
	10
Stela 12	Orrego Corzo and Schieber 2001:Figure 11a
Stela 13	Orrego Corzo and Schieber 2001:Figure 5a

Acanmul

Structure 9 column Figure 5; see Chapter 6

Aguateca

Stela 1	I. Graham 1967:Figures 2, 3; Greene Robertson 1995:D23732.PCT
Stela 2	I. Graham 1967:Figures 4, 5; Greene Robertson 1995:D23734.PCT;
	Houston 1993:Figure 4.20
Stela 3	I. Graham 1967:Figures 8, 9; Greene Robertson 1995:D23739.PCT
Stela 4	I. Graham 1967:Figures 10, 11
Stela 5	I. Graham 1967:Figures 12, 13; Greene Robertson 1995:D23740.PCT
Stela 6	I. Graham 1967:Figures 14, 15; Greene Robertson 1995:D23741.PCT
Stela 7	I. Graham 1967:Figures 16, 17; Greene Robertson 1995:D23742.PCT;
	Houston 1993:Figure 3.6
Stela 16	Eberl 2000:Figure 4
Stela 19	Eberl 2000:Figures 5, 6

Altar de Sacrificios

Altar 1 Altar 2	J. Graham 1972:Figure 50; Greene Robertson 1995:D23832 J. Graham 1972:Figure 53
Altar 3	J. Graham 1972:Figure 55
Panel 1	J. Graham 1972:Figure 57
Panel 2	J. Graham 1972:Figure 58
Panel 4	J. Graham 1972:Figure 59
Panel 9	J. Graham 1972:Figure 60
Stela 1	J. Graham 1972:Figure 5; Greene Robertson 1995:D23816
Stela 2	J. Graham 1972:Figure 9
Stela 3	J. Graham 1972:Figure 10
Stela 4	Greene Robertson 1995:D23818; Maler 1908a:Plate 2
Stela 5	Morley 1937-1938:V:Plate 18a
Stela 7	J. Graham 1972:Figure 16; Morley 1937-1938:V:Plate 18c
Stela 8	J. Graham 1972:Figure 18; Proskouriakoff 1950:Figure 48b
Stela 9	J. Graham 1972:Figure 23; Greene Robertson 1995:D23822;
	Proskouriakoff 1950:Figure 48a
Stela 10	J. Graham 1972:Figure 29; Greene Robertson 1995:D23824
Stela 12	J. Graham 1972:Figure 33; Greene Robertson 1995:D23826;
	Proskouriakoff 1950:Figure 39b

Stela 13	Greene Robertson 1995:D23828
Stela 16	J. Graham 1972:Figure 39
Stela 17	J. Graham 1972:Figure 42
Stela 18	J. Graham 1972:Figure 43; Greene Robertson 1995:23830

Benque Viejo

see Xunantunich

Bilbao

Monument 1	Greene Robertson 1995:D23947.PCT
Monument 2	Chinchilla Mazariegos 1997:Figure 1
Monument 3	Greene Robertson 1995:D23948.PCT
Monument 6	Greene Robertson 1995:D23950.PCT
Monument 8	Greene Robertson 1995:D23952.PCT
Monument 13	Greene Robertson 1995:D23953.PCT
Monument 15	Chinchilla Mazariegos 1997:Figure 2
Monument 16	Chinchilla Mazariegos 1997:Figure 2
Monument 17	Chinchilla Mazariegos 1997:Figure 2
Monument 19	Greene Robertson 1995:D23954.PCT
Monument 20	Greene Robertson 1995:D23955.PCT
Monument 21	Greene Robertson 1995:D23956.PCT
Monument 38	Greene Robertson 1995:D23959.PCT
Monument 42	Greene Robertson 1995:D23960.PCT; Parsons 1986:Figure 183

Bonampak

Altar 2	Proskouriakoff 1950:Figure 47a
Altar 3	Proskouriakoff 1950:Figure 44d
Lintel 1	M. Miller 1986:Figure 11
Lintel 2	M. Miller 1986:Figure 12
Lintel 3	M. Miller 1986:Figure 13
Lintel 4	M. Miller 1986:Figure 24
Stela 1	Greene Robertson 1995:D23908.PCT-D23915.PCT; M. Miller
	1986:Figure 19; Proskouriakoff 1950:Figure 68
Stela 2	Greene Robertson 1995:D23916.PCT-D23918.PCT; M. Miller
	1986:Figure 20; Proskouriakoff 1950:Figure 69a
Stela 3	Greene Robertson 1995:D23919.PCT; Proskouriakoff 1950:Figure
	69c
Stone 1	Greene Robertson 1995:D23925.PCT
Stone 2	Greene Robertson 1995:D23926.PCT
Structure 1 lintels	Greene Robertson 1995:D23920.PCT-D23922.PCT; Proskouriakoff
	1950:Figure 70a
Room 1	M. Miller 1986:Plates 1, 4-8
Room 2	M. Miller 1986:Plates 2, 43-52
Room 3	see Chapter 4
Structure 6 lintel	Greene Robertson 1995:D23923.PCT; Proskouriakoff 1950:Figure
	44c

Calakmul (Ox Te' Tuun)

	1 CMHI field drawing
Monument 105	Marcus 1987:Figures 12, 13
Monument 108	Marcus 1987:Figure 14
Monument 109	Marcus 1987:Figure 15
Monument 110	Marcus 1987:Figure 16
Monument 111	Marcus 1987:Figure 17
Monument 112	Marcus 1987:Figure 18
Monument 113	Marcus 1987:Figure 19
Stela 1	CMHI field drawing
Stela 2	Marcus 1987:Figure 49
Stela 7	CMHI field drawing
Stela 8	CMHI field drawing
Stela 9	CMHI field drawing; Proskouriakoff 1950:Figure 46c; Ruppert and
	Denison 1943:Plate 48a-c
Stela 13	CMHI field drawing
Stela 15	CMHI field drawing; Ruppert and Denison 1943:Plate 49a
Stela 16	see Chapter 3
Stela 17	CMHI field drawing; Proskouriakoff 1950:Figure 79b; Ruppert and
	Denison 1943:Plate 49b
Stela 18	CMHI field drawing
Stela 23	CMHI field drawing; Marcus 1987:Figures 62, 63
Stela 24	CMHI field drawing; Proskouriakoff 1950:Figure 55c
Stela 25	CMHI field drawing
Stela 26	CMHI field drawing
Stela 27	see Chapter 5
Stela 28	CMHI field drawing; Marcus 1987:Figures 24, 48, 51; Ruppert and
occid no	Denison 1943:Plate 49c
Stela 29	Figure 6; see Chapter 3
Stela 30	CMHI field drawing
Stela 31	CMHI field drawing
Stela 33	CMHI field drawing; Ruppert and Denison 1943:Plate 50a
Stela 34	CMHI field drawing
Stela 35	CMHI field drawing
Stela 38	CMHI field drawing
Stela 39	CMHI field drawing
Stela 40	CMHI field drawing
Stela 41	CMHI field drawing CMHI field drawing
Stela 43	see Chapter 5
Stela 45	CMHI field drawing
Stela 48	CMHI field drawing
Stela 40 Stela 50	CMHI field drawing; Proskouriakoff 1950:Figure 79e; Ruppert and
Stela 50	Denison 1943:Plate 50b
Ctolo 51	
Stela 51	CMHI field drawing; Marcus 1987:Figures 30, 31; Proskouriakoff
Stola 52	1950:Figure 56; Ruppert and Denison 1943:Plate 50c
Stela 52	CMHI field drawing; Ruppert and Denison 1943:Plate 51a
Stela 53	see Chapter 5
Stela 54	CMH field drawing; Ruppert and Denison 1943:Plate 51c
Stela 55	CMH field drawing
Stela 56	CMH field drawing
Stela 57	CMH field drawing Purposet and Danison 1042 Plata 522
Stela 58	CMHI field drawing; Ruppert and Denison 1943:Plate 52a
	400

Stela 59 CMHI field drawing Stela 61 CMHI field drawing Stela 62 CMHI field drawing; Ruppert and Denison 1943:Plate 52b Stela 64 CMHI field drawing Stela 65 CMHI field drawing; Proskouriakoff 1950:Figure 79a; Ruppert ar Denison 1943:Plate 52c Stela 66 CMHI field drawing; Marcus 1987:Figure 8 Stela 67 CMHI field drawing	
Stela 62 CMHI field drawing; Ruppert and Denison 1943:Plate 52b Stela 64 CMHI field drawing Stela 65 CMHI field drawing; Proskouriakoff 1950:Figure 79a; Ruppert ar Denison 1943:Plate 52c Stela 66 CMHI field drawing; Marcus 1987:Figure 8	
Stela 64 CMHI field drawing Stela 65 CMHI field drawing; Proskouriakoff 1950:Figure 79a; Ruppert ar Denison 1943:Plate 52c Stela 66 CMHI field drawing; Marcus 1987:Figure 8	
Stela 64 CMHI field drawing Stela 65 CMHI field drawing; Proskouriakoff 1950:Figure 79a; Ruppert ar Denison 1943:Plate 52c Stela 66 CMHI field drawing; Marcus 1987:Figure 8	
Denison 1943:Plate 52c Stela 66 CMHI field drawing; Marcus 1987:Figure 8	
Denison 1943:Plate 52c Stela 66 CMHI field drawing; Marcus 1987:Figure 8	and
Stela 67 CMUI field drawing	
Stela 07 CMTH Held drawing	
Stela 71 CMHI field drawing	
Stela 74 CMHI field drawing	
Stela 78 CMHI field drawing	
Stela 79 CMHI field drawing	
Stela 80 CMHI field drawing	
Stela 84 CMHI field drawing; Proskouriakoff 1950:Figure 79d	
Stela 86 CMHI field drawing	
Stela 88 CMHI field drawing; Marcus 1987:Figure 60; Proskouriakoff	
1950:Figure 42a; Ruppert and Denison 1943:Plate 53a	
Stela 89 Figure 7; see Chapter 3	
Stela 91 Proskouriakoff 1950:Figure 79f	
Stela 93 CMHI field drawing	
Stela 94 CMHI field drawing	
Stela 104 CMHI field drawing	
Stela 114 CMHI field drawing	
Stela 116 CMHI field drawing	

Campeche

Monument T10	Greene Robertson 1995:D20049.PCT
Monument T13	Greene Robertson 1995:D20057.PCT
Monument T18	Greene Robertson 1995:D20051.PCT
Monument T23	Greene Robertson 1995:D20052.PCT
Monument T24	Greene Robertson 1995:D20053.PCT
Monument T28	Greene Robertson 1995:D20037.PCT
Monument T30	Greene Robertson 1995:D20061.PCT
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Monument T33	Greene Robertson 1995:D20050.PCT
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Monument T44	Greene Robertson 1995:D20045.PCT
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Monument T46	Greene Robertson 1995:D20046.PCT
Monument T47	Greene Robertson 1995:D20046.PCT
Monument T48	Greene Robertson 1995:D20046.PCT
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Monument T52	Greene Robertson 1995:D20040.PCT
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Monument T58	Greene Robertson 1995:D20058.PCT
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Monument T63	Greene Robertson 1995:D20055.PCT
Monument T150	Greene Robertson 1995:D20047.PCT
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Altar 10	Beetz and Satterthwaite 1981:Figures 22, 41d
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Stela 4	M. Miller 1991:Figure 2.11a; Proskouriakoff 1950:174; Stirling 1943:Plate 22a
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Monument 3	Anderson 1978:Figure 4a
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Monument 23	Anderson 1978:Figure 13a
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Las Monjas	Greene Robertson 1995:D20735.PCT-D20748.PCT
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D23371.PCT

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CPN 24 [Stela M]	Baudez 1994:Figure 30; Proskouriakoff 1950:129
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Stela 16	Proskouriakoff 1950:Figure 58b
Stela 31	Proskouriakoff 1950:Figure 59c
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El Paraíso

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Stela 1	CMHI field drawing
Stela 9 [8]	CMHI field drawing
Stela 10	CMHI field drawing
Stela 11 [10]	CMHI field drawing

Stela 12 [11]	CMHI field drawing
Stela 15 [13]	CMHI field drawing
Stela 16 [14]	CMHI field drawing
Stela 17 [15]	CMHI field drawing
Stela 18 [16]	CMHI field drawing
Stela 19 [17]	CMHI field drawing
Stela 20 [18]	CMHI field drawing
Stela 22 [20]	see Chapter 5
Stela 23 [21]	CMHI field drawing
Stela 24 [22]	CMHI field drawing
Stela 25 [23]	CMHI field drawing
Stela 27 [25]	CMHI field drawing
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Stela 30	CMHI field drawing
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Stela 33 [30]	CMHI field drawing
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Stela 35 [32]	CMHI field drawing
Stela 37	CMHI field drawing
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El Tajín

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Sculpture 6	Kampen 1969:Figure 34a
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Panel 4	Kampen 1969:Figure 6c, d; Pascual Soto 1990:Figure 22
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Panel 7	Kampen 1969:Figure 7f; Pascual Soto 1990:Figure 25
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       Sculpture 6
                     Kampen 1969:Figure 18e; Pascual Soto 1990:Figure 30
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                     Kampen 1969: Figure 19a, b; Pascual Soto 1990: Figure 85
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                     Kampen 1969:Figure 39a-c
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Etzna (Edzna)

carved block	Greene Robertson 1995:D20014.PCT
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Panel 1	Benavides Castillo 1997:Figure 62
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Stela 8	Benavides Castillo 1997:Figure 42; Proskouriakoff 1950:Figure 84a
Stela 9	Benavides Castillo 1997:Figure 43; Greene Robertson 1995:D20003.PCT;
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Stela 12	Benavides Castillo 1997:Figure 46; Proskouriakoff 1950:Figure 81b
Stela 15	Benavides Castillo 1997:Figure 47; Greene Robertson 1995:D20007.PCT;
	Proskouriakoff 1950:Figure 84c
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Stela 25	Benavides Castillo 1997:Figure 57
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Frontera

see La Florida

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Hobomo

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see Xcalumkin

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Kaminaljuyu

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see Yaxchilan

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Moral

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Naachtun

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Naj Tunich

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Naranjo

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Stela 13	Maler 1908a:Plate 32; Proskouriakoff 1950:Figure 62b
Stela 14	Maler 1908a:Plate 33; Morley 1937-1938:V:Plate 15f;
Ctolo 17	Proskouriakoff 1950:Figure 53b
Stela 17	Morley 1937-1938:V:Plate 89d; Proskouriakoff 1950:110

Stela 19	Maler 1908a:Plate 34; Morley 1937-1938:V:Plate 16c; Proskouriakoff 1950:Figure 71a
Stela 20	Maler 1908a:Plate 35-1; Morley 1937-1938:V:Plate 16d; Proskouriakoff 1950:Figure 55a
Stela 21	Maler 1908a:Plate 35-2; Proskouriakoff 1950:125
Stela 22	Greene Robertson 1995:D23678.PCT; Maler 1908a:Plate 36;
	Proskouriakoff 1950:Figure 55b
Stela 23	Maler 1908a:Plates 37, 38; Proskouriakoff 1950:125
Stela 24	Greene Robertson 1995:D23681.PCT; Houston 1993:Figure 4.10; Maler
	1908a:Plate 39; Proskouriakoff 1950:Figure 49b
Stela 25	CMHI 2:69; Greene Robertson 1995:D23680.PCT; Maler 1908a:Plate 40-1;
	Morley 1937-1938:V:Plate 87b; Proskouriakoff 1950:Figure 44a;
	Spinden 1913:Plate 24-1
Stela 26	<i>CMHI</i> 2:71; Morley 1937-1938:V:Plates 14d, 87e
Stela 27	<i>CMHI</i> 2:73
Stela 28	CMHI 2:75; Maler 1908a:Plate 40-2; Proskouriakoff 1950:Figure 62a
Stela 29	CMHI 2:77; Greene Robertson 1995:D23682.PCT; Maler 1908a:Plate 41;
	Proskouriakoff 1950:125
Stela 30	CMHI 2:79; Maler 1908a:Plate 42; Proskouriakoff 1950:Figure 63a;
_	Spinden 1913:Plate 24-2
Stela 31	CMHI 2:83; Maler 1908a:Plate 43; Proskouriakoff 1950:125
Stela 32	CMHI 2:86; Greene Robertson 1995:D23684.PCT; Maler 1908a:Plate 44;
06-1-00	Proskouriakoff 1950:151
Stela 33	CMHI 2:87; Greene Robertson 1995:D23685.PCT; Morley 1937-
Stela 34	1938:V:Plates 15b, 91d; Proskouriakoff 1950:Figure 63b
Stela 34 Stela 35	CMHI 2:89; Morley 1937-1938:V:Plates 15d, 88e; Proskouriakoff 1950:115 CMHI 2:91; Greene Robertson 1995:D23683.PCT; Morley 1937-
Stera 33	1938:V:Plate 92a; Proskouriakoff 1950:141
Stela 36	<i>CMHI</i> 2:93; Morley 1937-1938:V:Plates 15c, 91a
Stela 37	CMHI 2:95
Stela 38	CMHI 2:97
Stela 39	CMHI 2:99
Stela 40	CMHI 2:101
Stela 41	CMHI 2:185
Stela 42	Mayer 2001b:Figures 1, 2
Stela 43	Mayer 2002:Figures 6, 7
	Nimli Punit
Stela 1	Greene Robertson 1995:D20164.PCT; Wanyerka 2003:Figure 14
Stela 2	Greene Robertson 1995:D20165.PCT; Wanyerka 2003:Figure 15
Stela 3	Wanyerka 2003:Figure 19
Stela 3	Wanyerka 2003:Figure 20
Stela 7	Wanyerka 2003:Figure 21
Stela 14	Greene Robertson 1995:D20162.PCT; Wanyerka 2003:Figure 25
Stela 15	Greene Robertson 1995:D20163.PCT; Wanyerka 2003:Figure 29
Stela 21	Wanyerka 2003:Figure 32

Nohoch Mul

see Coba

Ocultun

see La Florida

Oxkintok

Column 3	Pablo Aguilera 1992:171, Figure 6
Column 4	Pablo Aguilera 1992:171, Figure 7
Column 5	Pablo Aguilera 1992:171, Figure 8
Miscellaneous Stone 41	Pablo Aguilera 1990:Figure 7
Stela 2	Proskouriakoff 1950:Figure 87c
Stela 3	Garcia Campillo 1994:Figure 6; Proskouriakoff 1950:Figure
	87a
Stela 4	Greene Robertson 1995:D15971.PCT; Proskouriakoff 1950:Figure 86e
Stela 9	Proskouriakoff 1950:Figure 87d
Stela 10	Proskouriakoff 1950:Figure 88c
Stela 11	see Appendix C
Stela 12	Proskouriakoff 1950:Figure 88b
Stela 14	Proskouriakoff 1950:Figure 86g
Stela 18	Proskouriakoff 1950:Figure 86c
Stela 19	Pablo Aguilera 1990:Figure 9; Proskouriakoff 1950:Figure
	81c
Stela 20	Proskouriakoff 1950:Figure 86f
Stela 21	Proskouriakoff 1950:Figure 88a
Stela 24	Proskouriakoff 1950:Figure 86d
Stela 25	Proskouriakoff 1950:Figure 87b
Stela 26	Pablo Aguilera 1990:Figure 10; Proskouriakoff 1950:Figure 81d
Structure CA-7 Lintel 3	Pablo Aguilera 1990:Figure 5
Lintel 8	Pablo Aguilera 1990:Figure 6
Structure 3C7 Column 2	Mayer 1981:Plate 6; Proskouriakoff 1950:Figure 97a
Structure 3C11	Proskouriakoff 1950:Figure 95h
lintels	Proskouriakoff 1950:Figure 98a, b
	_

Oxpemul

Altar 3	Ruppert and Denison 1943:Plate 56d
Altar 15	Ruppert and Denison 1943:Plate 56e
Stela 9	Proskouriakoff 1950:129; Ruppert and Denison 1943:Plate 55b
Stela 10	Proskouriakoff 1950:129; Ruppert and Denison 1943:Plate 55c
Stela 12	Proskouriakoff 1950:129; Ruppert and Denison 1943:Plate 56a
Stela 15	Proskouriakoff 1950:Figure 79c; Ruppert and Denison 1943:Plate 56b
Stela 17	Proskouriakoff 1950:129; Ruppert and Denison 1943:Plate 56c
Stela 19	Figure 24; see Chapter 3

Ox Te' Tuun

see Calakmul

Palenque

Group IV Tablet of the Slaves	Greene Robertson 1995:D23525.PCT	
Palace East Court figures	see Appendix C	
Palace House A	Maudslay 1889-1902:IV:Plates 8-11; Proskouriakoff	
	1950:137	
Palace House C	see Appendix C	
Palace House D	Maudslay 1889-1902:IV:Plates 32-37; Proskouriakoff 1950:137	
Palace House E	Greene Robertson 1995:D23539.PCT; Proskouriakoff 1950:Figure 54b	
Palace Tower Court		
Creation Tablet	Greene Robertson 1995:D23562.PCT	
Orator Tablet	Greene Robertson 1995:D23560.PCT	
Scribe Tablet	Greene Robertson 1995:D23559.PCT	
Stela 1	Maudslay 1889-1902:IV:Plate 67; Proskouriakoff 1950:136	
Temple of the Cross	Greene Robertson 1995:D23534.PCT, D23541.PCT;	
	Maudslay 1889-1902:IV:Plates 69-76;	
	Proskouriakoff 1950:137	
Temple of the Foliated Cross	Greene Robertson 1995:D23531.PCT; Maudslay 1889-	
	1902:IV:Plates 80-81; Proskouriakoff 1950:Figure	
	54a	
Temple of the Inscriptions	Greene Robertson 1995:D23501.PCT, D23505.PCT-	
	D23508.PCT; Maudslay 1889-1902:IV:Plates 53-56	
Temple of the Sun	Greene Robertson 1995:D23533.PCT; Maudslay 1889-	
	1902:IV:Plates 86-88; Proskouriakoff 1950:137	
Temple XIV	Greene Robertson 1995:D23529.PCT	
Temple XXI	Greene Robertson 1995:D23561.PCT	
Piedras Negras		

Lintel 1	Maler 1901:Plate 30; Maudslay 1889-1902:II:Plates 78b, 79-89, 92-98
Lintel 2	Maler 1901:Plate 31; Maudslay 1889-1902:II:Plates 78b, 79-89, 92-98;
	Proskouriakoff 1950:120
Lintel 3	Maudslay 1889-1902:II:Plates 78b, 79-89, 92-98; Morley 1937-
	1938:V:Plates 37a, 146; Proskouriakoff 1950:148
Lintel 4	Greene Robertson 1995:D23940.PCT; Maler 1901:Plate 32; Maudslay
	1889-1902:II:Plates 78b, 79-89, 92-98; Proskouriakoff 1950:120
Lintel 5	Maudslay 1889-1902:II:Plates 78b, 79-89, 92-98; Morley 1937-
	1938:V:Plates 36b, 126b; Proskouriakoff 1950:120
Lintel 7	Maudslay 1889-1902:II:Plates 78b, 79-89, 92-98; Morley 1937-
	1938:V:Plates 32b, 126a; Proskouriakoff 1950:120
Lintel 8	Morley 1937-1938:V:Plate 142c
Lintel 9	Morley 1937-1938:V:Plate 142d
Lintel 10	Morley 1937-1938:V:Plate 142e
Lintel 11	Morley 1937-1938:V:Plate 120d
Lintel 12	Greene Robertson 1995:D23941.PCT; Maudslay 1889-1902:II:Plates 78b,
	79-89, 92-98; Morley 1937-1938:V:Plates 27a, 119c; Proskouriakoff
	1950:Figure 39d
Lintel 13	Morley 1937-1938:V:Plate 132e
Miscellaneous	Stone 10 Montgomery 2000:JM05101
Miscellaneous	Stone 16 Montgomery 2000:JM05102; Proskouriakoff 1950:148

Panel 4	D. Schele 1998:6100
Panel 15	Houston et al. 2000:Figure 5
Stela 1	CMHI 9:18; Maler 1901:Plate 12; Montgomery 2000:JM05210; Proskouriakoff 1950:135
Stela 2	CMHI 9:21; Maler 1901:Plate 15, 1; Montgomery 2000:JM05220; Proskouriakoff 1950:134
Stela 3	CMHI 9:26; Maler 1901:Plate 13; Montgomery 2000:JM05230, JM05231; Morley 1937-1938:V:Plate 130b; Proskouriakoff 1950:135
Stela 4	<i>CMHI</i> 9:30; Montgomery 2000:JM05240
Stela 5	CMHI 9:33; Maler 1901:Plate 15, 2; Montgomery 2000:JM05252
Stela 6	<i>CMHI</i> 9:36; Maler 1901:Plate 15, 3; Montgomery 2000:JM05267; Morley
Stera o	1937-1938:V:Plate 31h; Proskouriakoff 1950:Figure 52b
Stela 7	<i>CMHI</i> 9:39; Maler 1901:Plate 16; Montgomery 2000:JM05270;
Stela /	Proskouriakoff 1950:Figure 53c; D. Schele 1998:6109
Stela 8	CMHI 9:44; Maler 1901:Plate 17; Montgomery 2000:JM05280;
Stera o	Proskouriakoff 1950:Figure 47d; D. Schele 1998:6108
Stela 9	
Stela 9	CMHI 9:51; Maler 1901:Plate 18, 1; Montgomery 2000:JM05290;
Chala 10	Proskouriakoff 1950:135; D. Schele 1998:6101
Stela 10	CMHI 9:54; Maler 1901:Plate 19; Montgomery 2000:JM05310, JM05311;
Ct.I- 11	Proskouriakoff 1950:135, 136
Stela 11	CMHI 9:51; Maler 1901:Plate 20, 1; Montgomery 2000:JM05320;
C. 1. 10	Proskouriakoff 1950:Figure 52c; D. Schele 1998:6111
Stela 12	CMHI 9:61; Greene Robertson 1995:D23943.PCT; Maler 1901:Plate 21;
	Montgomery 2000:JM05349; Morley 1937-1938:V:Plate 51;
0. 1. 10	Proskouriakoff 1950:Figure 70c
Stela 13	Greene Robertson 1995:D23944.PCT; Maler 1901:Plate 18, 2; Montgomery
	2000:JM05363; Proskouriakoff 1950:Figure 70b; Spinden
0.1.14	1913:Plate 25-3
Stela 14	Maler 1901:Plate 20, 2; Montgomery 2000:JM05376; Proskouriakoff
0. 1 1.	1950:Figure 48d
Stela 15	Morley 1937-1938:V:Plate 139a; Proskouriakoff 1950:148
Stela 20	Morley 1937-1938:V:Plate 145b
Stela 25	Maler 1901:Plate 22; Morley 1937-1938:V:Plates 28m, 120c; Proskouriakoff 1950:Figure 52a
Stela 26	Maler 1901:Plate 23; Proskouriakoff 1950:Figure 53a; D. Schele 1998:6107
Stela 29	Maler 1901:Plate 24; Morley 1937-1938:V:Plate 120e
Stela 31	Maler 1901:Plate 25; Morley 1937-1938:V:Plate 130d; Proskouriakoff 1950:119, 120
Stela 32	Maler 1901:Plate 26, 1; Proskouriakoff 1950:120
Stela 33	Greene Robertson 1995:D23945.PCT; Maler 1901:Plate 26, 2;
	Proskouriakoff 1950:Figure 45a
Stela 34	Maler 1901:Plate 27; Proskouriakoff 1950:Figure 45b
Stela 35	Maler 1901:Plate 28; Proskouriakoff 1950:119, 120, Figure 53b; D. Schele 1998:6110
Stela 36	Maler 1901:Plate 29; Morley 1937-1938:V:Plate 30e
Stela 39	Morley 1937-1938:V:Plates 51, 145c
Stela 40	Morley 1937-1938:V:Plate 135b; Proskouriakoff 1950:135, 136
Stela 42	Morley 1937-1938:V:Plate 145a
Stela 43	Morley 1937-1938:V:Plate 143a Morley 1937-1938:V:Plate 123b
Stela 45	Morley 1937-1938:V:Plate 123b Morley 1937-1938:V:Plate 124d
Stela 46	Morley 1937-1938:V:Plate 124d Morley 1937-1938:V:Plate 123a
	pall court) panel
oducial iso (i	Proskouriakoff 1950:148; Satterthwaite 1944:Figure 22
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Pixoy

Miscellaneous 1	CMHI 4:45
Stela 1	<i>CMHI</i> 4:35
Stela 2	CMHI 4:37
Stela 3	<i>CMHI</i> 4:39
Stela 4	CMHI 4:41
Stela 5	<i>CMHI</i> 4:43

Polol

Altar 1	Proskouriakoff 1950:Figure 36d
Stela 1	Greene Robertson 1995:D23711.PCT
Stela 2	Lundell 1934:Plate 2; Proskouriakoff 1950:142
Stela 3	Lundell 1934:Plate 4; Proskouriakoff 1950:142
Stela 4	Greene Robertson 1995:D23712.PCT; Lundell 1934:Plate 3;
Proskouriakoff 1950:142	

Portrero Nuevo

atlanteans	Covarrubias 1957:Plate 15
Monument 1	Stirling 1955:Plate 24
Monument 2	Stirling 1955:Plates 21a, 23
Monument 3	Stirling 1955:Plates 25, 26a

Pusilha (Chumuc-ha)

Altar W Altar X	Wanyerka 2003:Figure 77 Wanyerka 2003:Figure 80
Ball Court Marker 1	Wanyerka 2003:Figure 61
Ball Court Marker 2	Wanyerka 2003:Figure 63
Ball Court Marker 3	Wanyerka 2003:Figure 64
Hieroglyphic Stairway	1
Step 1	Wanyerka 2003:67
Step 2	Wanyerka 2003:68
Step 3	Wanyerka 2003:69
Step 4	Wanyerka 2003:70
Step 5	Wanyerka 2003:71
Step 6	Wanyerka 2003:72
Step 7	Wanyerka 2003:73
Step 8	Wanyerka 2003:74
Step 9	Wanyerka 2003:75
Stela C	Morley 1937-1938:V:Plate 166c; Proskouriakoff 1950:117;
	Wanyerka 2003:Figure 44
Stela D	Morley 1937-1938:V:Plate 166b; Wanyerka 2003:Figure 46
Stela E	Morley 1937-1938:V:Plate 166e; Proskouriakoff 1950:150;
_ , _	Wanyerka 2003:Figure 48
Stela F	Morley 1937-1938:V:Plate 46c
Stela K	Morley 1937-1938:V:Plate 166d; Proskouriakoff 1950:117;
- 1 -	Wanyerka 2003:Figure 51
Stela O	Morley 1937-1938:V:Plate 46a

Morley 1937-1938:V:Plate 166a; Proskouriakoff 1950:117;
Wanyerka 2003:Figure 55
Morley 1937-1938:V:Plate 46b; Wanyerka 2003:Figure 57
Morley 1937-1938:V:Plate 161a; Proskouriakoff 1950:150;
Wanyerka 2003:Figure 58
Wanyerka 2003:Figure 60

Quirigua

Monument 1 [Stela A]	Maudslay 1889-1902:II:Plates 4-8; Proskouriakoff 1950:145; Sharer 1990:Figures 7, 8
Monument 2 [Zoomorph B]	Maudslay 1889-1902:II:Plates 9-15; Proskouriakoff 1950:145; Sharer 1990:Figures 9, 10
Monument 3 [Stela C]	Maudslay 1889-1902:II:Plates 16-20; Proskouriakoff 1950:145; Sharer 1990:Figures 11-13
Monument 4 [Stela D]	Maudslay 1889-1902:II:Plates 21-26; Proskouriakoff 1950:145; Sharer 1990:Figures 14-16
Monument 5 [Stela E]	Maudslay 1889-1902:II:Plates 27-32; Proskouriakoff 1950:144, 145; Sharer 1990:Figures 17-18
Monument 6 [Stela F]	Maudslay 1889-1902:II:Plates 33-40; Proskouriakoff 1950:144, 145; Sharer 1990:Figures 19, 20
Monument 7 [Zoomorph G]	Maudslay 1889-1902:II:Plates 41-44; Sharer 1990:Figures 21, 22
Monument 8 [Stela H]	Maudslay 1889-1902:II:Plate 45a; Morley 1937- 1938:V:Plates 169c, 178d; Proskouriakoff 1950:131; Sharer 1990:Figure 23
Monument 9 [Stela I]	Morley 1937-1938:V:Plate 172b; Proskouriakoff 1950:145; Sharer 1990:Figures 24, 25
Monument 10 [Stela J]	Maudslay 1889-1902:II:Plates 45b, c, 46; Morley 1937- 1938:V:Plate 178d; Proskouriakoff 1950:145; Sharer 1990:Figures 26, 27
Monument 11 [Stela K]	Maudslay 1889-1902:II:Plates 47-48; Proskouriakoff 1950:145; Sharer 1990:Figures 28, 29
Monument 12 [Altar L]	Greene Robertson 1995:D24006.PCT; Maudslay 1889- 1902:II:Plates 49-50a, b; Morley 1937-1938:V:Plate 173d; Proskouriakoff 1950:144; Sharer 1990:Figure 40
Monument 13 [Altar M]	Sharer 1990:Figures 30, 31
Monument 14 [Altar N]	Sharer 1990:Figure 32
Monument 15 [Zoomorph O]	Maudslay 1889-1902:II:Plate 52; Morley 1937-1938:V:Plate 173e; Proskouriakoff 1950:144, 145; Sharer 1990:Figures 33-34
Monument 16 [Zoomorph P]	Maudslay 1889-1902:II:Plates 53-64; Morley 1937- 1938:V:Plate 48d; Proskouriakoff 1950:145; Sharer 1990:Figures 36-38
Monument 17 [Altar Q]	Morley 1937-1938:V:Plate 171f; Proskouriakoff 1950:145; Sharer 1990:Figure 41
Monument 18 [Altar R]	Morley 1937-1938:V:Plate 171e; Proskouriakoff 1950:145; Sharer 1990:Figure 42
Monument 19 [Stela S]	Morley 1937-1938:V:Plate 170a; Proskouriakoff 1950:131; Sharer 1990:Figure 43
Monument 20 [Stela T]	Sharer 1990:Figure 44
Monument 21 [Stela U]	Proskouriakoff 1950:131; Sharer 1990:Figure 45
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Monument 22 [Altar V]	Sharer 1990:71
Monument 23 [Altar of Zoomorph 0]	Sharer 1990:Figure 35
Monument 24 [Altar of Zoomorph P]	Sharer 1990:Figure 39
Monument 26	Sharer 1990:Figures 46-47
Monument 29	Sharer 1990:Figure 48
Monument 30	Sharer 1990:Figure 49

Río Bec

Group 2 Stela 1 Group 2 Stela 3	CMHI field photo; Sulak 2000:Figures 5, 6 CMHI field photo; Sulak 2000:Figure 7
Group 2 Stela 5	CMHI field photo; Sulak 2000:Figure 8
Group 2 Stela 6	Proskouriakoff 1950:Figure 73b
Group 5 Stela 1	CMHI field photo
Group 5 Stela 2	CMHI field photo
Group 5 Stela 4	CMHI field photo
Group 5 Stela 5	Ruppert and Denison 1943:Plate 55a
Group 5 Stela 6	CMHI field photo; Proskouriakoff 1950:Figure 73b

Sacul

Stela 1	Escobedo 1993:Figure 5; Mayer 1990:Figures 3-11
Stela 2	Escobedo 1993:Figure 10; Mayer 1990:Figure 12
Stela 3	Mayer 1990:Figures 13-15
Stela 6	Mayer 1990:Figures 16-17
Stela 9	Escobedo 1993:Figure 6; Mayer 1990:Figures 18-26
Stela 10	Mayer 1990:Figure 27

San Lorenzo, Vera Cruz

Monument 1	Stirling 1955:Plates 5, 6
Monument 2	Stirling 1955:Plate 7
Monument 3	Stirling 1955:Plate 8
Monument 4	Stirling 1955:Plates 9, 10
Monument 5	Stirling 1955:Plates 12, 13
Monument 6	Stirling 1955:Plate 14
Monument 7	Stirling 1955:Plate 17a
Monument 8	Stirling 1955:Plate 15a
Monument 9	Stirling 1955:Plates 17b, 18
Monument 10	Stirling 1955:Plate 15b
Monument 11	Stirling 1955:Plate 16a
Monument 12	Stirling 1955:Plate 16b
Monument 14	Stirling 1955:Plates 21b, 22
Monument 15	Stirling 1955:Plate 20

San Pedro Fort

Monument T68	Greene Robertson 1995:D20065.PCT
Monument T69	Greene Robertson 1995:D20066.PCT
Monument T71	Greene Robertson 1995:D20067.PCT
Monument T75	Greene Robertson 1995:D20069.PCT

Monument T79	Greene Robertson 1995:D20073.PCT
Monument T87	Greene Robertson 1995:D20081.PCT
Monument T88	Greene Robertson 1995:D20083.PCT
Monument T94	Greene Robertson 1995:D20087.PCT
Monument T97	Greene Robertson 1995:D20090.PCT
Monument T98	Greene Robertson 1995:D20089.PCT
Monument T99	Greene Robertson 1995:D20091.PCT

Santa Barbara (El Paraíso)

Monument 2	Pablo Aguilera 1992:Figure 9
Monument 3	Pablo Aguilera 1992:Figure 10
Monument 8	Pablo Aguilera 1992:Figure 11
Monument 10	Pablo Aguilera 1992:Figure 3
Monument 11	Pablo Aguilera 1992:Figure 2

Santa Rosa Xlabpak

see Santa Rosa Xtampak

Santa Rosa Xtampak (Santa Rosa Xlabpak, Xlabpak, Xtampak)

Palace panel	Figure 25; see Chapter 3
Stela 1	Graña-Behrens 2005:36; Proskouriakoff 1950:Figure 86b
Stela 2	Graña-Behrens 2005:36; Proskouriakoff 1950:Figure 85a
Stela 3	Graña-Behrens 2005:37; Proskouriakoff 1950:Figure 85d
Stela 4	Graña-Behrens 2005:37; Proskouriakoff 1950:Figure 85c
Stela 5	Graña-Behrens 2005:38; Proskouriakoff 1950;Figure 80b
Stela 6	Graña-Behrens 2005:38
Stela 7	Graña-Behrens 2005:39; Proskouriakoff 1950:Figure 86a
Stela 8	Graña-Behrens 2005:39; Proskouriakoff 1950:Figure 85b

Sayil

Stela 1	Proskouriakoff 1950:162
Stela 2	Proskouriakoff 1950:Figure 90a
Stela 3	Proskouriakoff 1950:Figure 89a
Stela 4	Proskouriakoff 1950:Figure 81a
Stela 5	Proskouriakoff 1950:Figure 89b
Stela 6	Proskouriakoff 1950:Figure 80c
Stela 7	Proskouriakoff 1950:Figure 90b
Stela 9	Proskouriakoff 1950:Figure 90d
Structure 4B1	Figures 26, 27; see Chapter 3

Seibal (Ceibal)

Panel 1	CMHI 7:55
Stela 1	CMHI 7:13; J. Graham 1990:Figures 19, 20; Greene Robertson
	1995:D23785.PCT; Maler 1908a:Plate 3-1; Morley 1937-
	1938:V:Plate 18b; Proskouriakoff 1950:Figure 78b

Stela 2	CMHI 7:15-16; J. Graham 1990:Figure 23; Greene Robertson 1995:D23789.PCT; Maler 1908a:Plate 4; Proskouriakoff 1950:153
Stela 3	CMHI 7:17; J. Graham 1990:Figures 26-29; Greene Robertson 1995:D23790.PCT; Maler 1908a:Plate 3-2; Proskouriakoff
	1950:Figure 78a
Stela 4	<i>CMHI</i> 7:19-20; J. Graham 1990:Figure 36
Stela 5	CMHI 7:21; J. Graham 1990:Figure 7; Greene Robertson 1995:D23793.PCT; Maler 1908a:Plate 5-2; Proskouriakoff 1950:145
Stela 6	<i>CMHI</i> 7:23-24
Stela 7	CMHI 7:25; J. Graham 1990:Figure 6; Greene Robertson 1995:D23795.PCT; Maler 1908a:Plate 5-1; Proskouriakoff 1950:145; Spinden 1913:Plate 25-1
Stela 8	CMHI 7:27; J. Graham 1990:Figure 14; Greene Robertson 1995:D23797.PCT; Maler 1908a:Plates 7, 10-1; Proskouriakoff 1950:152
Stela 9	CMHI 7:29; J. Graham 1990:Figure 13; Greene Robertson 1995:D23798.PCT; Maler 1908a:Plates 1, 10-2; Proskouriakoff 1950:152
Stela 10	CMHI 7:31-32; J. Graham 1990:Figures 10, 11; Greene Robertson 1995:D23800.PCT; Maler 1908a:Plate 8; Proskouriakoff 1950:Figure 77; Spinden 1913:Plate 25-2
Stela 11	CMHI 7:33-34; J. Graham 1990:Figure 8; Greene Robertson 1995:D23802.PCT; Maler 1908a:Plate 9; Proskouriakoff 1950:152
Stela 12	CMHI 7:35; Morley 1937-1938:V:Plates 17d, 95d
Stela 13	CMHI 7:37; J. Graham 1990:Figures 30, 31; Greene Robertson 1995:D23804.PCT
Stela 14	CMHI 7:39; J. Graham 1990:Figure 22; Greene Robertson 1995:D23806.PCT
Stela 15	CMHI 7:41
Stela 16	CMHI 7:43
Stela 17	CMHI 7:45; J. Graham 1990:Figures 34, 35; Greene Robertson 1995:D23808.PCT
Stela 18	CMHI 7:47; J. Graham 1990:Figures 32, 33; Greene Robertson 1995:D23809.PCT
Stela 19	CMHI 7:49; J. Graham 1990:Figure 24; Greene Robertson 1995:D23810.PCT
Stela 20	CMHI 7:51; J. Graham 1990:Figure 21; Greene Robertson 1995:D23812.PCT
Stela 21	CMHI 7:53; J. Graham 1990:Figure 16; Greene Robertson 1995:D23813.PCT
Tablet 1	CMHI 7:57
Tablet 2	<i>CMHI</i> 7:58
Tablet 3	<i>CMHI</i> 7:58
Tablet 4	<i>CMHI</i> 7:59
Tablet 5	<i>CMHI</i> 7:59
Tablet 6	<i>CMHI</i> 7:60
Tablet 7	<i>CMHI</i> 7:60
Tablet 8	CMHI 7:61
Tablet 9	CMHI 7:61

Tamarindito

Stair 1 Stair 2 Stair 3 Stela 1 Stela 3 Stela 5	Greene Robertson 1995:D23770.PCT Greene Robertson 1995:D23771.PCT Greene Robertson 1995:D23772.PCT Greene Robertson 1995:D23768.PCT Greene Robertson 1995:D23766.PCT Houston 1993:Figure 3.5	
Tikal (Mutul)		
Altar 1	Jones and Satterthwaite 1982:Figure 6	
Altar 2	Jones and Satterthwaite 1982:Figure 8	
Altar 3	Jones and Satterthwaite 1982:Figure 57	
Altar 4	Jones and Satterthwaite 1982:Figure 58	
Altar 5	Jones and Satterthwaite 1982:Figure 23; Maler 1911:Plate 28;	
Altar 6	Proskouriakoff 1950:124	
Altar 7	Jones and Satterthwaite 1982:Figure 28	
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Xunantunich (Benque Viejo)

Altar 1	CMHI 2:127; Maler 1908a:Plate 18-2; Morley 1937-1938:V:Plate 17c
Stela 1	CMHI 2:122; Greene Robertson 1995:D20169.PCT; Maler
	1908a:Plate 19; Morley 1937-1938:V:Plate 17b;
	Proskouriakoff 1950:152
Stela 8	CMHI 2:124; Greene Robertson 1995:D20170.PCT
Stela 9	CMHI 2:125; Greene Robertson 1995:D20171.PCT
Structure 19 altar	Maler 1903:Plate 80-2
Structure 36 altar	Maler 1903:Plate 80-1

Yaxchilan (Menche)

Altar 1	Morley 1937-1938:V:Plate 26c
Altar 3	Morley 1937-1938:V:Plate 26a
Altar 4	Morley 1937-1938:V:Plate 106b
Altar 5	Morley 1937-1938:V:Plate 105a
Altar 7	Morley 1937-1938:V:Plate 106a
Altar 9	Morley 1937-1938:V:Plates 26b, 105b
Altar 10	Morley 1937-1938:V:Plate 105c
Altar 11	Morley 1937-1938:V:Plates 26d, 105d
Altar 13	Morley 1937-1938:V:Plate 105e
Altar 14	Morley 1937-1938:V:Plate 105f
Ball Court Marker	Greene Robertson 1995:D23906.PCT
Hieroglyphic Stair 1	
Step 1	СМНІ 3:143
Step 2	<i>CMHI</i> 3:145
Step 3	CMHI 3:147
Step 4	СМНІ 3:149
Step 5	<i>CMHI</i> 3:151

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Step 6
                      CMHI 3:153
Hieroglyphic Stair 2
       Step 1
                      CMHI 3:156
       Step 2
                      CMHI 3:156
       Step 3
                      CMHI 3:157
       Step 4
                      CMHI 3:157
       Step 5
                      CMHI 3:158
       Step 6
                      CMHI 3:159
                     Figure 39; see Chapter 3
       Step 7
       Step 8
                      CMHI 3:162
       Step 9
                      CMHI 3:163
       Step10
                      CMHI 3:163
       Step 11
                      CMHI 3:164
       Step 12
                      CMHI 3:164
       Step 13
                      CMHI 3:164
Hieroglyphic Stair 3
       Step 1 tread
                     CMHI 3:166
       Step 1 riser
                     CMHI 3:167
       Step 2
                      CMHI 3:168
       Step 3
                     CMHI 3:169
       Step 4
                     CMHI 3:170
       Step 5 tread
                     CMHI 3:171
       Step 5 riser
                      CMHI 3:172
       Step 6
                      CMHI 3:173
Hieroglyphic Stair 4
       Step 1
                     CMHI 3:175
       Step 3
                     CMHI 3:176
Hieroglyphic Stair 5
                     CMHI 3:179, 181
Lintel 1
                     CMHI 3:13; Greene Robertson 1995:D23838.PCT; Maler 1903:Plate
                             46; Proskouriakoff 1950:147
Lintel 2
                      CMHI 3:15; Greene Robertson 1995:D23839.PCT; Maler 1903:Plate
                            47; Proskouriakoff 1950:147
Lintel 3
                     CMHI 3:17; Greene Robertson 1995:D23840.PCT; Maler 1903:Plate
                             48; Proskouriakoff 1950:147
                      CMHI 3:19; Morley 1937-1938:V:Plate 110a; Proskouriakoff
Lintel 4
                             1950:134
Lintel 5
                     CMHI 3:21; Greene Robertson 1995:D23842.PCT; Maler 1903:Plate
                             49; Proskouriakoff 1950:147
Lintel 6
                     CMHI 3:23; Greene Robertson 1995:D23843.PCT; Maler 1903:Plate
                             50:Proskouriakoff 1950:147
                     CMHI 3:25; Greene Robertson 1995:D23844.PCT; Maler 1903:Plate
Lintel 7
                             51; Proskouriakoff 1950:147
Lintel 8
                     CMHI 3:27; Greene Robertson 1995:D23845.PCT; Maler 1903:Plate
                             52; Proskouriakoff 1950:147
                     CMHI 3:29; Maler 1903:Plate 53; Proskouriakoff 1950:146, 147
Lintel 9
                     CMHI 3:31; Maler 1903:Plate 54
Lintel 10
Lintel 12
                     CMHI 3:33; Morley 1937-1938:V:Plate 109a; Proskouriakoff
                             1950:147
                     CMHI 3:35; Greene Robertson 1995:D23847.PCT; Morley
Lintel 13
                            1937-1938:V:Plate 109b; Proskouriakoff 1950:147
Lintel 14
                     CMHI 3:37; Greene Robertson 1995:D23848.PCT; Maler 1903:Plate
                            55; Proskouriakoff 1950:147
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Lintel 15	CMHI 3:39; Greene Robertson 1995:D23849.PCT; Maudslay 1889- 1902:II:Plate 83; Proskouriakoff 1950:147
Lintel 16	CMHI 3:41; Greene Robertson 1995:D23851.PCT; Maudslay 1889- 1902:II:Plate 84; Proskouriakoff 1950:147
Lintel 17	CMHI 3:43; Greene Robertson 1995:D23852.PCT; Maudslay 1889- 1902:II:Plate 85; Proskouriakoff 1950:147
Lintel 18	<i>CMHI</i> 3:45; Morley 1937-1938:V:Plate 110b
Lintel 19	CMHI 3:133
Lintel 20	CMHI 3:47; Morley 1937-1938:V:Plate 112d
Lintel 21	CMHI 3:49; Maler 1903:Plate 56
Lintel 22	CMHI 3:51; Maler 1903:Plate 57
Lintel 23	CMHI 3:135, 136
Lintel 24	·
	CMHI 3:53; Greene Robertson 1995:D23855.PCT; Maler 1903:Plate 58; Maudslay 1889-1902:II:Plates 86, 87; Proskouriakoff 1950:147
Lintel 25	CMHI 3:55; Greene Robertson 1995:D23856.PCT; Maler 1903:Plate 58; Maudslay 1889-1902:II:Plates 86, 87; Proskouriakoff 1950:147
Lintel 26	<i>CMHI</i> 3:57, 139; Maler 1903:Plate 58; Maudslay 1889-1902:II:Plates 86, 87; Morley 1937-1938:V:Plate 110c; Proskouriakoff 1950:147
Lintel 27	<i>CMHI</i> 3:59; Morley 1937-1938:V:Plate 111a
Lintel 28	<i>CMHI</i> 3:61; Morley 1937-1938:V:Plate 111b
Lintel 29	<i>CMHI</i> 3:67; Morley 1937-1938:V:Plate 112a
Lintel 30	<i>CMHI</i> 3:69; Maler 1903:Plate 60; Morley 1937-1938:V:Plate 112b
Lintel 31	CMHI 3:71; Maler 1903:Plate 61; Morley 1937-1938:V:Plate 112c
Lintel 32	<i>CMHI</i> 3:73; Maler 1903:Plate 62; Morley 1937-1938:V:Plate 111d;
	Proskouriakoff 1950:147
Lintel 33	CMHI 3:75; Maler 1903:Plate 63; Morley 1937-1938:V:Plate 111c;
	Proskouriakoff 1950:147
Lintel 34	<i>CMHI</i> 3:77, 140; Morley 1937-1938:V:Plate 112e
Lintel 35	CMHI 3:79
Lintel 36	<i>CMHI</i> 3:81; Morley 1937-1938:V:Plate 113a; Proskouriakoff 1950:109, 147
Lintel 37	<i>CMHI</i> 3:83; Maler 1903:Plate 64
Lintel 38	<i>CMHI</i> 3:85; Maler 1903:Plate 65, 1; Proskouriakoff 1950:147
Lintel 39	<i>CMHI</i> 3:87; Maler 1903:Plate 65, 2; Proskouriakoff 1950:147
Lintel 40	<i>CMHI</i> 3:89; Maler 1903:Plate 65, 3; Proskouriakoff 1950:147
Lintel 41	<i>CMHI</i> 3:91; Greene Robertson 1995:D23861.PCT; Maler 1903:Plate 66;
	Morley 1937-1938:V:Plate 178B; Proskouriakoff 1950:147
Lintel 42	CMHI 3:93; Greene Robertson 1995:D23862.PCT; Maler 1903:Plate 66;
	Proskouriakoff 1950:147
Lintel 43	CMHI 3:95; Maler 1903:Plate 67; Proskouriakoff 1950:147
Lintel 44	<i>CMHI</i> 3:97; Maler 1903:Plate 68; Morley 1937-1938:V:Plate 114b;
	Proskouriakoff 1950:134, 137
Lintel 45	<i>CMHI</i> 3:99; Greene Robertson 1995:D23863.PCT; Maler 1903:Plate 68;
	Morley 1937-1938:V:Plate 114c; Proskouriakoff 1950:134, 137
Lintel 46	<i>CMHI</i> 3:101; Greene Robertson 1995:D23864.PCT; Maler 1903:Plate 68;
	Proskouriakoff 1950:134, 137
Lintel 47	CMHI 3:103; Morley 1937-1938:V:Plate 113c
Lintel 48	<i>CMHI</i> 3:105; Morley 1937-1938:V:Plate 113b; Proskouriakoff 1950:109,
	147
Lintel 49	<i>CMHI</i> 3:107; Morley 1937-1938:V:Plate 113d
Lintel 50	<i>CMHI</i> 3:109; Greene Robertson 1995:D23866.PCT; Morley 1937-
	1938:V:Plate 114a; Proskouriakoff 1950:147
Lintel 51	<i>CMHI</i> 3:111; Greene Robertson 1995:D23867.PCT; Morley 1937-
	1938:V:Plate 115c; Proskouriakoff 1950:147

Lintel 52	CMHI 3:113; Greene Robertson 1995:D23868.PCT; Morley 1937- 1938:V:Plate 115b; Proskouriakoff 1950:147
Lintel 53	CMHI 3:115; Greene Robertson 1995:D23869.PCT; Morley 1937- 1938:V:Plate 115a; Proskouriakoff 1950:147
Lintel 54	CMHI 3:117; Morley 1937-1938:V:Plates 115d, 178f; Proskouriakoff
	1950:147
Lintel 55	CMHI 3:119; Morley 1937-1938:V:Plate 178F.a; Proskouriakoff 1950:147
Lintel 56	<i>CMHI</i> 3:121
Lintel 57	CMHI 3:123; Greene Robertson 1995:D23870.PCT; Morley 1937- 1938:V:Plate 178F.c; Proskouriakoff 1950:147
Lintel 58	CMHI 3:125; Morley 1937-1938:V:Plate 178F.d; Proskouriakoff 1950:147
Lintel 59	<i>CMHI</i> 3:131; Morley 1937-1938:V:Plate 178G.b
Lintel 60	Greene Robertson 1995:D23871.PCT
Stela 1	Greene Robertson 1995:D23873.PCT; Maler 1903:Plate 69; Morley 1937- 1938:II:560-566; Proskouriakoff 1993:112, 162
Stela 2	Greene Robertson 1995:D23874.PCT; Maler 1903:Plate 72, 1;
0.1.0	Proskouriakoff 1950:118
Stela 3	Greene Robertson 1995:D23875.PCT; Morley 1937-1938:V:Plate 100c; Proskouriakoff 1950:146, Figure 67
Stela 4	Greene Robertson 1995:D23877.PCT; Maler 1903:Plate 70; Morley 1937- 1938:V:Plate 19h; Proskouriakoff 1950:146
Stela 5	Greene Robertson 1995:D23879.PCT; Morley 1937-1938:V;Plate 101a
Stela 6	Greene Robertson 1995:D23880.PCT; Maler 1903:Plate 71; Morley 1937- 1938:V:Plates 19a, 101d; Proskouriakoff 1950:118
Stela 7	Greene Robertson 1995:D23881.PCT; Proskouriakoff 1950:146
Stela 8	Morley 1937-1938:V:Plates 19i, 100b; Proskouriakoff 1950:134
Stela 9	Greene Robertson 1995:D23883.PCT; Maler 1903:Plate 72, 3; Proskouriakoff 1950:132, 134
Stela 10	Maler 1903:Plate 73; Morley 1937-1938:V:Plate 178H.b; Proskouriakoff 1950:146
Stela 11	Greene Robertson 1995:D23884.PCT; Maler 1903:Plates 74-75; Montgomery 2000:JM01600; Proskouriakoff 1950:146
Stela 12	Maler 1903:Plate 76; Morley 1937-1938:V:Plate 102c
Stela 13	Greene Robertson 1995:D23890.PCT; Maler 1903:Plate 72, 2; Proskouriakoff 1950:146
Stela 14	Morley 1937-1938:V:Plates 19b, 103b; Proskouriakoff 1950:109
Stela 15	Maler 1903:Plate 79, 1; Proskouriakoff 1950:132, 133
Stela 16	Morley 1937-1938:V:Plate 104c; Proskouriakoff 1950:146
Stela 17	Morley 1937-1938:V:Plate 178H.a; Proskouriakoff 1950:147
Stela 18	Greene Robertson 1995:D23893.PCT; Maler 1903:Plate 77, 1; Proskouriakoff 1950:146
Stela 19	Greene Robertson 1995:D23896.PCT; Maler 1903:Plate 77; Proskouriakoff 1950:132, 133
Stela 20	Greene Robertson 1995:D23897.PCT; Maler 1903:Plate 78; Proskouriakoff 1950:Figure 74
Stela 23	Greene Robertson 1995:D23898.PCT, D23899.PCT; Proskouriakoff 1950:132, 133
Stela 27	Morley 1937-1938:V:Plate 103c; Proskouriakoff 1950:109, Figure 39c
Stela 30	Proskouriakoff 1950:134

Structure 19 altar	Maler 1903:Plate 80, 2	
Structure 36 altar	Maler 1903:Plate 80, 1	
Structure 44		
altar	Maler 1903:Plate 79, 2	
Door 1 Step 1	Greene Robertson 1995:D23901.PCT	
Door 1 Step 2	Greene Robertson 1995:D23902.PCT	
Door 2 Step 3	Greene Robertson 1995:D23905.PCT	
Door 3 Step 1	Greene Robertson 1995:D23904.PCT	

Yaxcopoil

Stela 1	Mayer 1994b:Figure 1; Proskouriakoff 1950:Figure 88f
Stela 2	Mayer 1994b:Figures 2, 3; Proskouriakoff 1950:Figure 88e
columns	Mayer 1994b:Figures 6-11; Pablo Aguilera 1992:Figure 4;
	Proskouriakoff 1950:Figure 110d, e
door jambs	Mayer 1994b:Figures 12-14

Yaxha

Stela 1	Maler 1908a:Plate 15-1; Proskouriakoff 1950:107
Stela 2	CMHI field drawing; Grube 2000:Figure 197; Maler 1908a:Plate 15-2; Proskouriakoff 1950:107, 108; D. Schele 1998:6701
Stela 3	Greene Robertson 1995:D23691.PCT; Grube 2000:Figure 205; Morley 1937-1938:V:Plate 160a; Proskouriakoff 1950:107
Stela 4	CMHI field drawing; Grube 2000:Figure 198; Maler 1908a:Plate 16-1; Proskouriakoff 1950:107, 108; D. Schele 1998:6700
Stela 5	Greene Robertson 1995:D23692.PCT; Maler 1908a:Plate 16-2;
Stela 6	Proskouriakoff 1950:107, 108 see Appendix C
Stela 7	CMHI field drawing; Grube 2000:Figure 200; Proskouriakoff 1950:107
Stela 10	see Appendix C
Stela 11	Greene Robertson 1995:D23689.PCT; Grube 2000:Figure 199; Morley 1937-1938:V:Plate 161b; Proskouriakoff 1950:108; D. Schele 1998:7302
Stela 12	Morley 1937-1938:V:Plate 160d; Proskouriakoff 1950:107, 108
Stela 13	Greene Robertson 1995:D23693.PCT; Morley 1937-1938:V:Plates 49b, 160e; Proskouriakoff 1950:142
Stela 31	see Appendix C

Yokanal

see Ucanal

APPENDIX B THE PALEOPATHOLOGY OF SHORT STATURE

Faunal Remains from the Classical World

Introduction

The skeletal evidence for restricted stature from Egypt is a casualty of the time period during which it was collected. Most of the data presented below result from excavations at the turn of the twentieth century, when field methods sorely lacked precision. Although ancient Egypt is well known for the preservation of human remains, in the intervening century, much of that material has simply vanished. Furthermore, Weeks (1971:196-197) and Dasen (1993:16) note the paucity of published studies based on Egyptian faunal material. According to a relatively recent survey by Anne Watrous and Gary Richards,

Our examination of the Egyptian evidence reveals that the osteological remains of only 14 dwarfed individuals have been published. ... Our review of the available descriptions indicates that 2 individuals are achondroplastics (*sensu stricto*), 2 suffer from related conditions (?hypochondroplasia, pseudoachondroplasia), and the remaining 10 are either, or both, too incomplete or have not been sufficiently described [Watrous and Richards 1992:171; see also Figure 2 as well as Necropolis Tomb 2304 #12-5160 (Giza), below].

Thus, for all that is known about the role of dwarves in ancient Egyptian society (for example, Dasen 1993; Dawson 1927, 1938; Filer 1996:53-61; Johnston 1963; Kozma 2006; Sampsell 2001), what faunal evidence once existed is now almost completely unverifiable, untraceable, or unavailable. Paleopathology texts (such as Brothwell 1981; Brothwell and Sandison 1967; Ortner and Putschar 1985; Roberts and Manchester 1995; C. Wells 1964; Zimmerman and Kelley 1982) review the available cases but can include only limited archaeological contexts. I hope that this compilation of the current paleopathological data on limited-stature conditions in prehistory will fill a literature gap.

Predynastic and Protodynastic Egypt

Three examples of faunal remains exhibiting decreased stature predate the Dynastic period of Upper Egypt. Of these, the oldest is, in many ways, the most cryptic. (Dynastic dates come from http://guardians.net/hawass/chronology.htm.)

El-Mustagidda Cemetery 2200 / 3500 Grave 3510. It is unfortunate that the bones often identified as the earliest example of achondroplastic remains from Egypt have been lost. In the 1930s, Guy Brunton uncovered the skull and upper postcrania of a male in the cemetery at the site of El-Mustagidda (Mostagedda) in the Budari District of Upper Egypt and assigned it a Neolithic or Predynastic date of approximately 5,000 B.C. to 4,500 B.C. (Brunton 1937:42, Plate 10). E. W. A. Hughes Jones first described the remains, then in the Museum of the Royal College of Surgeons, as "the earliest and most peculiar example of an achondroplasia-like disease known to us" and even raised the possibility that the bones were parts of two different individuals (Hughes Jones 1932:569). According to Hughes Jones, the skull shows no pathology, and the radii and ulnae are proportionately reduced in size, "almost perfect miniatures,"

so "It can be definitely said that this is not an example of achondroplasia as we usually know it" (Hughes Jones 1932:569, 573).

In 1940, however, Adrien Bleyer (1940:307) cited this find as the earliest example of achondroplasia from Egypt, and 25 to 55 years later, authors such as C. Wells (1964:42), Sandison and Wells (1967:526-527), Zimmerman and Kelley (1982:40), Ortner and Putschar (1985:331), and Filer (1996:55) uncritically repeated this identification. While Brothwell (1967:432) concurs with Hughes Jones that the remains exhibit "a quite normal skull both in size and shape," he describes the radii and ulnae as "short and robust bones typical of achondroplasia" (see also Brothwell 1981:167-168; Brothwell and Powers 1968:177). According to Dasen (1993:17), "Wynne-Davies suggests that the man might have been affected by pseudo-achondroplasia or another short-limbed condition, such as multiple epiphyseal dysplasia" (Figure 2; Dasen 1993:320, Figure 2.1; Kozma 2006:305; Watrous and Richards 1992:171; Weeks 1971:197-198). As the present whereabouts of the bones are unknown, the diagnosis cannot be confirmed.

Unfortunately unprovenienced are at least one femur and two tibiae of possible Predynastic date, now in the University of Cambridge Laboratory of Physical Anthropology. The short shafts but relatively large articular ends are typical of achondroplasia (Brothwell 1967:432; Brothwell and Powers 1968:177; Dasen 1993:17, 320; Watrous and Richards 1992:171).

Kom el Ahmar. Just around the turn of the twentieth century, James Quibell and Frederick Green found "the skeleton of a dwarf" in a tomb dated to the archaic or Protodynastic period (before 3,000 B.C.) at the site of Kom el Ahmar (Hierakonpolis, Nekhen), just over 40 miles south of Thebes (Luxor), on the west bank of the Nile in Upper Egypt (Quibell and Green 1902:26). As Weeks (1971:196-197, 199-200) and Dasen (1993:321) note, data from neither field nor faunal analysis are available, so the diagnosis can only be taken on faith (see also Dawson 1927:319, 1938:186).

Although none of the three cases of short stature predating the Egyptian Dynastic period are definitive, the evidence nonetheless points to the antiquity of this condition and the inclusion of individuals thus affected in cemetery and tomb burials.

Early Dynastic Egypt

Evidence for stature-reducing conditions during the First Dynasty comes from two sites in Upper Egypt: Abydos and Saqqara. The major site of Abydos (or Abedju or El'Araba el Madfuna), on the west bank of the Nile in the northern part of Upper Egypt, is unique in having three separate pairs of burials that possibly belong to dwarves. In all three cases, one burial is found in each of two chambers of a royal tomb complex. The find from Saqqara, though also unique for being well preserved and documented, has received scant analysis. An unprovenienced find, however, has been analyzed as a case of a nonachondroplastic form of disproportionate dwarfism.

King Djer Tomb Chambers 61 and 96 (Abydos). King Djer (or Zer) was an early ruler of the First Dynasty (from approximately 3,000 B.C. to 2,650 B.C.) at Abydos. In the late nineteenth century, while excavating the tomb of King Djer, Émile Amélineau came across two short coffins, one in Chamber 61 measuring 82 cm long and one in Chamber 96 measuring 114 cm exteriorly and 104 cm interiorly, each containing a complete skeleton (Amélineau 1983 [1899]:64, 66; Dasen 1993:20). Georges Papillault examined the skeleton from Chamber 96 and "concluded that the dwarf was probably achondroplastic" (Dasen 1993:19); this was confirmed by the presence in the chamber of a stela depicting a dwarf. Amélineau suggested that the bones in Chamber 61 might be those of a pituitary or proportionate dwarf, though there seems to be no evidence that they are not those of a child (Dasen 1993:20, 320-321). The present whereabouts of both sets of remains is unknown (see also Krogman 1949:54-55; C. Wells 1964:42).

Also from the First Dynasty tomb complex of King Djer at Abydos came a single humerus, illustrated by Petrie (1901:24, Plate 6a) and described as achondroplastic by

Dawson (1927:316, 319, 1938:186; see also Bleyer 1940:307; Brothwell 1967:432; Brothwell and Powers 1968:177; Dasen 1993:17, 321; Filer 1996:55; Ortner and Putschar 1985:331-332; Weeks 1971:196-197, 199).

King Semerkhet Tomb Chambers L (BMNH AF.11.4 / 427) and M (BMNH AF.11.4 / 462) (Abydos). Around the turn of the twentieth century, Flinders Petrie unearthed a second pair of short-statured remains from Abydos, in the small chambers outside the wall surrounding the tomb of King Semerkhet (Mersekha, Mersekha-Semempses), who ruled Egypt late in the First Dynasty (between 3,000 B.C. and 2,650 B.C.; Petrie 1900:13; see also Dawson 1927:316, 319, 1938:186; Randall-MacIver 1901:4, Plate VII). The more complete skeleton, consisting of a skull and long bones typical of achondroplasia, was located in Chamber I (Brothwell 1967:432-433, Figure 8a; Brothwell and Powers 1968:177). The remains, now in the British Museum of Natural History, comprise the skull, left humerus, right femur, and both tibiae and have been analyzed as those of a young adult (though stature was not reconstructed; Ortner and Putschar 1985:331-332, Figures 518-521). Looters at Abydos had scattered most of the grave stelae once associated with the burials, but in Chamber M. a stela portraying a dwarf was excavated with long bones that also bore evidence of achondroplasia (Petrie 1900:13; see also Barnes 1994:136; Dasen 1993:17, 321; Filer 1996:55; Kozma 2006:305; Weeks 1971:199).

King Qa'a Tomb Chambers 5 and 17 (Abydos). Flinders Petrie located the third pair of short skeletons from Early Dynastic Abydos during his excavation of the tomb complex of King Qa'a, a late monarch of the First Dynasty (approximately 3,000 B.C. to 2,650 B.C.). Apparently, the only surviving record is Petrie's note on the site plan of a "dwarf" in Chamber 5 and "dwarf?" in Chamber 17 (Petrie 1900:Plate LX). As the present site of the skeletal material is unknown, the doubt expressed must accompany this identification (Dasen 1993:321).

King Uadji Tomb 3504 Subsidiary Grave 58 (Saqqara). About fifteen miles south of Giza, on the west bank of the Nile in Lower Egypt, is the site of Saqqara (Sakkara). The size and wealth of the burial monument for Saqqara's King Uadji (or Wadj) attracted First Dynasty tomb robbers; burials outside the walls enclosing the tomb, however, were left undisturbed until the 1950s. One of these, dated to roughly between 3,000 B.C. and 2,650 B.C., held a wooden coffin and four pottery vessels once containing wine, bread, and cheese (Weeks 1971:199). Although first described by its excavator as a "male adult with arms and legs deformed by rickets" (Emery 1954:36), the skeleton is one of the few for which a photographic record (Emery 1954:Plate 25, 1961:Plate 23) as well as the bones themselves (in the Cairo University Department of Anatomy) exist, allowing its diagnosis as a case of achondroplasia (Figure 3). It is unfortunate that this example has not received analysis comparable to those from America and Europe (Dasen 1993:17, 320, Plate 2.2; Kozma 2006:305, Figure 2; Weeks 1971:199).

MacIvor Collection BMNH AF 11.3 / 75. Donald Ortner and Walter Putschar examined an isolated, unprovenienced pair of humeri, in the MacIvor Collection of the British Museum of Natural History, described as from Early Dynastic Egypt (3,000 B.C. to 2,650 B.C.). Probably from a young adult, the bones show evidence of mucopolysaccharidosis, either Hunter's type or Morquio-Brailsford's type. Mucopolysaccharidosis affects primarily the torso, resulting in diminished stature, kyphosis (hunchback), and other deformations (Nemours 2003-2006; Ortner and Putschar 1985:335-337, Figures 526-527; see also Aufderheide and Rodríguez-Martín 1998:369; Bailey 1973:357-358; Dasen 1993:20, 322).

Of the nine proposed cases of dwarfism from Early Dynastic Egypt, four are represented by fragmentary remains, one of which is unprovenienced and one of which

can no longer be located. Of the five relatively complete cases, the only one that can be confirmed, as the others have disappeared, has not been subjected to modern examination (or the results have not been published).

Old Kingdom Egypt

Short-statured remains fare somewhat better for the Middle Kingdom than for the Early Dynastic period. The Third, Fifth, and Sixth Dynasties are represented, from the sites of Giza in northern Egypt, Beni Hasan in central Egypt, and Abydos in the south, by both proportionate and various forms of disproportionate forms of dwarfism.

Third Dynasty Skull Collection. Dorothy Smith, in 1912, published an unprovenienced collection of eight adult female skulls (E21, E420, E506, E579, E666, E862, E869, E919) and one adult male skull (E487) dated to the Third Dynasty (about 2,650 B.C. to 2,575 B.C.). As their present locality is not known, they are presumably cases of hypopituitarism or proportionate dwarfism (Dasen 1993:322; Sandison and Wells 1967:526; H. Smith 1912; Weeks 1971:200-201).

Fifth Dynasty Abydos. According to Dawson, as of 1927, "At Abydos also, the skeleton of a dwarf dating from the Fifth Dynasty was found, and this is now in the Museum the Royal College of Surgeons in London" (Dawson 1927:319, 1938:186; the Fifth Dynasty is in the Old Kingdom period, roughly 2,465 B.C. to 2,325 B.C.). The remains have since been lost (Dasen 1993:322; Weeks 1971:197, 201).

Necropolis Tomb 2304 #12-5160 (Giza). In 1992, Watrous and Richards described a skeleton in the Lowie Museum of Anthropology at the University of California, Berkeley that had originally been recovered between 1911 and 1912 by G. A. Reisner from the Giza Necropolis (Lower Egypt). This is the second such find in the Lowie collections (see Augustine Site LMA 12-6670, California, below). The relatively complete skeleton was first excavated from a subsidiary shaft in the Western Cemetery, which is associated with the pyramid of Khufu and dates to the Fifth or Sixth Dynasty (about 2,465 B.C. to 2,150 B.C.). The skeleton is male and age at death is approximately 45 years (Gary D. Richards, personal communication June 2006). Watrous and Richards (1992) identify its condition as hypochondroplasia or pseudoachondroplasia. Hypochondroplasia appears as though it were a milder form of achondroplasia, with a less distinctive shape of head and hands and a more variable stature; 115 cm to 152 cm. Pseudoachondroplasia is rhizomelic form of disproportionate dwarfism, affecting the 'root' parts of the limbs such as the hips and shoulders, but not the skull. Stature can be more dramatically restricted than in cases of achondroplasia and more variable than hypochondroplasia: 90 cm to 140 cm (Figure 2; Adelson 2005a:288; Bailey 1973:83, 117-123; Langer et al. 1993:780; Nemours 2003-2006; Rimoin 1975:13-15, 53; Sillence et al. 1979:835, 838-839; Wiedemann et al. 1992:260, 268; Wynne-Davies and Fairbank 1976:24). Like the Early Dynastic coffin burial from Saggara, the skeleton in Giza Necropolis Tomb #12-5160 warrants more study.

Pr N 'nh Mastaba (Giza). Excavations in the Western Cemetery at the major site of Giza (at the point of the Nile Delta, on the west bank in Lower Egypt), under the direction of Zahi Hawass, discovered a mudbrick tomb, or mastaba, in 1990. The mastaba is dated to the Fourth to Sixth Dynasty of the Old Kingdom (circa 2,575 B.C. to 2,150 B.C.). Inscriptions associated with the burial in one of three shafts atop the mastaba read 'Pr N 'nh' or 'Pr-n(j)-'nh(w)'; the name of the grave's occupant is variously reconstructed to be Perenankh, Perniankh, Pereniankh, or Perniankhu. The disarticulated skeletal remains, consisting of the skull, most long bones, ribs, vertebrae, scapulae, and pelvis, were analyzed by Hussien et al. (1990:12), who conclude they belong to "a middle-aged, short-limbed, rhizomelic dwarf, with a disproportionately large skull – a picture of achondroplasia. ... The muscular insertions on the long bones and the mandible are accentuated." Height was not estimated. A basalt statue found in

a niche on the north side of the mastaba, inscribed with Pr N 'nh's name, also displays the classic Egyptian depiction of achondroplasia.

Interestingly, the mastaba of Pr N 'nh is not far from the tomb of the dwarf Seneb, well known from his famous statue, though his remains have never been found. Hawass proposes that this proximity, together with associated inscriptions, might indicate a family relationship between the two short individuals, perhaps by marriage (Hawass 1991:157-158, 160, 2004; see also Filer 1996:55-56; Kozma 2006:307; Sampsell 2001:67. This male disproportionate dwarf, Seneb, should not be confused with a proportionate female dwarf named Senb, known from the site of Beni Hasan, about 150 miles south of Giza and on the opposite bank of the Nile, described below).

Ipi Tomb 481 (Beni Hasan). The site of Beni Hasan (variations include Beni Hassan and Bani Hasan) is on the east bank of the Nile just about at the division between Upper and Lower Egypt. Like those at Abydos, investigations at Beni Hasan yielded a pair of burials of limited stature, though not contemporaneous. In 1907, Garstang described a tomb, dated toward the close of the Sixth Dynasty (circa 2,325 B.C. to 2,150 B.C.), decorated with a scene of its occupant, Ipi (or Apa), with a dwarf. In one of the tomb's shafts was a male skeleton with four small alabaster vases. Garstang's description of the bones must suffice to diagnose some type of short-limbed dysplasia, as their present site is unknown (Dasen 1993:19, 322; Dawson 1927:319, 1938:186; Garstang 2002 [1907]:36-43, Figure 28; Weeks 1971:196-197, 201).

In spite of several examples without provenience and two others having been lost, two relatively recent finds, one rediscovered in a museum collection, have been examined from the Old Kingdom period. One is a case of hypochondroplasia or pseudoachondroplasia, the details of which will hopefully be forthcoming; the second example, a case of achondroplasia, is that of Perenankh, titled "the dancing dwarf" and "one who delights his lord every day, the king's dwarf Pr-n(j)-'nh(w) of the Great Palace" (Hawass 1991:160, 2004). Perenankk thus takes his place with another well-known, perhaps related, dwarf serving the Egyptian court (Hawass 1991:157-158, 2004).

Middle Kingdom and New Kingdom Egypt

Evidence of stature-decreasing conditions from Egypt's more recent history varies more widely than evidence from earlier periods. Two Middle Kingdom and two New Kingdom instances are known, including a female pituitary dwarf named Senb, a male less than a meter tall, an achondroplastic skull from a mass grave, and an infant victim of a rare bone disease.

Senb Tomb 487 (Beni Hasan). According to an excavator of Beni Hasan, "A tomb near to this [No. 481, above], but of Middle Empire date, No. 487, contained the remains of an exceptionally small but well-formed woman named Senb. Her height was only about 140 cm" (Garstang 2002 [1907]:41). Elsewhere, Garstang speculates "robbers may have neglected this coffin owning to its small size, which made it appear like that of a child; for the body of the lady Senb measured only 145 cm" (Garstang 2002 [1907]:113). Buried with Senb, who apparently was a proportionate or pituitary dwarf, was jewelry of gold, silver, electrum, carnelian, and jasper; wooden toiletry boxes inlaid with ebony and ivory; cosmetic equipment including a mirror, tools, and makeup containers of alabaster and faience; as well as ivory hairpins and a braided hairpiece (Garstang 2002 [1907]:113, 114, 226). The Middle Kingdom period covers from approximately 2,040 B.C. to 1,640 B.C. (See also Dasen 1993:20, 322; Filer 1996:53.)

Ankhef Tomb 6 (Asyut). At the site of Asyut, on the west bank of the Nile in northern Upper Egypt, Émile Chassinat and Charles Palanque discovered a reused coffin within the tomb of one Ankhef. Inside the Middle Kingdom (2,040 B.C. to 1,640 B.C.) coffin, which measured 92 cm long, was the partially disintegrated skeleton of a male. The field description of the bones, which is consistent with a case of achondroplasia,

must be relied upon, as the bones' location is not known (Chassinat and Palanque 1911:14; Dasen 1993:19, 322).

Tuthmosis IV Temple Tomb (Thebes). At the major Upper Egypt site of Thebes (or Luxor), on the Nile's east bank, is the temple and tomb complex of Tuthmosis (Thotmes, Tahutmes) IV, dating to the Eighteenth Dynasty of the New Kingdom period (about 1,550 B.C. to 1,307 B.C.). When Flinders Petrie excavated below the temple,

The upper passage and chamber was closely filled with at least two layers of bodies, over eighty being packed into it. ... It seems probable that this was an older and plundered tomb, used as a common burying-place – perhaps for the workmen – during the reign of Tahutmes IV, or possibly Amenhotep II [Petrie 1897:8].

In the mass grave was the skull of a female aged 20 to 25 years at death.

Not long after being found, the skull was deposited in the Royal College of Surgeons and studied by at least three researchers. One concluded, "I believe ... fairly definitely that the skull is that of a cretin and not the skull of an achondroplasiac" (Seligmann 1912:17, 18, Plate B), while another discounted the evidence for cretinism in favor of that for achondroplasia (Keith 1913:189, 195-200, Figures 7-11). As drawings and photographs are all that remain of the skull, the question cannot be decided; most researchers agree with a diagnosis of achondroplasia but note the skull's ambiguous morphology (Alexandersen 1967:555; Barnes 1994:136; Brothwell 1967:433, 1981:167-168; Brothwell and Powers 1968:177-178; Dasen 1993:17, 323; Filer 1996:56; Ortner and Putschar 1985:331; Sandison and Wells 1967:521-522; Sigerist 1951:46; Weeks 1971:202, 203; Williams 1929:11).

Speos Artemidos BM 41603. Just south of Beni Hasan, on the east bank of the Nile, is the New Kingdom site of Speos Artemidos. In 1907, Garstang recorded a Twenty-first Dynasty cartonnage case containing a "mummified monkey" (2002 [1907]:204, Figure 219; the Twenty-first Dynasty covers roughly from 1,070 B.C. to 945 B.C.). More recent analysis of the 73-cm-long coffin, during the cataloguing of Egyptian artifacts in the British Museum, revealed "the disorganized bones of an infant (sex uncertain) who had suffered from a rare disorder of the bone called osteogenesis imperfecta" (Dawson and Gray 1968:14). The fetal type of this condition causes bone formation to fail, and so is fatal at birth or shortly thereafter (Aufderheide and Rodríguez-Martín 1998:365-366; Dasen 1993:19, 323; Ortner and Putschar 1985:338; Zimmerman and Kelley 1982:41).

Apparently, the use of coffins preserved the disparate occurrences of dwarfism during the Middle and New Kingdoms. The small size of Senb's coffin may have saved her collection of items for personal adornment from being plundered, while only the skull of a woman of unusual form survived mass burial. It is unfortunate that more information is not available on the skeleton in a reused coffin within Ankhef's tomb, as this man (or boy) must have been less than a meter tall. Finally, an even shorter coffin in the British Museum likely still contains the partially formed bones of an infant who died 3,000 years ago.

Greece

Gouvalari Tomb 7 (Peloponnesus). The site of Gouvalari, located on the southwest coast of the Greek Island of Peloponnesus, in the area of Pylos, is the source of the only known faunal evidence for reduced stature from this part of the Mediterranean.

The skeleton, which dates approximately 35 centuries [ago], belonged to a woman who lived in the sixteenth century B.C. and died between 35-40 years [old]. The stature of this woman in life was estimated to have been 138.68 cm. Clavicles were not found and since the humeri were found positioned abnormally in front of the chest, the possibility of this woman having cleidocranial dysplasia was entertained [Bartsocas 1982:11; see also Dasen 1993:19-20, 323; Grmek 1983:111].

Also called dysostosis cleidocranialis or cleidocranial dysostosis, this is a congenital disorder of the development of the cranial vault and clavicles and, to a lesser extent, pelvis and femora (Ortner and Putschar 1985:338-340; see Löddeköpinge Churchyard, Sweden, below). According to Aufderheide and Rodríguez-Martín (1998:72), "adult stature is often slightly reduced, but dwarfism is very uncommon."

Summary

Viewed from the perspective of the archaeological evidence for the lives of pathologically short individuals, Egyptian culture was remarkably homogeneous throughout the dynasties and along the length of the Nile, from the Neolithic cemetery of El-Mustagidda to a Twenty-first Dynasty coffin at Speos Artemidos, as well as from Giza, on the Nile Delta, to Kom el Ahmar, not far from the Nubian border. Though Classical paleopathological studies lag far behind epigraphic and iconographic studies, they reinforce the interpretation of dwarves participating fully in ancient Egyptian society, both in this world and in their expectations of the afterlife to come.

Faunal Remains from the Old World

Introduction

Unlike the relatively consistent evidence from Egypt, European cases of pathologically short stature are widely distributed in both time and space, from the Italian Paleolithic to historic periods, from Sweden in the north to the southern tip of Italy, as well as from Serbia in Eastern Europe to western England. Faunal remains are more thoroughly studied than those from the Classical World as well as better preserved and provenienced than those from the New World. Males and females are equally represented, ranging in age from adolescent to the sixth decade of life; young adulthood is the most common age at death. Achondroplasia is the most frequent identification, though several other forms of disproportionate, stature-limiting conditions are also found. Reconstructions of height vary from 100 cm to 138.5 cm.

Western Europe

By far the oldest case of diminished stature in Western Europe comes from an Upper Paleolithic site on Italy's southern extent. Italy's northernmost border is the source of one of the most recent examples, possibly as late as the A.D. fourteenth century. While most are examples of achondroplasia (from Netherlands, Belgium, France, and Italy), other forms of disproportionate dwarfism are also represented by unusually well preserved faunal evidence (from Switzerland and Italy). The affected individuals range in age from a young man to a woman about 60 years old.

Riparo del Romito 2 (Italy). Located in the northern Calabria region of southwestern Italy is the site of Riparo del Romito, near Papasidero (Cosenza). This rockshelter, dating to the late Upper Paleolithic (11,150 yBP \pm 150 years), contained the double burial, beneath undisturbed Epi-Gravettian levels, of a small but unexceptional older adult female and an adolescent, very likely male. Consisting of skull, long bones, and patellae, the male's remains yield an age of 17 \pm 2 years at death and a stature of

100 cm to 130 cm. The grave also included two large horn fragments, grave goods typical of the late Pleistocene in Italy (Frayer et al. 1987:60, 1988:550).

The adolescent male was apparently affected by a type of disproportionate dwarfism called acromesomelic dysplasia (Frayer et al. 1987, 1988). Whereas achondroplasia reduces the length of the proximal part of the limbs, resulting in short humeri and femora, acromesomelic dysplasia reduces the length of the medial and distal segments, resulting in short radii, ulnae, tibiae, and fibulae (Frayer et al. 1988:551, 561. It is sometimes classified as chondroectodermal or Ellis-van Creveld dysplasia; see Jarrow Monastery JA 67 NG 2, below). There is some evidence that the two occupants of the shallow, oval burial pit might have been related, as this stature-restricting syndrome is very rare and inheritance is recessive (Adelson 2005a:289; Aufderheide and Rodríguez-Martín 1998:362; Bailey 1973:198, 208, 215; Frayer et al. 1988:549, 563; Nemours 2003-2006; Sillence et al. 1979:834-835).

According to Frayer et al., this very short but otherwise healthy member of a Paleolithic society would have had difficulty both hunting and walking long distances, so "he must have been supported by members of his social group." When he died, he was "accorded special funereal treatment" by being interred in a cave, containing four other graves and decorated with parietal art, that must have been "an important social and/or ritual centre." Furthermore, "this burial is an important case of care and affection towards a handicapped member in Upper Paleolithic society" (Frayer et al. 1987:61-62, 1988:563-564; see also Adelson 2005b:118-121; Aufderheide and Rodríguez-Martín 1998:362; Roberts and Manchester 1995:34).

Ernes Cairn (France). From a burial chamber within a cairn at the site of Ernes, near Caen in northwestern France, was excavated the nearly complete remains of a young adult identified by Louis Bortuzzo as characterized by achondroplasia. For an interment dating to the middle Neolithic (3,950 B.C. to 3,190 B.C.), it was well preserved, with the exception of the cranium. Gender is not determinable; height is estimated to be around 100 cm (Bortuzzo 1992, 1995:55-56, 60). Bortuzzo points to this tiny individual's inclusion in the cairn as evidence of his or her acceptance by the community (Bortuzzo 1995:61; see also Aufderheide and Rodríguez-Martín 1998:360).

Geneva (Switzerland). Kaufman, Lagier, and Baud analyzed the skeleton of a female about 60 years old at death from a site dating to the A.D. sixth century near Geneva, southwestern Switzerland. Its features suggest dyschondrosteosis, one form of disproportionate dwarfism characterized by shortened radii and ulnae. Though height is not dramatically reduced, females are more affected than males. The stature of individuals with this condition does not generally exceed 150 cm (cited by Aufderheide and Rodríguez-Martín 1998:362; see also Sillence et al. 1979:835).

Oosterbeintum Terp (Netherlands). Excavation of an early medieval mound at Oosterbeintum, in Friesland, the northern Netherlands, yielded a skeleton, complete but for the cranium and pelvis. Although gender cannot be identified, age at death is 25 to 35 years and estimated stature is 124 cm to 128 cm. According to H. T. Uytterschaut, faunal morphology is consistent with achondroplasia and "is well developed, which indicates a normal muscle activity" (Uytterschaut 1990:23).

Coxyde Necropolis (Belgium). South of the Netherlands, at the site of Coxyde (Koksijde), on Belgium's southwestern coast, is a necropolis from the Frankish period (roughly A.D. 400 to A.D. 900). Although the achondroplastic skeleton of an adult was well preserved and thoroughly measured, Susanne (1970) declines to reconstruct gender, age at death, or height. As in other examples, musculature is well developed (Susanne 1970:4, 66; cited by Aufderheide and Rodríguez-Martín 1998:360; Brothwell 1967:433; Brothwell and Powers 1968:178; Gladykowska-Rzeczycka 1980:73; Larje 1985:260).

Cividale del Friuli Necropolis (Italy). Gaspare Baggieri (2000a, 2000b) reports on a double grave from the necropolis of Cividale del Friuli, on Italy's northeastern border. The interment, of a female and a male, dates to the Late Medieval or pre-Renaissance period (from the A.D. twelfth to the fourteenth centuries). The man, aged between 25 and 40 years at death, was affected by achondroplasia with some unusual features of the tibiae and fibulae. Stature, measured in situ, is $120 \text{ cm} \pm 5 \text{ cm}$. "The fact that he was buried in the prone position, a very singular ritual in the community where he lived, suggests that he was also considered unique during his lifetime" (Baggieri 2000b:11; see also Moundville M1889 and M2856, Alabama, below).

In some ways, the earliest case of achondroplasia from Europe, indeed from any archaeological site, is the most revealing, as it clearly indicates the acceptance of and support for a most disabled individual by a social group. Later evidence from this part of Europe, of active persons with intentional burials (though a face-down position might suggest discrimination), strengthens this interpretation.

England

Faunal evidence for stature-limiting conditions is known from at least four sites from across England, dating from possibly as early as the Neolithic through Iron Age, Roman, and Anglo-Saxon times to the Middle Ages. Both proportionate and disproportionate types of dwarfism are represented. Three of the instances are of young adult women, though they are from differing time periods and widely separated parts of England.

Brinton's Skeleton. An occurrence of achondroplasia known as 'Brinton's Skeleton' from Neolithic Great Britain is said by J. Caffey to date to over 7,000 yBP (cited by Johnston 1963:704; I have had no success in locating this source. Gladykowska-Rzeczycka [1980:72] quotes Johnston [1963], while Larje [1985:260] cites Gladykowska-Rzeczycka [1980]).

Dorchester. A site southeast of Dorchester, in southern England, yielded the nearly complete skeleton of a young adult female with a reconstructed stature of 130 cm. The interment dates to the late Iron Age/Romano-British period. Analyzed by Juliet Rogers (1986:6-7), this young woman was probably affected by the Langer Type of mesomelic dwarfism. Unlike skeletons affected by achondroplasia, in which the proximal portions of the long bones are reduced in length, Langer's dwarfism radically shortens the medial segments of the radii, ulnae, tibiae, fibulae, and mandible (see also Aufderheide and Rodríguez-Martín 1998:362; Bailey 1973:265; Sillence et al. 1979:834; Wiedemann et al. 1992:204).

Gloucester Roman Cemetery No. 557. A proportionate form of dwarfism most likely affected the female skeleton, about 21 to 22 years old at death, interred in a Roman cemetery in Gloucester, southwestern England. While other female burials average 153 cm in height, this young woman's height is reconstructed from her femur to be 131 cm to 132 cm, though the bones were in proportion and, except for poor muscle development, unexceptional. According to Charlotte Roberts (1987:1659), pituitary dwarfism is the most likely cause (see also Aufderheide and Rodríguez-Martín 1998:329).

Jarrow Monastery JA 67 NG 2. Calvin Wells (1979) identifies an example of dwarfism from the River Tyne region on England's northeastern coast: the Anglo-Saxon burial ground of Jarrow Monastery, consecrated in A.D. 685. An interment there yielded a female skeleton, aged 24 to 28 years old at death and 132 cm in height. Although the bones are poorly preserved, they suggest a type of acromesomelic dysplasia, a disproportionate dwarfism that affects the medial and distal limb segments (sometimes also classified as chondroectodermal or Ellis-van Creveld dysplasia; see Riparo del Romito 2, Italy, above, as well as Adelson 2005a:289; Aufderheide and Rodríguez-Martín

1998:362; Bailey 1973:198, 215; Nemours 2003-2006; Sillence et al. 1979:834-835). According to C. Wells (1979:63), "the muscle markings on her bones ... are well developed and show that she must have been fairly strong."

London General Post Office. Srboljub Zivanovic (1982:87-88, 126) illustrates two right humeri, from a medieval Anglo-Saxon graveyard on the site of London's old General Post Office, which he identifies as achondroplastic. No other information is offered, however, nor have I found supporting documentation for these alleged cases.

Norwich. A. J. Stirland (1994:25-26) reports on the skeleton of a male, likely in his 30s at death, from a medieval site in Norwich, eastern England. While the humerus, ribs, and skull are normal, the femora and tibiae are not, which suggests a rare, nonachondroplastic form of disproportionate dwarfism called metaphyseal chondrodysplasia (or metaphyseal dysostosis), a group of hereditary disorders of deficient ossification. No reconstruction of stature is given, but individuals characterized by these disorders rarely exceed 150 cm in height. Several types of metaphyseal chondrodysplasias are known (Aufderheide and Rodríguez-Martín 1998:362; Bailey 1973:270-271; Marshall 1977:141; Ortner and Putschar 1985:343; Sillence et al. 1979:835).

The dwarfed faunal remains from Britain show a wide variety of short-stature conditions: proportionate or pituitary dwarfism, shortened distal and medial limb segments (acromesomelic or chondroectodermal dysplasia), shortened medial limb segments (mesomelic dwarfism), shortened proximal limb segments (achondroplasia), and metaphyseal chondrodysplasia. The stature of the cases of the first three types of dwarfism is remarkably consistent: between 130 cm and 132 cm.

Eastern Europe

Two finds from Poland, to the north, and one from Serbia, to the south, constitute the evidence for short stature in prehistoric Eastern Europe. Both proportionate and disproportionate types of dwarfism are present, dating from the A.D. second or third to the A.D. fifteenth centuries, and all are cases of adults, both male and female.

Bagicz (Poland). In 1899, H. Schumann (cited by Gladykowska-Rzeczycka 1980:73) published the description of a burial from the site of Bagicz, near Kolobrzeg, in northwestern Poland on the Baltic Sea. Dating to the A.D. second to third centuries, the skeleton is that of an adult female with a reconstructed statue of about 138.5 cm, identified as a case of pituitary or proportionate dwarfism (also mentioned by Larje 1985:260; Roberts and Manchester 1995:34).

Legnica Castle Grave 3 (Poland). In southwestern Poland, salvage excavations at the Castle of Legnica (dating to the A.D. eleventh and twelfth centuries) discovered faunal material, including two adult ulnae and one left radius, morphologically consistent with achondroplasia. Judyta Gladykowska-Rzeczycka (1980:71) reconstructs a stature of about 120 cm (also mentioned by Aufderheide and Rodríguez-Martín 1998:360; Frayer et al. 1988:550; Larje 1985:260; Roberts and Manchester 1995:34).

Ludos-Csurgó (Serbia). Gyula Farkas and Imre Lengyel (1971) report a well-preserved skeleton from the A.D. fifteenth-century site of Ludos-Csurgó, near Subotica, on (then) Yugoslavia's northeastern border (now Serbia). The individual, a male probably around age 67 years at death, had short limbs, both proximally and distally, and multiple exostoses (bony outgrowths), suggesting exostosis multiplex or chondrodystrophia hyperplastica. This condition is characterized by lesions at the ends of long bones, in this case interfering with growth sufficiently to produce a height of 122.8 cm (Aufderheide and Rodríguez-Martín 1998:361; Farkas and Lengyel 1971:207;

Ortner and Putschar 1985:373; also cited by Frayer et al. 1988:550; Hoffman 1976:88; Larje 1985:260-261; Zimmerman and Kelley 1982:38-39).

These Eastern European cases demonstrate persons attaining adulthood though only $120~\rm cm$ tall, including one man, not much taller, who lived nearly $70~\rm years$.

Sweden

A funereal tradition in southern Sweden, well established by the A.D. ninth to eleventh centuries, has produced four cases of disproportionate dwarfism, including achondroplasia and a rare, inherited condition. Though preservation is less than ideal, both male and female adults have been found.

Skämsta Graves 33124 and 41850 (Sweden). Just north of Uppsala, on Sweden's eastern coast, at the site of Skämsta, a group of six burials dating to between A.D. 550 and A.D. 1050 were excavated. Among them, interred only 1 m apart, were a female (33124) and a male (41850), both 40 to 50 years old at death with an estimated stature below 130 cm (the woman was shorter than the man). The male skeleton is relatively complete, though some parts were crushed; while more than half of the female skeleton is missing, the remaining bones (cranium and right limbs) are well preserved. Each was interred with a comb, and the man had a knife as well.

Analyzed by Caroline Arcini and Per Frölund (1996:155-161, 163-164), the remains are typical of spondyloepiphyseal dysplasia, a heterogeneous form of dwarfism in which ossification of both the vertebrae and the proximal epiphyses of the limbs fails, producing a disproportionately short trunk without greatly affecting the skull. Individuals thus affected are usually from 100 cm to 120 cm tall, though there are several forms of SED and stature can vary (Figure 2d; Ablon 1984:5; Adelson 2005a:291; Aufderheide and Rodríguez-Martín 1998:361; Bailey 1973:438-439, 455; Nemours 2003-2006; Sillence et al. 1979:839; see also Caracol Stela 11 in Chapter 4 and Figure 14).

Because this condition can be inherited, these two people were likely closely related, either siblings or parent and child. Both individuals show signs of osteoarthritis and "their mobility must have been limited"; the man, in his later years, "probably could not provide for himself" (Arcini and Frölund 1996:163-164). Their graves, however, were just like those around them. It is interesting that of the group of six interments, four of them revealed evidence of disability or debilitating disease; the group may represent a household of related members, or a separate burial ground for the physically disadvantaged, or both (Arcini and Frölund 1996:165).

Kopparsvik 151 (Gotland). The island of Gotland lies off the southeastern coast of Sweden in the Baltic Sea; south of the town of Visby, on a beach, is the site of Kopparsvik, which includes a graveyard in use during the late A.D. ninth through the tenth centuries, the island's Early Viking period. One burial, studied by Rita Larje (1985), has been identified as that of a 50- to 60-year-old male, with brooches of iron and bronze. Height could not be reconstructed, as the bones from the knees down were missing, but the remaining bones are well preserved. "The skeleton of this dwarf shows the characteristics of a mild degree of achondroplasia but there is some uncertainty ...". Given the man's maturity and interment in the cemetery, Larje (1985:271) concludes, "the dwarf from Kopparsvik was surely a well-known and respected member of his Viking Age society." (See also Arcini and Frölund 1996:155; Frayer et al. 1988:550.)

Löddeköpinge Churchyard (Sweden). Also from Sweden are poorly preserved skeletal fragments in an early medieval churchyard in Löddeköpinge, at the southwestern perimeter of the country. Dating to between the early A.D. eleventh and middle A.D. twelfth centuries, as described by Ove and Evy Persson (1984:84, 98, 102), neither gender, age at death other than adult, nor stature can be reconstructed, though the field drawing suggests an estimated height of 125 cm to 135 cm. Pathologies of the cranium in particular are consistent with dysostosis cleidocranialis, a congenital

disorder of the development of the cranial vault and clavicles and, to a lesser extent, pelvis and femora (also called cleidocranial dysplasia and cleidocranial dysostosis; Aufderheide and Rodríguez-Martín 1998:72; Ortner and Putschar 1985:338-340). As with other examples of decreased stature seen above, "the muscle attachments on both humeri are unusually well developed" (Persson and Persson 1984:102). "It is clear this individual was badly disabled through disease, developmental anomalies and trauma" and "must have been heavily dependent on other people's help and care" (Persson and Persson 1984:102, 103; see also Arcini and Frölund 1996:155).

The case of the man and woman from Skämsta is unique in suggesting that the physically disabled were interred apart from others, though this may represent a family burial area; each had reached middle age and was accompanied by artifacts. All four of the examples from Sweden show physically active people, having reached maturity, supported by their societies and interred with grave goods in community cemeteries.

Summary

From the Upper Paleolithic on Italy's southwestern coast to the A.D. fifteenth century on Serbia's Hungarian border, the faunal evidence for dwarves from across prehistoric Europe tells an interesting story. The well-developed musculature that most of the cases exhibit indicates that these individuals, with both proportionate and disproportionate dwarfism of varied kinds, were physically active, while the ages at death – from the Paleolithic adolescent to a Swiss woman and Serbian man who lived into their 60s – suggest support for them by their families or societies. Though one example in Sweden might be a separate interment area for the physically challenged, most other European burials indicate the acceptance of these people by their communities.

Faunal Remains from the New World

Introduction

The faunal evidence for stature-reducing conditions from the pre-Columbian New World ranges in date from perhaps 3,000 years ago to the period of contact by Europeans. Over three-quarters of the cases of pathologically short stature are from North America. The skeletal remains, especially from Central and South America, are impoverished both in terms of preservation and provenience, and in a third of the instances from North America, the specimens have been lost. Both male and female individuals have been recovered, however, most having reached adulthood, with both proportionate forms of dwarfism and disproportionate forms.

North America

North America has been known to be the source of dwarfed faunal material at least as long as the sites of Egypt and Europe, as well as the source of the only conclusively identified cases of prehistoric dwarfism in the New World found thus far (two from one site in Alabama and one from California). The remaining six finds are unverifiable (two from Florida and one each from Ohio, Maryland, Arizona, and New Mexico). The three conclusively identified instances are of achondroplasia, while one from Florida and one from New Mexico are suspected to be pituitary (proportionate) dwarfism. Eastern North American sites have produced the oldest examples, from possibly as early as the tenth century B.C. through as late as the A.D. fourteenth century, while finds from western North American sites are more recent, from the A.D. twelfth through the nineteenth centuries.

Waverly Mound 4 (Ohio). Around the turn of the nineteenth century, Gerard Fowke discovered the skull and long bones of "a skeleton of peculiar form" in Mound 4 of an Adena site near Waverly, seat of Pike County, southern Ohio. His description of

the bones and of stature "not over five feet" for a male are compatible with achondroplasia, but cannot be verified as these bones have been lost (Fowke 1902:145, 362, 371-372). Adena society is generally thought of as dating to anywhere from 1,000 B.C. to A.D. 100. (Fowke 1902 is cited by Barnes 1994:136; Brothwell 1967:433-434; Brothwell and Powers 1968:178; Gladykowska-Rzeczycka 1980:73; Johnston 1963:704; Ortner and Putschar 1985:332; Snow 1943:10.)

Ferguson Farm Ossuary IV NMNH 379527 (Maryland). Donald Ortner and Walter Putschar (1985:334) illustrate an isolated skull from Ossuary IV at the Ferguson Farm in Accokeek, southwestern Maryland. The site dates to the Late Woodland (roughly A.D. 500 to A.D. 1500) with no evidence of European contact. According to their analysis, the skull is probably that of a person with achondroplasia, but the lack of associated postcrania precludes confirmation (Ortner and Putschar 1985:334; see also Aufderheide and Rodríguez-Martín 1998:360; Barnes 1994:136; Larje 1985:260).

Moundville M 1889 and M 2856 (Alabama). In 1943, Charles Snow extensively documented two achondroplastic burials from the site of Moundville, west central Alabama, which dates to the late prehistoric Middle Mississippi Phase, approximately A.D. 1000 to A.D. 1500 (Snow 1943:6). In 1934, an excavation by the Alabama Museum of Natural History discovered adult female remains (M1889) with an in situ height of 124.5 cm; in 1939, a National Park Service excavation uncovered those of an adult male (M2856) with an in situ height of 148.8 cm. The burials, "located in the same general area near the same mound," were placed face down without grave goods (Snow 1943:8; see Cividale del Friuli Necropolis, Italy, above). The nearly complete Moundville specimens of achondroplasia are the only two in pre-Columbian Eastern North America that include postcrania and for which detailed field records, laboratory measurements, and radiographic analysis exist. (Snow's quite thorough analysis is widely cited: Aufderheide and Rodríguez-Martín 1998:360; Barnes 1994:136; Brothwell 1967:434-435; Brothwell and Powers 1968:178; Gladykowska-Rzeczycka 1980:73; Hoffman 1976:67; Johnston 1963:704; Larje 1985:260; Ortner and Putschar 1985:332-334; Roberts and Manchester 1995:34; Susanne 1970:2; Zimmerman and Kellev 1982:40.)

Huntoon Island Shell Mound (Florida). Before the turn of the nineteenth century, Jeffries Wyman (1875:26-27, 86) recovered cranial, mandibular, and long-bone fragments (now lost) from a freshwater shell mound on Huntoon Island in the St. John's River in northeastern Florida. A height of "about three feet and a half high" was estimated from the femora, while the mandible indicated an adult, presumably affected by proportionate dwarfism (Wyman 1875:62). The only available date for the site is based on the 200- to 300-year-old trees that were then growing on the shell mounds. (See also Wyman 1868; Wyman 1875 is referred to by Brothwell 1967:433; Brothwell and Powers 1968:178; Gladykowska-Rzeczycka 1980:73; Johnston 1963:704; Snow 1943:10.)

Belle Glade (Florida). T. Dale Stewart (cited by Snow 1943:10) reported that a dwarfed skeleton was excavated at Belle Glade, southeastern Florida, but those remains are also now lost (see also Brothwell 1967:434; Brothwell and Powers 1968:178).

Carter Ranch Pueblo Burial 12 (Arizona). Burial 12 from Carter Ranch Pueblo, in east central Arizona, comprised a female, aged 21 to 34 years at death, and two vessels. The interment dates to Pueblo III (A.D. 1100 to A.D. 1225). Although at first identified as a case of proportionate dwarfism, her reconstructed stature of 154.1 cm came within the normal range once the entire skeletal series was analyzed. Skull morphology, however, especially cranial index, suggests that "while the individual is not technically a dwarf in height, these features point to one of the short stature/cranial anomaly syndromes" (Danforth et al. 1994:92, 97; see also Tikal Burial 167 in W. Coe

1990:II:232, 1990:IV:Figure 31 for a similar case of cranial porotic hyperostosis paired with arthritic kyphosis).

Hawikuh NMNH 314306 (New Mexico). In the National Museum of Natural History is most of a skeleton from the site of Hawikuh, New Mexico, which yielded both late prehistoric and early historic components. Probably male, age at death is estimated at over 20 years and height is reconstructed to have been "only three-fourths as tall as normal" (Ortner and Putschar 1985:302-304, Figure 472). The combination of small stature and mature bones suggests pituitary (proportionate) dwarfism, but the fragile, damaged remains prevent positive identification (see also Aufderheide and Rodríguez-Martín 1998:329; Roberts 1987:1659).

Augustine Site LMA 12-6670 (California). J. Michael Hoffman (1975, 1976) reports in detail the rediscovery of a skeleton, probably female aged 20 to 40 years at death, in the collections of the Lowie Museum of Anthropology at the University of California, Berkeley. It was excavated at the Augustine Site in Sacramento County, central California, in 1938 and dates to the Late Horizon Phase II (A.D. 1500 to A.D. 1800). The skeleton is about 95% complete and so can be reasonably conclusively identified by radiographic analysis as that of a person with achondroplasia. Although no stature is reconstructed, Hoffman (1976:88) notes that the long bones of the Augustine Site woman are even shorter than those of the Moundville woman, so her height was probably less than 124.5 cm. According to James Johnston's radiographic interpretation of the Augustine remains, "... this particular individual was of good, solid structure as far as functional capability ... and was obviously able to get around quite well"; markings on bones indicate well-developed muscles (Hoffman 1976:82; Hoffman's report is cited by Aufderheide and Rodríguez-Martín 1998:360; Barnes 1994:136; Larje 1985:260; Ortner and Putschar 1985:334; see also White and Folkens 2000:397).

In spite of some of the earlier North American faunal remains having been lost, the Moundville cases and the Augustine case are among the most well preserved and well documented of dwarfed human remains in the archaeological record. Together, they present a picture of these individuals functioning within their societies (though the face-down burial at Moundville might indicate some discrimination; see Cividale del Friuli Necropolis, Italy, above). Hoffman (1976:86-87, 91) notes that examination of the Augustine, California skeleton, in particular the ethmoid bone as well as the olecranon process and fossa, has contributed to the understanding of why the nasal bridge is depressed and why elbow extension is limited in living achondroplasts: a unique, important contribution by paleopathology to modern human biology.

Central America

See The New World: Central America under The Paleopathology of Short Stature in Chapter 2.

South America

Faunal evidence for dwarfism in pre-Columbian South America is equivocal, both physically and temporally, being limited to only three disassociated finds.

Chilca Burial Site NMNH 379510 (Peru). In 1942, J. Robert Wells reported the surface find of an isolated subadult cranium from an "ancient" burial site near Chilca, Peru (on the coast south of Lima), the small size of which suggested an instance of pituitary dwarfism (J. Wells 1942:425). Upon J. Wells's donation of the cranium to the National Museum of Natural History, it was analyzed by Ales Hrdlicka, who determined it to be that of a female "midget" (or proportionate dwarf) of 16 to 17 years of age at death (Hrdlicka 1943). Ortner and Putschar (1985:304), however, challenge this identification: "the Peru skull would appear to be a congenital idiot rather than a pituitary dwarf" (see also Sandison and Wells 1967:526; C. Wells 1964:43).

Ica 1915-2-382 and Chicama 1915-2-462 (Peru). The Hrdlicka Paleopathology Collection at the San Diego Museum of Man includes two isolated bones, from pre-Columbian Peru's western coast, thought to be of achondroplastic individuals: the right humerus of an adult female found near Ica (1915-2-382) and the left humerus of an adult male from the Valley of Chicama (1915-2-462; Tyson and Alcauskas 1980:180-183). As in the cases of other isolated finds, the lack of associated faunal remains precludes a conclusive identification.

Summary

Although the faunal evidence for pre-Columbian dwarfism is sparse, three virtually complete and well-studied skeletons from North America, two from Alabama and one from California, indicate that these people, although short, were robust, having the musculature of productive citizens, living well into middle age, and being interred in a manner typical of their societies (Hoffman 1976:89-90; Snow 1943:26). Hoffman's observation of the California case,

we can probably say that she did suffer some physical handicap, but the fact that she was able to live to adulthood would argue for the social group at the Augustine Site to have made various adjustments and accommodations to her disability [Hoffman 1976:90],

would apply to the Moundville cases and indeed to those from the entire New World as well.

Summary

Of the nearly fifty cases of pathologically short stature known from the archaeological record, achondroplasia accounts for about thirty cases, though only a dozen are definitive. A few are probably the hypochondroplastic or pseudoachondroplastic forms. Five more examples of short-limbed dwarfism are nonachondroplastic types. Other disproportionately dwarfing conditions account for at least seven cases, and seven more are proportionate or pituitary dwarves, though only two of these are definite. The picture that emerges from these data is remarkably consistent for all three areas: the Classical World, the Old World, and the New World, from the Paleolithic to historic periods. Throughout time and across space, dwarves, in all their variety, have functioned within their respective societies during their lives and have been treated as full members of their communities in death.

APPENDIX C OTHER DEPICTIONS OF SHORT STATURE

Introduction

Inclusion here by no means indicates that a person with disproportionately short stature is being portrayed, nor does this list pretend to be exhaustive in any way. As Chapter 8 points out, the Maya integration of the natural and supernatural produces the freedom to render the human figure at a variety of scales and in a variety of forms. Although some aspects of the illustration of persons apparently became conventionalized over time, deliberate ambiguity of representation also seems to characterize Classic lowland Maya iconography (M. Miller and Martin 2004:25; Proskouriakoff 1950:18-19; Tate 1992:51; Viel 1999:381).

Monuments

Copan Ball Court A-IIb North and South Markers

At Copan, roughly 210 km south of Caracol, three scenes carved in stone mark the north end, the south end, and the center of Ball Court A-IIb. The north and south markers each display two figures on either side of a ball, one kneeling, one standing. On the north marker, the standing figure is to the viewer's left, while on the south marker, the standing figure is on the viewer's right (Greene Robertson 1995:D23993.PCT, D23994.PCT). Baudez (1994:162-164, Figure 78) describes the kneeling figures, dressed as ball players, as paying homage to a standing figure with a feline head on the north marker and to a standing figure with a youthful face, probably a maize impersonator, on the south marker. According to Baudez (1994:163), the scenes "are located in the netherworld." Freidel and Schele (Freidel et al. 1993:366-368) identify the figures on the markers as characters from the Popol Vuh myth of Hunahpu and Xbalanke (see also de la Garza and Izquierdo 1992:337-342). Although the standing figures are shorter than the kneeling figures and their body proportions differ, they have none of the physical or cultural attributes of dwarfism.

Naranio Stela 5

Just about 40 km southeast of Tikal is the site of Naranjo. Illustrated by *CMHI* (2:21), Naranjo Stela 5 shows a primary figure standing facing front, his head turned to his right, with a secondary figure on his right at his feet. Maler (1908b:86), Villacorta C. (1929:394), and Morley (1937-1938:II:72) note the small figure, who is sitting on his heels, one knee partially raised. The monument is eroded around the edges, but the seated position of the secondary figure is not one that a person with achondroplasia would assume, nor are his limbs significantly shortened (see V. Miller 1985:148; Proskouriakoff 1950:141, 1993:52, 73-74; Spinden 1913:179, 182). The shape of the secondary figure's head, unfortunately eroded, bears some resemblance to that of the secondary figure on Yaxha Stela 31 (below).

Oxkintok Stela 11

As described by Pollock (1980:281), Oxkintok, between 25 km and 30 km northwest of Uxmal, is unique among Puuc sites. Stela 11 may illustrate a disproportionate figure (Pollock 1980:318-319, Figure 545e; Proskouriakoff 1950:Figure 88d, 1993:23, 191).

Palenque Palace

V. Miller (1985:142-143, 148, Figures 2, 9-12) identifies Palenque (approximately 180 km west of El Peru) as a site at which dwarves appear in three separate media: clay figurines, a carved jade plaque, and stucco sculpture (below). A Jaina-style figurine was recovered from a looted burial in Funerary Group 1, and the head of an otherwise unprovenienced broken clay figurine is thought to have come from Palenque. Without the remainder of the figurine, dwarfism cannot be determined from the facial profile alone (see Facial Profiles under Other Physical Characteristics in Chapter 4 as well as Mayer 1986:217; for the Palenque Jade Plaque, see V. Miller 1985:143, 148, Figure 12).

East Court Figures 2 and 8. At Palenque, within the Palace complex, four structures bound the East Court with stairs leading from each structure into the courtyard. The flight of stairs on the east side, connecting to House A, is flanked by sculpted figures. Greene Robertson (1985:III:63, Figure 293) presents them "extended to their full standing height" which causes Figures 2 and 8 to appear disproportionately short relative to the others. "If, however, these figures were originally used separately and not together, then Figures 2 and 8 would not necessarily be depicting dwarfs." These two figures are unlike any of those that appear on the monuments of other Maya sites. If, in fact, Palenqueño artists intended to represent some sort of disproportionate dwarfism, Figures 2 and 8 would be a short-trunked type rather than a short-limbed type (for example, Figure 2d; Greene Robertson 1985:III:61-65, Figures 289-290, 293, 296, 310).

House C West Corridor Stucco Scene. House C of the Palace complex is between the East Court and the West Court, with two parallel corridors running north and south. On a wall of the western corridor are the remains of a sculptured stucco scene that once portrayed a standing individual, wearing a headdress that includes a back rack. Two tiny figures are modeled in the back rack, one of which Greene Robertson (1985:II:Figure 281) identifies as a dwarf. Unless a proportionate dwarf is intended, there is no evidence to support this identification, however, as the person is seated while the arms, extended upward, and head are of average proportions (Greene Robertson 1977:307, 318-319, 1985:II:61-62, Figures 275, 280-281; V. Miller 1985:143, 148, Figure 11). Caso (1942:44), Covarrubias (1942:46-47), Corson (1973:61), Foncerrada de Molina (1976:45-47), and Clancy (1999:29, 37) point out the difficulty of distinguishing an artistic portrayal of a short-statured adult from that of a child.

Uxmal Stelae 11 and 14

Uxmal is located in northwestern Yucatan, in the Puuc ('hill') region. Although Morley (1970 [1941?-1942?]:174, Figure 18) notes "a subsidiary human figure standing in the lower right corner" of Stela 11 there, insufficient evidence survives to identify it. Even less of the scene remained by the time the Corpus of Maya Hieroglyphic Inscriptions project recorded Stela 11 (*CMHI* 4:102; see also Kowalski 1987:37; Proskouriakoff 1950:164, Figure 92a).

Stela 14, better preserved, displays a similar scene, including two secondary figures on the primary figure's right and one on his left, as noted by Morley (1970 [1941?-1942?]:160, 177). Although the head of the secondary figure on the primary figure's left is effaced, the rest of his body appears to be of average proportion. Like the figures floating above the enormous feather headdress of the primary figure, he is simply shown at a smaller scale. While the two secondary figures on the primary figure's left are wearing full-head masks like the dwarves on Lintel 3 of Tikal Structure 5C-4 (Temple IV), their proportions are quite different. Proskouriakoff (1950:164), Kowalski (1987:38, 180, 238), and Dunning (2001:336) identify the single secondary figure on the right as a warrior and the two on the left as wind gods. Uxmal Stela 14 has been illustrated by Andrews (1995:333, Figure 41); *CMHI* (4:108); Cuevas Garcia and

Bernal Romero (2002:384, 388); Greene Robertson (1995:D20022.PCT); Kowalski (1985:240, 247, Figure 6, 1987:37-38, 42, 50-51, 71-72, 74); Morley (1970 [1941?-1942?]:Figure 21); Morley et al. (1983:339-341, 346); Proskouriakoff (1950:Figure 92b); Tozzer (1957:56, Figure 604); and Willard (1933:358-359).

Yaxha Stelae 6, 10, and 31

Stela 6 and Stela 10. Yaxha, 30 km southeast of Tikal, is an interesting site for the number of secondary figures on monuments. On Stela 6, a small figure kneels on the right side of the primary figure, and one may have been present to his left as well (Greene Robertson 1995:D23686.PCT; Maler 1908b:66-67, Plate 17, 1; Morley 1937-1938:III:472-475; Proskouriakoff 1950:107-108, Figure 40b, 1993:13, 21). At a time when the term 'dwarf' was used in a nontechnical way to mean simply a small, human figure, Villacorta C. (1928:173-174) referred to the secondary figure as a dwarf. According to Morley (1937-1938:III:475), "the anatomical proportions of the subsidiary human figure kneeling in the left corner, while not so good as those of the corresponding figure on Stela 10, are nevertheless very natural." Proskouriakoff (1950:108) observes that the hands are bound, a detail difficult to discern in the available photographs. On Stela 10, "the man, done in reduced size, kneeling at the feet of the principal figure, can be plainly distinguished" (Maler 1908b:69, Plate 18, 1; see also Grieder 1962:138; Proskouriakoff 1950:107-108). Though at a smaller scale, this figure is clearly of average proportions, and the arms are held as though bound.

Stela 31. While Stela 31 follows a similar theme to Stelae 6 and 10, the secondary figure is quite different. Robicsek (1975:213, Figure 199) identified the secondary figure on Yaxha Stela 31 as a dwarf, followed by Foncerrada de Molina (1976:49, 52, Figure 10), V. Miller (1985:147, 148, 152, Figure 17), and Mayer (1986:213). If it is a dwarf, it is, as Coggins (1994:33) notes, "the only one of its type on the monuments." In the drawing by Ian Graham published by Hellmuth (1972:Figure 6) and others, the secondary figure's head shape and facial profile resemble that of the secondary figure on Naranjo Stela 5 (*CMHI* 2:21), who is most probably not a dwarf. (The CMHI field drawing of Yaxha Stela 31, however, differs significantly from the published version.) The seated posture of the figure and the loss of carved relief around his head make it impossible to determine whether he is disproportionately short. That he is bound and held at spear-point might argue against his being a child, but whether a dwarf or a child, the scene is unique (see also Coggins 1994:44-45, 54, Figure 18; Greene et al. 1972:344, Plate 164; Greene Robertson 1995:D23695.PCT, D23696.PCT; Grube and Martin 2004:72; Martin 2002:53).

Provenienced Ceramic Vessels

Only a small sample of the many painted clay pots that have been identified as picturing the dwarf motif can be included here; inclusion here does not, however, imply that these are all renditions of the pathologically, disproportionately short.

Actun Balam

Pendergast (1966:157-160, 1969:44-46) describes a small figure painted on a vase from Actun Balam, just south of Caracol, as a dwarf, though there is no evidence of disproportionality. In 1969, Kubler identified the small figure as "a miniature human," but 15 years later, as "a dwarf" (1969:32, 1984:281; see also Foncerrada de Molina 1976:50, Figure 24; Hellmuth 1986:Figure 95; Kubler 1969:Figure 47; Pendergast 1969:Plate 3).

Aquateca Structure M7-35

Excavations under the direction of Takeshi Inomata at Aguateca, just southeast of Dos Pilas, recovered a polychrome vase apparently stored beneath the bench of the central room of a building designated the House of the Niche (Inomata 1997:345, Figure 15). In the scene thereon, Inomata notes "the presence of possible dwarfs" (2001:47) and Reents-Budet "an attendant dwarf or child" (2001b:216).

Holmul

Holmul is located about 40 km northeast of Tikal. In a burial in Group I Building F were five ceramic vessels, including one tripod bowl and one cylindrical vase (Merwin and Vaillant 1932:13-15, Plate 2b).

Tripod Bowl PM 5666 / MSH 019. The small individual in the scene on the interior floor of the dish is usually interpreted as a dwarf, based on the resemblance of the pair of figures to the Holmul-dancer motif. References include Foncerrada de Molina (1976:50, Figure 22); Grieder (1962:134-136); Kelemen (1946:179, Plate 129b); Merwin and Vaillant (1932:15, 72, 77, Plates 2b, 29a, c); V. Miller (1985:147-148, Figure 20); Reents-Budet (1985:Plates 9, 10, 1994:Figures 3.13b, 5.14); and Reents-Budet et al. (2000:107).

Cylindrical Vase PM 11-6-20 / C 5668 / MSH 013. One of the few to have been archaeological recovered, the Holmul-style cylinder vases are named for this example (Coggins 1985:153, Figure 88; Foncerrada de Molina 1976:50, Figure 21; Grieder 1962:134, 136-137; Mayer 1986:218; Merwin and Vaillant 1932:15, 72, 77, Plates 2b, 30a, 30c; Prager 2002:56, Figure 23; Reents-Budet 1985:Figure 7a).

Uaxactun G 471

Uaxactun is located 16 km due north of Tikal. According to R. Smith (1955:Figure 2b), a fragment of a cylindrical vessel from Uaxactun may show "a consultation scene between a dwarf and standing figure." Grieder, in his dissertation (1962:134, 173, 290, Plate 30a), describes the painted sherds as bearing what he named "the tall man and dwarf motif." Although the fragment includes only the secondary figure and a portion of the primary figure, this also may be one of the few provenienced examples of pottery decorated in the Holmul style (see also Foncerrada de Molina 1976:50, Figure 19; Mayer 1986:218; Reents-Budet 1985:Figure 16).

Yalloch NMAI 9/6546

Maler reports the story of one Guillermo Tut of Yalloch, who came upon a deposit of pottery while pursing a tepescuintli. Tut sold the collection to Thomas Tappin, who "transferred" it to Thomas Gann. Tut found the pottery about 10 years before the Peabody Museum began excavations at the site of Holmul, just west of Yalloch (Maler 1908b:123). Gann in 1918 and Gordon in 1925 gave the location of one of the vessels from the deposit, an unusually tall cylinder missing a bottom, as the Bristol Museum (Gann 1918:13, 138, Plates 26-28, 1925:72, 109-113; Gordon 1925:Plates 17, 18; M. Miller 1989:131-132). By 1932, the vessel had gone to the Heye Foundation's collection (Merwin and Vaillant 1932:77; Villacorta C. 1934:159-160). Annie Hunter's rollout line drawing continues to be the best record of its Holmul-style iconography (M. Coe 1978:99; Foncerrada de Molina 1976:50, Figure 23; Grieder 1962:134, 136-137, 290, Plate 41; Kubler 1969:30, 38, Figure 56; Mayer 1986:218; V. Miller 1985:147-148, Figure 3; Prager 2002:Figure 7; Reents-Budet 1985:195, 223-224, Figure 31a; Robicsek 1975:Figure 252). The vessel is now in the National Museum of the American Indian.

Carved Jade and Shell

Chichen Itza

Chichen Itza is located in north central Yucatan. In her analysis of the small, carved jades from the Cenote of Sacrifice there. Proskouriakoff describes some of the beads, pendants, figurines, and plaques as illustrations of dwarves, based on "the general pattern of their design They present a squat, pot-bellied little figure with an exposed navel. The legs are very short The arms are held at the sides. Elbows are bent, but hands do not meet in front, exposing and emphasizing the protruding belly. Accoutrement is usually simple" (Proskouriakoff 1974:102; see, for example, Plates 44a2, 52c6, 57, 58a). According to Coggins (1984:76), thirteen jade figurine pendants featuring dwarves were recovered from the Cenote of Sacrifice, characterized by "short limbs, hands at either side of a protruding belly, and oversized head with aquiline nose and hair in a serrated crest." She notes "no jade dwarf figurine has ever been excavated, but dwarves are represented in scenes with ruler figures on the monuments and ceramics of the Late Classic southern lowlands" (see Coggins 1984:Nos. 67-69). As to whether or not carved jade plaques display dwarves, Coggins expresses some doubt: "if all such plagues do represent dwarves, then they were much more widespread than has been thought, with perhaps a dozen examples from the Cenote" (1984:77; see Nos. 7, 70, 103). Similarly, Kerr (2001-2002:3261, 5818) and Teufel (2000:153-155) describe carved jades as portrayals of dwarves. (See also Water Birds under Other Secondary Figures in Chapter 4; Coggins 1974:243-244, Plate 18; Fernández Souza 1998;559 No. 162; M. Miller and Samayoa 1998:58, 60, 64, Figure 7; V. Miller 1985:143, 146, 148, 151-152, Figures 13, 25.)

Nebaj

In 1951, the excavators of this plaque -- one of the few of this type to have been recovered archaeologically -- described it as "the finest example of jade carving yet found" (A. Smith and Kidder 1951:35-36, Figure 59b), and this may still be true. It was part of Cache 14 at the site of Nebaj, in the southern highlands 150 km southwest of Dos Pilas, and has been widely reproduced (for example, by Anton 1970:No. 9; M. Coe 1966:114, Plate 66; Covarrubias 1957:251, Plate LII; Foncerrada de Molina 1976:49, Figure 17; Lothrop 1964:116-117; Martin and Grube 2000:7; Martínez Durán 1964:90 No. 8; Mayer 1986:Figure 10; McVicker and Palka 2001:183, 185, Figure 8a; M. Miller 1996:154-155; M. Miller and Martin 2004:128, 147; M. Miller and Samayoa 1998:64; V. Miller 1985:143; Robicsek 1975:Figure 279; Sánchez de Bonifasi 1998:No. 280; Thompson 1966:Plate 21a; Westheim et al. 1972:434, Plate 121).

Palengue

See V. Miller (1985:143, 148, Figure 12).

Teotihuacan

Said to have been found at Teotihuacán, in the Mexican highlands far to the west of the Maya area, the famous jade plaque was bequeathed to the British Museum by Thomas Gann (Joyce 1938:145, Plate Lb; see also Digby 1972:30; Foncerrada de Molina 1976:49, Figure 16; Gann 1936:38, Plate V; Grube 1992b:483; Kelemen 1946:292, Plate 238b; Mayer 1986:Figure 10; McVicker and Palka 2001:183, Figure 8c; M. Miller 1996:154-155; M. Miller and Samayoa 1998:64; Robicsek 1975:271; Schele and Miller 1986:111, 122, Plate 34; A. Smith and Kidder 1951:36; Thompson 1966:Plate 21b; Westheim et al. 1972:434, Plate 123).

Tikal MNAE 11501

One of the few figurines recovered by a controlled excavation is from Tikal Burial PNT-009 in Structure 5C-49, in an area south of the Tozzer Causeway between Structures 5D-3 and 5C-4 (Temples III and IV), near the 'Lost World' pyramid (Kerr 2001-

2002:4881; Laporte and Fialko 1995:82-83; Sánchez de Bonifasi 1998:No. 193). In the interment of a subadult female were carvings of shell, including the figurine of what appears to be a person with achondroplasia. The burial likely dates to the A.D. eighth century.

Northern Lowland Columns

As pointed out in Chapter 8, the relationship between the dwarf motif shown on monuments from Peten sites and on architectural columns from northern lowland sites is yet to be discovered. Because almost all examples from northern sites are unprovenienced, how the motif spread from south to north has thus far been untraceable (see, however, The Northern Lowlands under Expansion of the Dwarf Motif in Chapter 6). These are only a few of the most widely published examples.

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See Music and Dance under Other Associations in Chapter 4 (Benavides C. 1998:No. 52; Coggins 1994:52 Note 14; Greene Robertson 1995:D20039.PCT; Mayer 1981:25, Plate 13, 1986:Figure 6; M. Miller 1988:325-326, Figure 11.8; V. Miller 1985:147, Figure 16; Prager 2002:50, Figure 14).

Metropolitan Museum of Art P 62.3

The column once in the Museum of Primitive Art, now in the Metropolitan Museum of Art (both New York), is very much like those in museums in Berlin and Massachusetts (below; Mayer 1980:43, Plate 52, 1981:9-10, 28-29; Mills 1985).

Museum für Völkerkunde IV Ca 6135

The museum in Berlin holds two columns: one with one dwarf and one with two dwarves, the latter being the better documented. According to a study by Mills (1985:53), the columns in museums in Berlin (Germany), New York (New York), and Worcester (Massachusetts) "are probably from the same shop" (see also Mayer 1978:29, Plate 41, 1981:9-10, 24, Plate 1, 1986:Figure 5, 1989:15, Plate 67, 1995:17-18, Plate 83; Mills 1977; Morley 1937-1938:IV:419).

Worcester Art Museum 1962-1

See Coggins (1969:98, 1994:52 Note 14); Jewell (1963); Mayer (1978:29, 1980:71-72, Plate 77, 1981:9-10, 29, 1989:16, Plates 83, 84); V. Miller (1985:146, Figure 14); Mills (1985); Richardson et al. (1963:249, 251); Worcester Art Museum (1974:219, 1994:174).

Xchan Structure 5 Column 2

Benavides C. (2001:147-148) reports that at the site of Xchan, in northwestern Yucatan, a column bears a carved scene of a primary figure and three dwarves. If so, it would be a rare example still in place at an archaeological site, the dwarf-motif column from Acanmul having been removed. As of March 2004, no corroborating evidence has been forthcoming.

Other Depictions

Atlantean Figures

Some have suggested that the dwarf motif was transformed into the atlantean figures of the Puuc sculptural style, though their disproportionality may be the result of their function as architectural supports. Like columns from northern lowland sites, few, if any, remain in situ. Three atlanteans that once adorned the Palace of the Figures at Xculoc were, as of 1980, in the Campeche Museo Arqueológico, Etnografico y Historico (Pollock 1980:378, Figure 627). In debris associated with Hacienda Uxmal was found M47, a stone atlantean sculpture that Pollock suggests might have come from Xculoc,

about 20 km away (1980:267, Figure 466d; see also Cook de Leonard 1971; Halperin 2006:4; Piña Chan 1997:10-11; Prager 2002:56, 62; Proskouriakoff 1950:Figure 95i).

Bonampak Structure 1 Room 3 West Wall Vault

See Music and Dance under Other Associations in Chapter 4.

Comalcalco Graffito

About 280 km northwest of Yaxchilan, on the Gulf of Mexico, is the unique site of Comalcalco, the structures of which are built of brick. A graffito on one of the bricks shows a figure recognizable as a disproportionate dwarf, wearing an elaborate costume that resembles a bird. M. Miller and Martin (2004:155) aptly describe this portrayal as "a confident work informed by a subtle, elite knowledge." The head of the figure forms a third of his height, and his limbs, especially the proximal segment, are short. His profile shows the bulging forehead, indented nasal bridge, short, flat nose, and prominent chin characteristic of a person with achondroplasia (Andrews 1989:120; Mayer 1986:218; M. Miller and Martin 2004:Plate 86). Armijo Torres (1998:604) describes two ocarinas from Comalcalco as representing dwarves, and Marc Zender (personal communication April 2002) believes a dwarf may be modeled in stucco on the façade of Temple I there.

La Sufricaya Structure 1 Wall SL 06-11

Discovered relatively recently, La Sufricaya is only a short distance from Holmul. On the western section of a largely destroyed mural, in red paint, is the lower part of an apparently short-legged figure in right profile. If this is a human figure, it is wearing a simple garment and has long, wavy hair (Estrada-Belli 2003:Figure 33).

Unprovenienced Ceramic Vessels

Although a few more ceramic vessels bearing the dwarf motif retain provenience than do figurines, the vast majority is from unknown sources. A handful of the more widely published examples is included here, although many more are known. For unprovenienced pottery, listed by repository if known, chances are that an unknown percentage is fake (Kerr 1989:4-5, 1992a:460, 1992b, 1997:720-721; M. Miller 1989:140; Robicsek and Hales 1981:xvi, 167). The K numbers, below, refer to photographs by Kerr (2001-2002), the MS numbers to the Maya Polychrome Ceramics Project (Reents-Budet 1994), and the P numbers to M. Coe's (1978) publication by Princeton University.

Australia National Gallery 82.2292 / K 1453

Schele and Mathews (1998:77), Grube and Martin (2001:151), and Prager (2001:278, 2002:49) describe the two small figures facing the primary figure as "court dwarfs," while Danien (1997:44-45, 1998:96) identifies the smaller of the two as a "diviner." According to M. Miller and Martin (2004:43), however, the smaller figure is a piece of wooden furniture, carved in the shape of a dwarf, designed to hold a mirror. See also Motul de San José Stela 4 under Expansion of the Dwarf Motif in Chapter 6; Houston et al. (2006:126, Figure 3.25); Kerr (1989:86); Schele and Mathews (1998:76-77, Figure 2.16); Stone (1995:153-154, Figure 6-53).

Chicago Art Institute 1986.1081 #127 / K 633 / MS 1374 / P 14

Usually ascribed to Naranjo (M. Coe 1978:95-99; Reents-Budet 1994:62-63, 181, 184, 319), this Holmul-style vase is unusual for presenting three pairs of primary and secondary figures rather than two (Coggins 1994:45; M. Miller 1992a:160; M. Miller and Martin 2004:58; V. Miller 1985:147-148, Figure 18; Reents-Budet 1985:37, 101, Figures 14b, 15, 41, 1991:217-218, 2001a:258-259; Reents-Budet et al. 2000:107; D. Schele 1998:5510; Taube 1985:174).

Grolier 32 / K 5505

See M. Coe (1973b:74); Prager (2002:49, Figure 12); and Reents-Budet (1994:Figure 5.52).

Grolier 58 / K 5110

Next to the dwarf mirror-holder on this vessel is the Glyph Compound T134:210v, also connected to dwarves on Motul de San José Stela 4 and Yaxchilan Hieroglyphic Stair 2 Step VII (M. Coe 1973b:118-119; Houston 1992:528, Figures 5a, b; Kerr 1997:756; Prager 2002:Figure 26j). See Chapter 7.

Louvre K 1560 / RH 2

If the painter of this vessel intended to represent a person with achondroplasia, as most of the dwarves on monuments are, the arms of the secondary figure in the scene with God L are too long (see, however, Nonachondroplastic Forms of Dwarfism under Summary [of Physical Attributes] in Chapter 4). It is discussed by Cohodas (1989:216, 218, 224, Figure 14.5); Dütting and Johnson (1993:170-171, 173, Figure 4); Gillespie and Joyce (1998:289 Note 12); Houston (1992:526); Kerr (1989:98); M. Miller and Martin (2004:61, Figure 22); M. Miller and Samayoa (1998:Figure 3); Robicsek and Hales (1981:15 Vessel 2, 35-37, 107); D. Schele (1998:5518); and Taube (1992:Figure 39a).

Museo Chileno de Arte Precolombina 0041 / K 1456

The use of appliqué is very unusual (Houston 1992:526, 530, Figure 1; Kerr 1989:88; Museo Chileno de Arte Precolombino 1983:14).

Princeton 6 / K 518

Although identified by G. Stuart and G. Stuart (1983:46-47) as a costumed dwarf, according to M. Coe (1982:106-107), the short figure on this vessel "is the Uinal Monster, the beast of the twenty-day month in the Maya calendar. An anthropomorphic frog or toad" (see also Carlson 1988:288, Figure 9.12; M. Coe 1978:46-51; Robicsek 1978:136-137, Figure 152; Robicsek and Hales 1981:195). This example demonstrates that not every short individual is necessarily a dwarf. In this case, the head is not overly large for the body and the limbs are more or less proportionate. There is no anatomical, iconographic, or contextual evidence for dwarfism.

Villahermosa Museo Regional

See Banco Nacional de Comercio Exterior (1964:339); Cook de Leonard (1954:96, Figure 10); Covarrubias (1957:228); Grieder (1962:173, Plate 39); V. Miller (1985:143); Westheim et al. (1972:440, Plate 259).

Vessel K 7727

Most views of this vase (such as Berjonneau and Sonnery 1985:245; Prager 2002:56, Figure 24; G. Stuart and G. Stuart 1983:38-39) illustrate only the scene with the secondary figure holding birds and describe him as a dwarf. The rollout by Kerr (1997:1005), however, shows two additional small figures, the first riding on a tumpline cargo carried by a spotted creature, the second tied onto the back of a woman. Burdick (1998) identifies the first small figure as the uinal toad, the second as the maize god, and the third as "perhaps a Baby Hero Twin."

Figurines

It is not possible to reference here more a small sample of the dozens of modeled or molded clay figures that have been described as representing the dwarf motif, nor is it possible to identify all those included here as definitively depicting the truly pathologically short. Pieces from the Stavenhagen Collection (Anton 1970:Nos. 194, 198, 216), for example, almost surely illustrate a mother and child. Most figurines

are looted from burials on the island of Jaina, Campeche or are said to be in the Jaina style (see Palenque, above). As pointed out in the literature review (Chapter 1), no firm evidence supports the interpretation of Late Classic monumental iconography based on analogy to mortuary figurines from Campeche (Corson 1973:62, 1976:40; see also The Supernatural and the Underworld under Other Associations in Chapter 4). The depiction of dwarves by Jaina-style figurines has been discussed by Clancy (1985:176, Figure 124); Cook de Leonard (1971); Covarrubias (1957:250); Foncerrada de Molina (1976:Figure 15); Goldstein (1979); Groth-Kimball (1960:29, 31, 36-37); Grube (1992b:590); Mayer (1986:Figure 11); M. Miller (1975:18, Figure 2); M. Miller and Martin (2004:Plate 8); V. Miller (1985:142-144, Figures 1, 5-8); Piña Chan (1997:10); Prager (2001:No. 438); Reents-Budet (1994:Nos. 53-55, 87); Schele (1997:128-129, 148-158); Schele and Miller (1986:150, Plates 41-43); and Tate (1993:131, Plate 28).

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TABLE 1

DWARF-MOTIF MONUMENTS BY DATE

site	monument	period ending or latest date	Gregorian equivalent
Caracol	Stela 4	9.7.10.0.0?	A.D. 583?
Caracol	Stela 1	9.8.0.0.0	A.D. 593
Caracol	Stela 6*	9.8.10.0.0	A.D. 603
Caracol	Stela 5	9.9.0.0.0	A.D. 613
Calakmul	Stela 29	9.9.10.0.0	A.D. 623
Uxul	Altar 2	9.10.10.0.0	A.D. 642
Xultun	Stela 7	9.10.10.0.0	A.D. 642
Xultun	Stela 22	9.12.0.0.0	A.D. 672
La Milpa	Stela 12	9.8.10.0.0?- 9.17.10.0.0?	A.D. 600?- A.D. 780?
El Peru	Stela 34	9.13.0.0.0	A.D. 692
Tikal	Str. 5D-1 Lintel 3	9.13.3.0.0	A.D. 695
Caracol	Stela 21	9.13.10.0.0	A.D. 702
Dos Pilas	Stela 14	9.14.5.3.14	A.D. 717
Dos Pilas	Stela 15	9.14.10.0.0	A.D. 721
Motul de San José	Stela 4	9.14.10.0.0?	A.D. 720?
Calakmul	Stela 89	9.15.0.0.14	A.D. 731

TABLE 1

DWARF-MOTIF MONUMENTS BY DATE, CONTINUED

site	monument	period ending or latest date	Gregorian equivalent
Tikal	Str. 5D-141 façade	9.8.10.0.0?- 9.18.10.0.0?	A.D. 600?- A.D. 800?
Tikal	Str. 5D-52 lintel	9.15.10.0.0	A.D. 741
Yaxchilan	HS 2 Step VII*	9.15.13.6.9	A.D. 744
Tikal	Str. 5C-4 Lintel 3*	9.15.15.2.3	A.D. 746
Acanmul	Str. 9 column	after 9.16.0.0.0	after A.D. 750
Oxpemul	Stela 19	9.16.5.0.0	A.D. 756
Xultun	Stela 24	9.16.10.0.0	A.D. 761
La Florida	Stela 7	9.16.15.0.0	A.D. 766
Motul de San José	Stela 2	9.15.0.0.0- 9.19.0.0.0?	A.D. 730?- A.D. 810?
Xultun	Stela 23	9.17.0.0.0?	A.D. 771?
Sayil	Str. 4B1 east column	9.16.0.0.0?- 9.18.10.0.0?	A.D. 750?- A.D. 800?
Sayil	Str. 4B1 west column	9.16.0.0.0?- 9.18.10.0.0?	A.D. 750?- A.D. 800?
La Milpa	Stela 4*	9.17.10.0.0?	A.D. 780?
Xultun	Stela 25	9.17.10.0.0? or 9.18.10.0.0?	A.D. 780? or A.D. 800?

TABLE 1

DWARF-MOTIF MONUMENTS BY DATE, CONTINUED

site	monument	period ending or latest date	Gregorian equivalent
Caracol	Stela 11	9.18.10.0.0	A.D. 800
Caracol	Stela 9	9.18.0.0.0?- 10.0.0.0.0?	A.D. 790?- A.D. 830?
Caracol	Stela 8	9.19.0.0.0?	A.D. 810?
Calakmul	Stela 16	9.19.0.0.0	A.D. 810
Caracol	Stela 19	9.19.10.0.0	A.D. 820
Santa Rosa Xtampak	Palace panel*	9.15.0.0.0?- 10.4.0.0.0?	A.D. 730?- A.D. 910?
Xultun	Stela 8	10.0.0.0.0	A.D. 830
Xultun	Stela 3	10.1.10.0.0	A.D. 859
Xultun	Stela 10	10.3.0.0.0	A.D. 889
Tzum	Stela 5	no date available	

Note: I have not attempted to express certainty of dating with numbers of question marks. When Long Counts are approximate, Gregorian equivalents are also rounded.

^{*} two dwarves are depicted



Figure 1. Members of the Little People of America. Photograph by Joseph Zrinski used by permission.

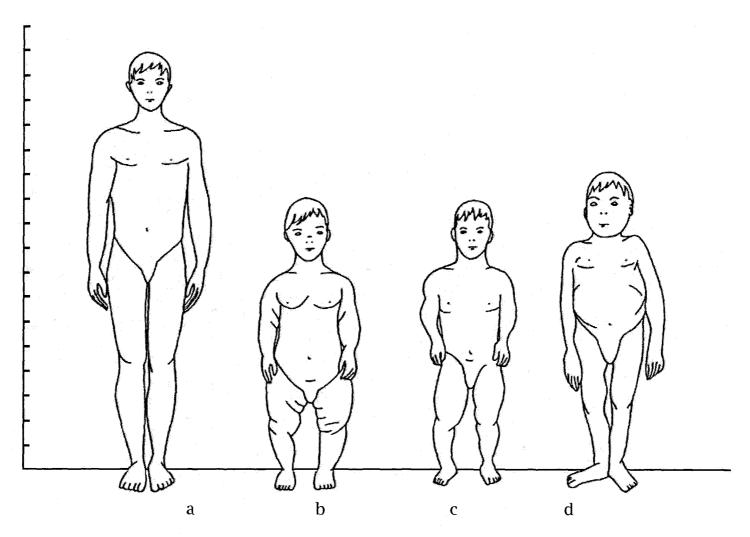


Figure 2. Examples of disproportionate dwarfism: a, average stature; b, achondroplasia; c, pseudoachondroplasia; d, spondyloepiphyseal dysplasia. After Dasen (1993:Figure 1.1), used by permission of Oxford University Press.



Figure 3. Saqqara burial of male adult with achondroplasia, first-dynasty Egypt. Emery (1954:Plate XXV) reproduced by permission of the Egypt Exploration Society; Emery (1961:Plate 23) reproduced by permission of Penguin Books Ltd.

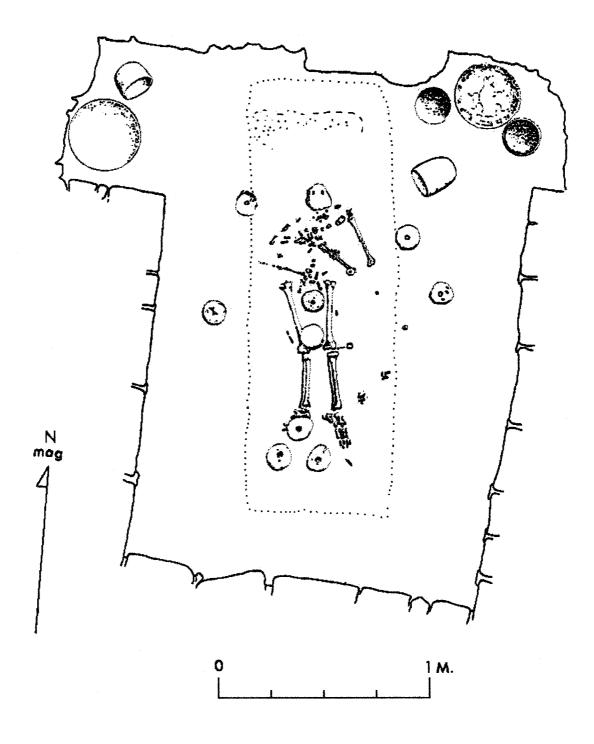


Figure 4. Tikal Burial 24. After W. Coe (1990:V:Figure 177), used by permission of the University of Pennsylvania Museum.

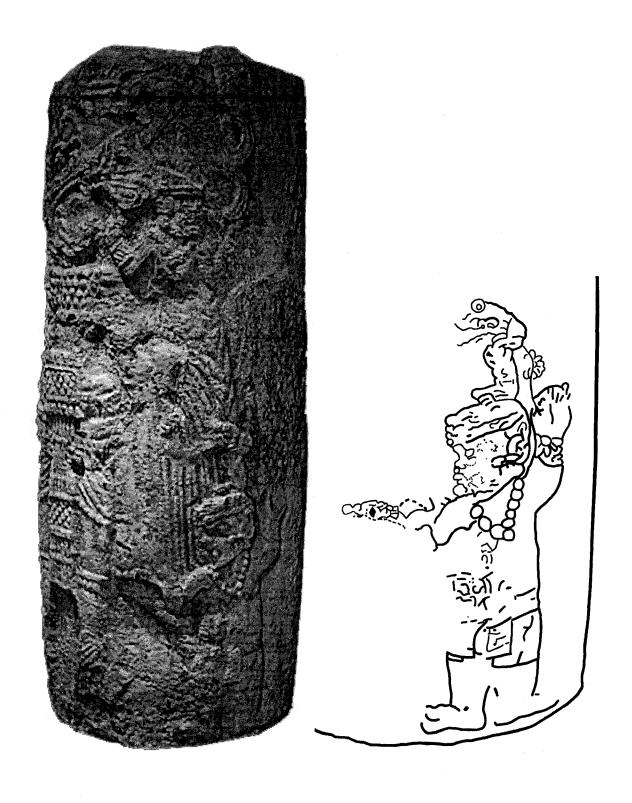


Figure 5. Acanmul Structure 9 column. Photograph by Joseph W. Ball used by permission. Drawing by Patricia B. Goodman used by permission.

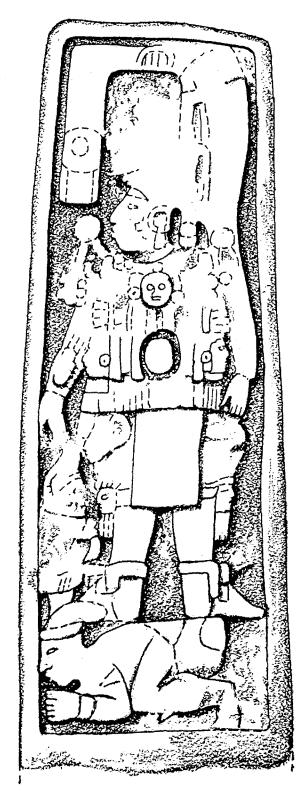


Figure 6. Calakmul Stela 29. Ruppert and Denison (1943:Plate 49d) used by permission of the Carnegie Institution of Washington.

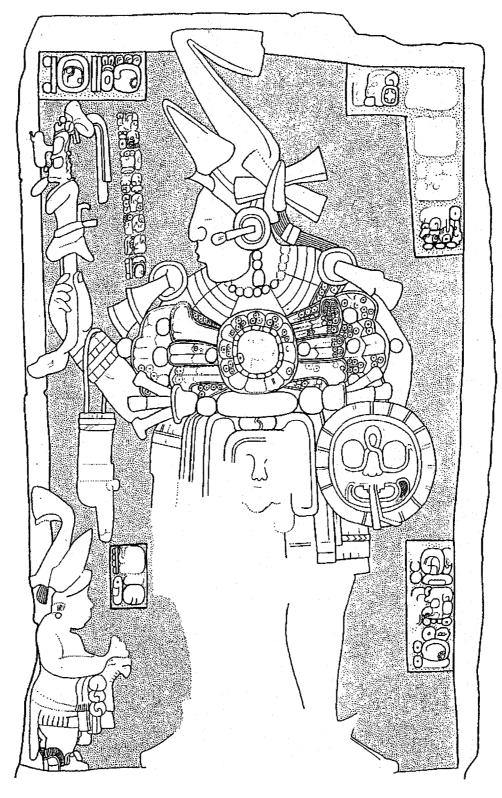


Figure 7. Calakmul Stela 89. Drawing by Nikolai Grube used by permission.

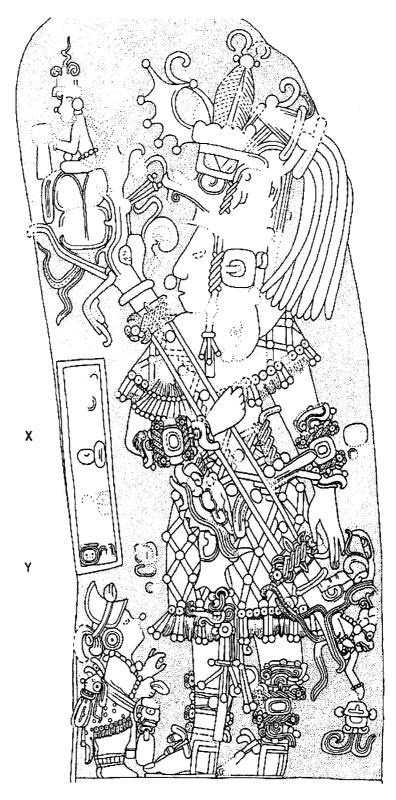


Figure 8. Caracol Stela 1 detail.

Drawing by Carl P. Beetz (Beetz and Satterthwaite 1981:Figure 1) used by permission of the University of Pennsylvania Museum.

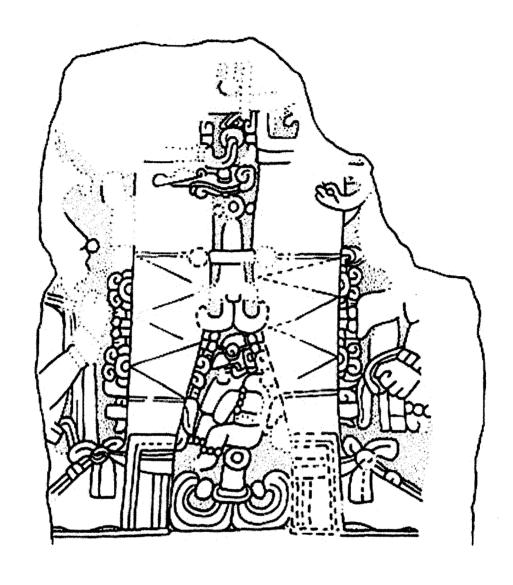


Figure 9. Caracol Stela 4 detail.

Drawing by Carl P. Beetz (Beetz and Satterthwaite 1981:Figure 5a) used by permission of the University of Pennsylvania Museum.

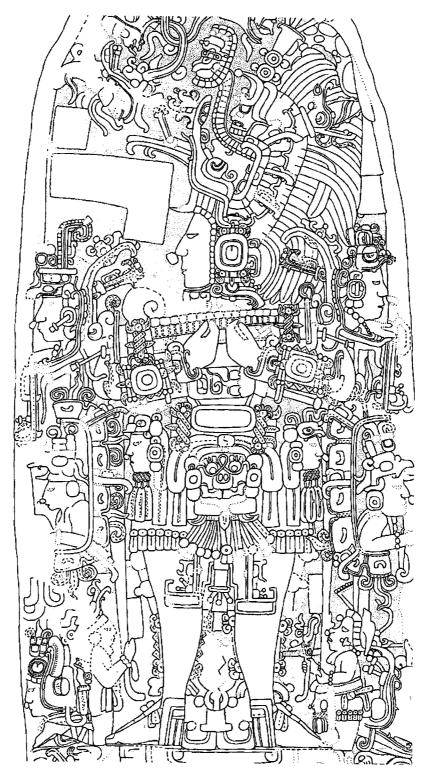


Figure 10. Caracol Stela 5 detail.

Drawing by Carl P. Beetz (Beetz and Satterthwaite 1981:Figure 6a) used by permission of the University of Pennsylvania Museum.



Figure 11. Caracol Stela 6 front detail.

Drawing by Carl P. Beetz (Beetz and Satterthwaite 1981:Figure 7a) used by permission of the University of Pennsylvania Museum.



Figure 12. Caracol Stela 6 back detail.

Drawing by Carl P. Beetz (Beetz and Satterthwaite 1981:Figure 8) used by permission of the University of Pennsylvania Museum.

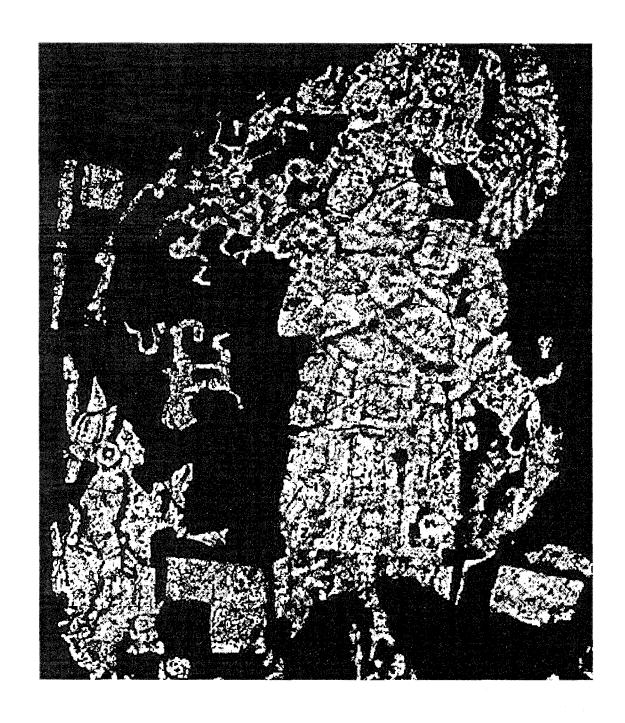


Figure 13. Caracol Stela 9 detail. Rubbing by Merle Greene Robertson (1995:D20962.PCT) used by permission of the Pre-Columbian Art Research Institute.

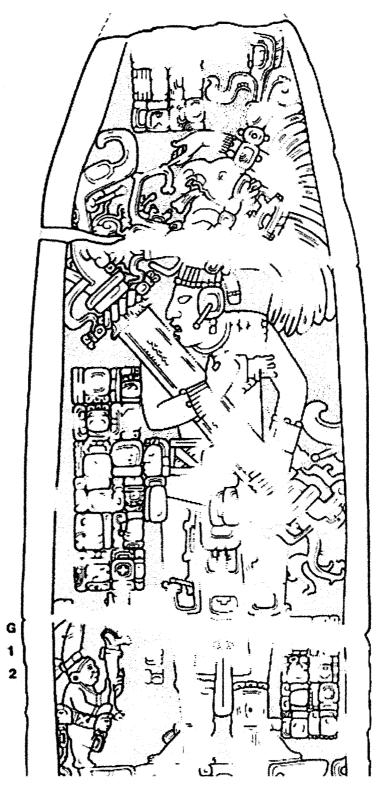


Figure 14. Caracol Stela 11 detail.
Drawing by Stephen D. Houston (1987:Figure 71a)
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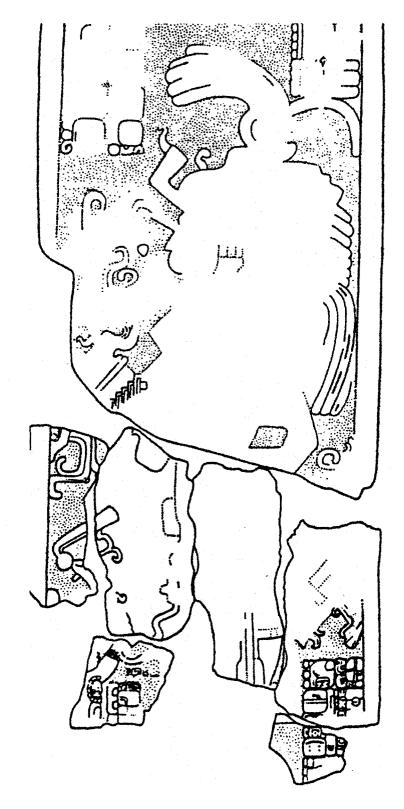


Figure 15. Caracol Stela 19 detail. Drawing by Nikolai Grube (1994a:Figure 9.6) used by permission of the Caracol Archaeological Project.

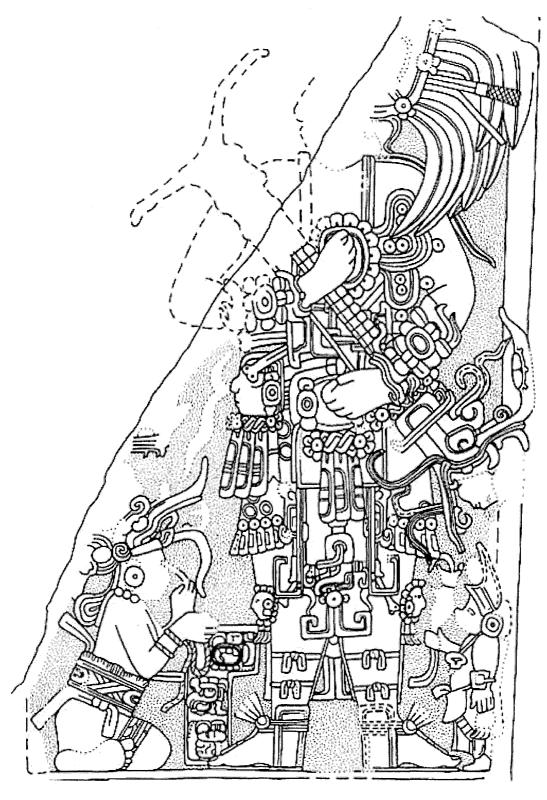


Figure 16. Caracol Stela 21 detail.

Drawing by Carl P. Beetz (Beetz and Satterthwaite 1981:Figure 19) used by permission of the University of Pennsylvania Museum.

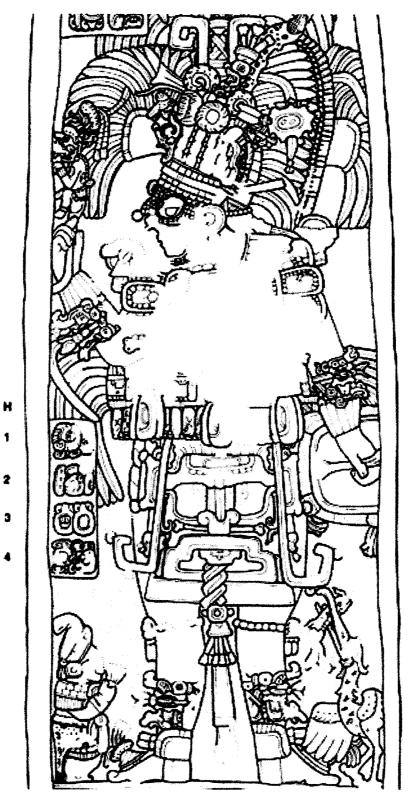


Figure 17. Dos Pilas Stela 14 detail. Drawing by Stephen D. Houston (1989:Figure 27, 1993:Figure 3-24) used by permission.

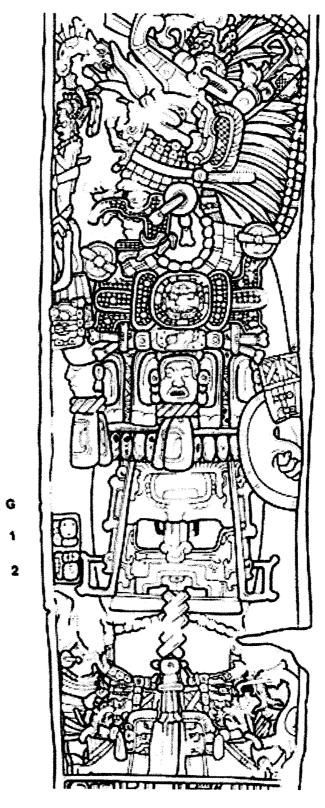


Figure 18. Dos Pilas Stela 15 detail. Drawing by Stephen D. Houston (1993:Figure 3-25) used by permission.

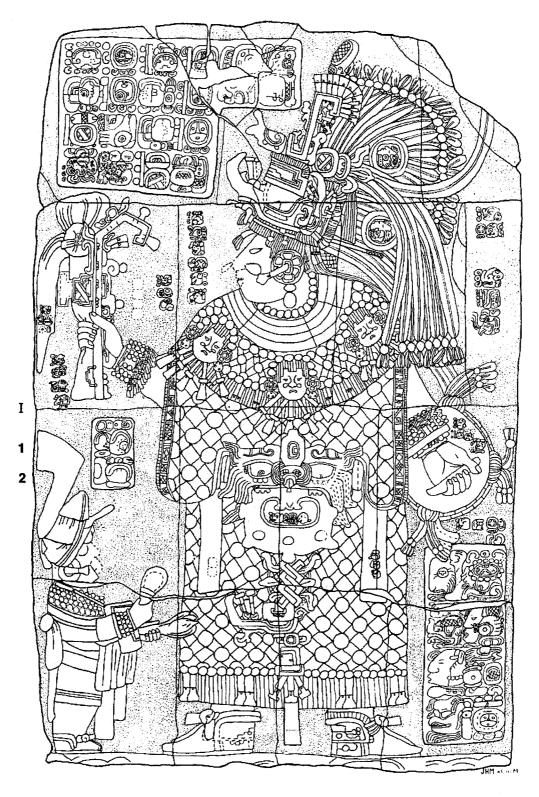


Figure 19. El Peru Stela 34 detail. Drawing by Jeffrey H. Miller (1974:Figure 2), copyright Merle Greene Robertson, used by permission of the Pre-Columbian Art Research Institute.

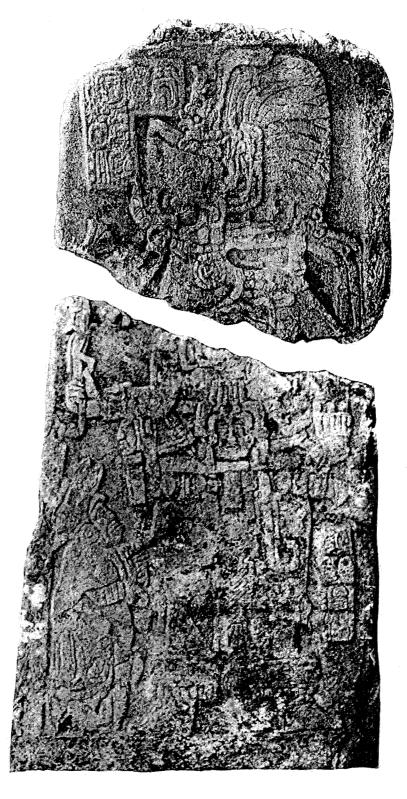


Figure 20. La Florida Stela 7. Photograph by Frances Morley, 1944 (Proskouriakoff 1950:Figure 61c) used by permission of the Carnegie Institution of Washington.

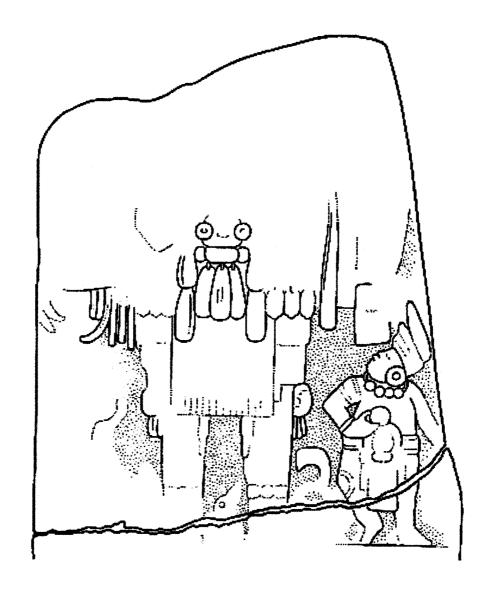


Figure 21. La Milpa Stela 4 front detail. Drawing by Nikolai Grube (Grube and Hammond 1998:Figure 2) used by permission.

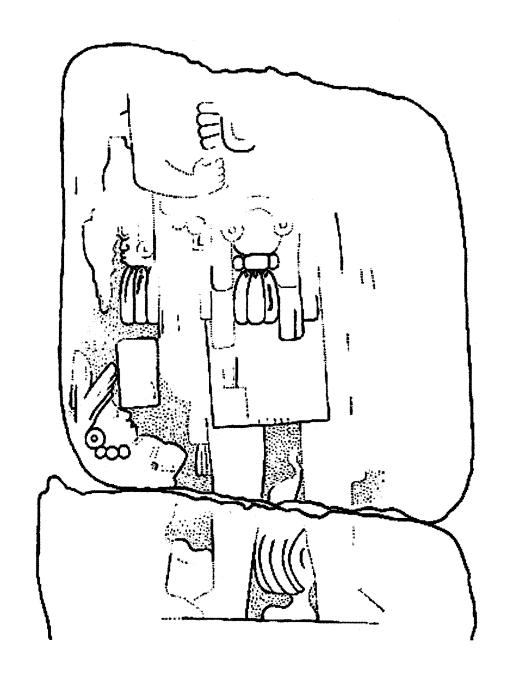


Figure 22. La Milpa Stela 4 back detail. Drawing by Nikolai Grube (Grube and Hammond 1998:Figure 3) used by permission.

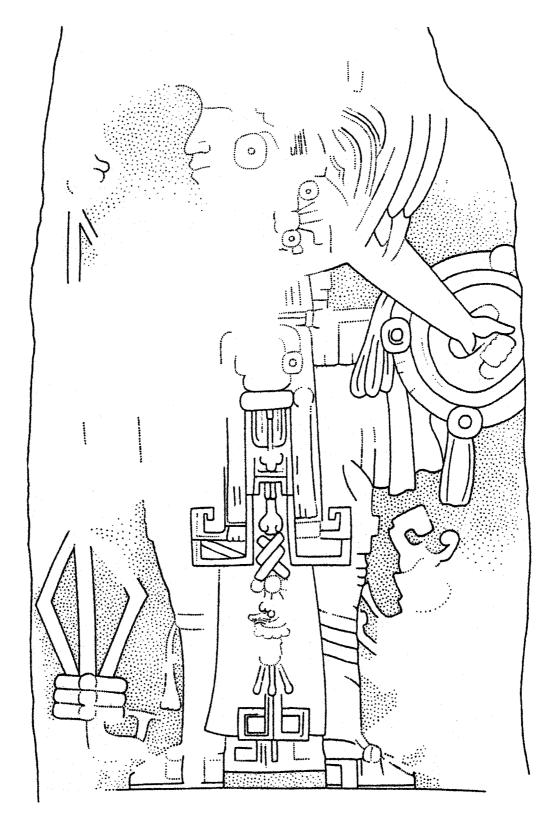


Figure 23. La Milpa Stela 12 detail. Drawing by Nikolai Grube (1994b:Figure 3a) used by permission.

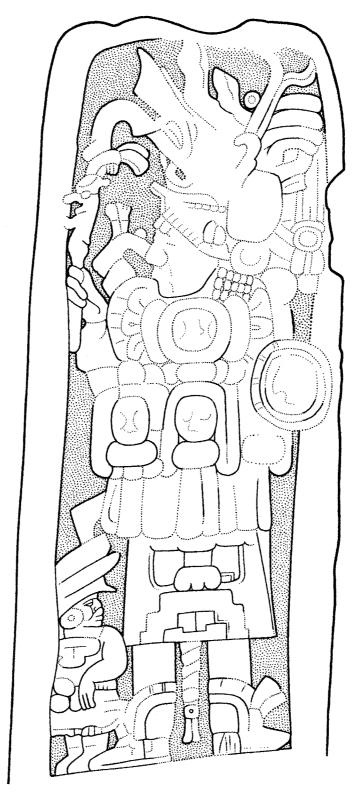


Figure 24. Oxpemul Stela 19. Drawing by Nikolai Grube used by permission.



Figure 25. Santa Rosa Xtampak Palace panel. Andrews (1997:Figure 41) used by permission of Labyrinthos Press.



Figure 26. Sayil Structure 4B1 east column. Pollock (1980:Figure 253a), copyright by the President and Fellows of Harvard College, used by permission of Peabody Museum Press.

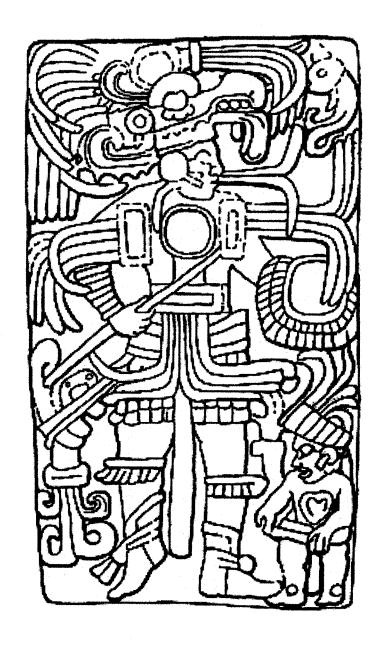


Figure 27. Sayil Structure 4B1 west column. Pollock (1980:Figure 253b), copyright by the President and Fellows of Harvard College, used by permission of Peabody Museum Press.

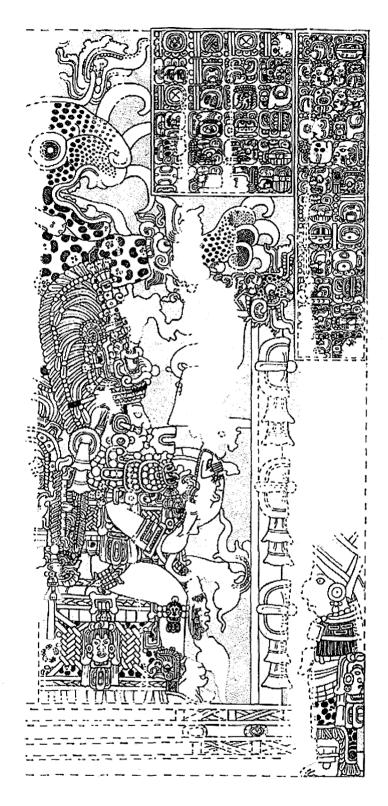


Figure 28. Tikal Structure 5D-1 (Temple I) Lintel 3 detail. Drawing by William R. Coe (Jones and Satterthwaite 1982:Figure 70) used by permission of the University of Pennsylvania Museum.

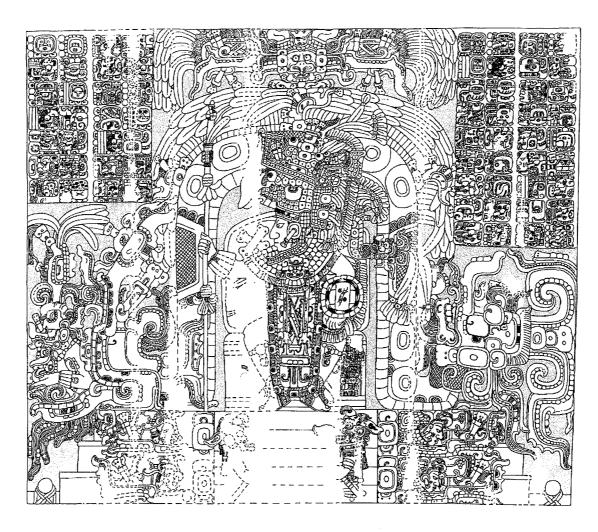


Figure 29. Tikal Structure 5C-4 (Temple IV) Lintel 3 detail. Drawing by William R. Coe (Jones and Satterthwaite 1982:Figure 74) used by permission of the University of Pennsylvania Museum.

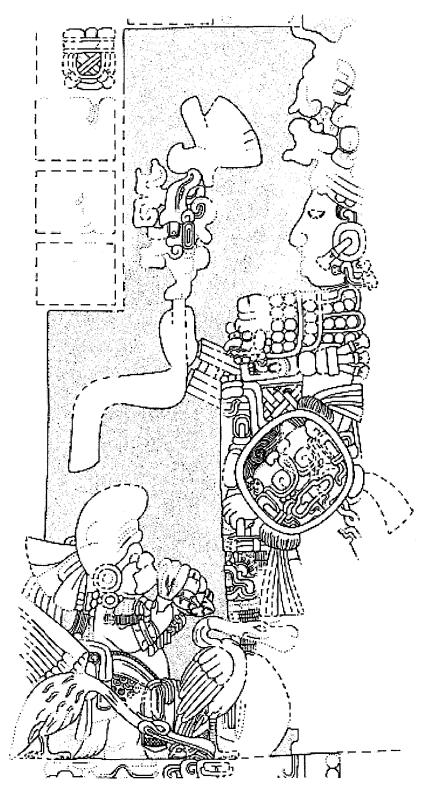


Figure 30. Tikal Structure 5D-52 lintel detail.

Drawing by William R. Coe (Jones and Satterthwaite 1982:Figure 75) used by permission of the University of Pennsylvania Museum.



Figure 31. Tikal Structure 5D-141 façade detail. Photograph by Karl Herbert Mayer (1986:Figure 7) used by permission of Isensee Verlag.

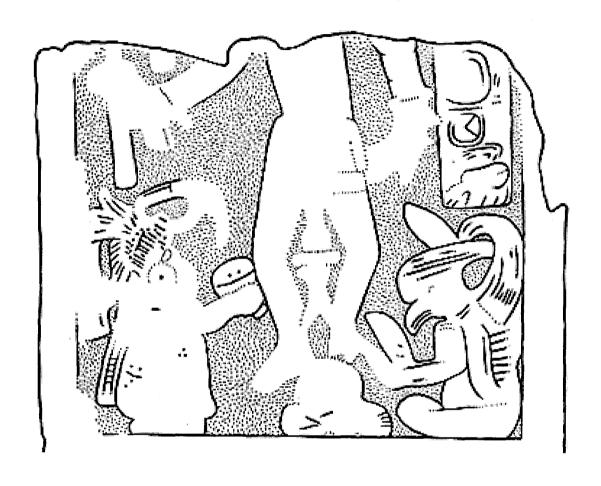


Figure 32. Tzum Stela 5 detail. Drawing by Eric von Euw (*Corpus of Maya Hieroglyphic Inscriptions*, Vol. 4, Part 1, p. 59) reproduced courtesy of the President and Fellows of Harvard College.



Figure 33. Uxul Altar 2 front. Harvard University (2002-2004 image H-34-351 object 58-34-20/63033), Ruppert and Denison (1943:Plate 59a) reproduced courtesy of the President and Fellows of Harvard College.

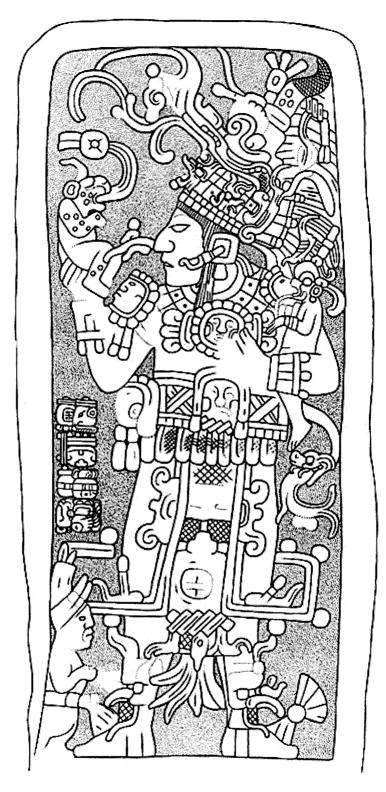


Figure 34. Xultun Stela 3 detail. Drawing by Eric von Euw (*Corpus of Maya Hieroglyphic Inscriptions*, Vol. 5, Part 1, p. 15) reproduced courtesy of the President and Fellows of Harvard College.

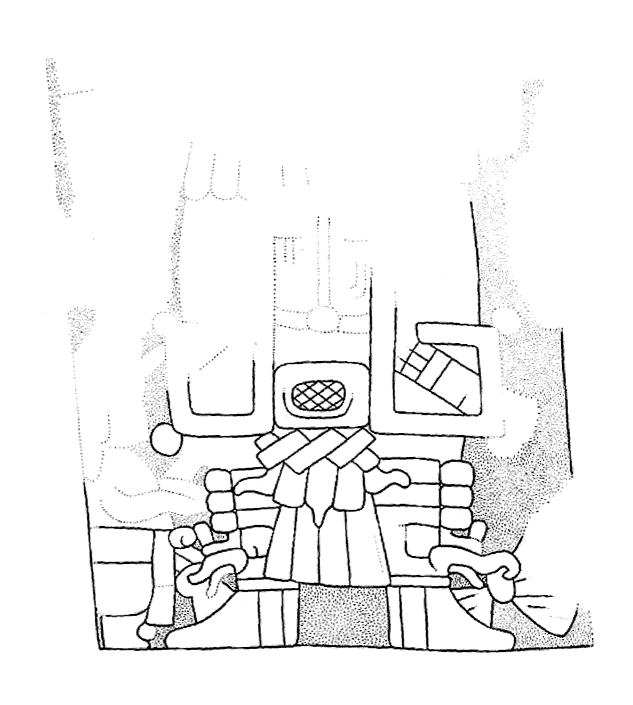


Figure 35. Xultun Stela 8 detail. Drawing by Eric von Euw (*Corpus of Maya Hieroglyphic Inscriptions*, Vol. 5, Part 1, p. 31) reproduced courtesy of the President and Fellows of Harvard College.

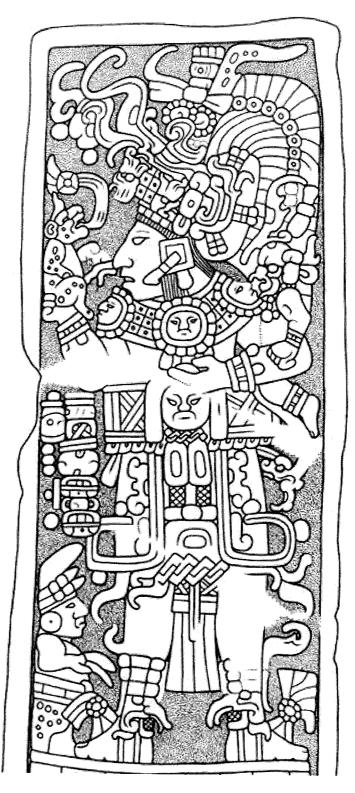


Figure 36. Xultun Stela 10 detail. Drawing by Eric von Euw (*Corpus of Maya Hieroglyphic Inscriptions,* Vol. 5, Part 1, p. 37) reproduced courtesy of the President and Fellows of Harvard College.

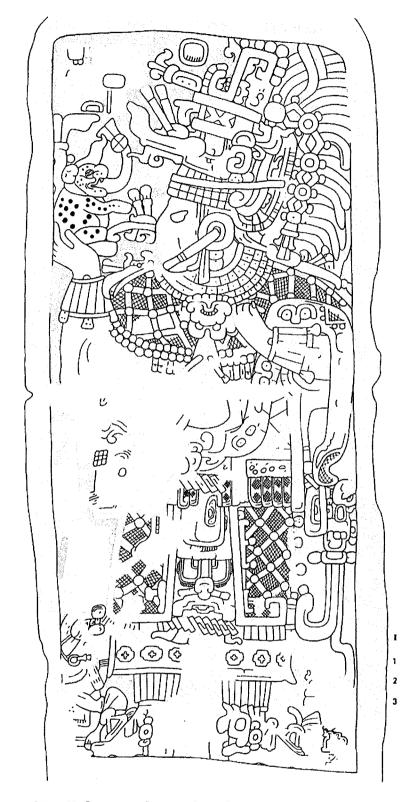


Figure 37. Xultun Stela 24 detail. Drawing by Eric von Euw (*Corpus of Maya Hieroglyphic Inscriptions*, Vol. 5, Part 2, p. 84) reproduced courtesy of the President and Fellows of Harvard College.

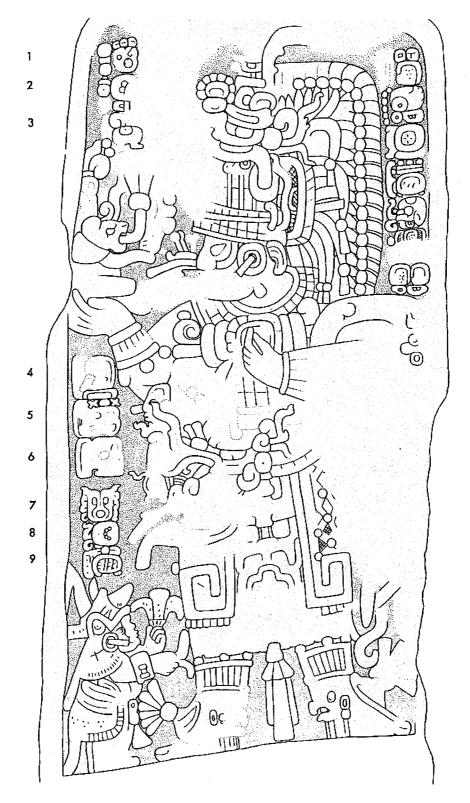


Figure 38. Xultun Stela 25 detail. Drawing by Eric von Euw (*Corpus of Maya Hieroglyphic Inscriptions,* Vol. 5, Part 2, p. 88) reproduced courtesy of the President and Fellows of Harvard College.

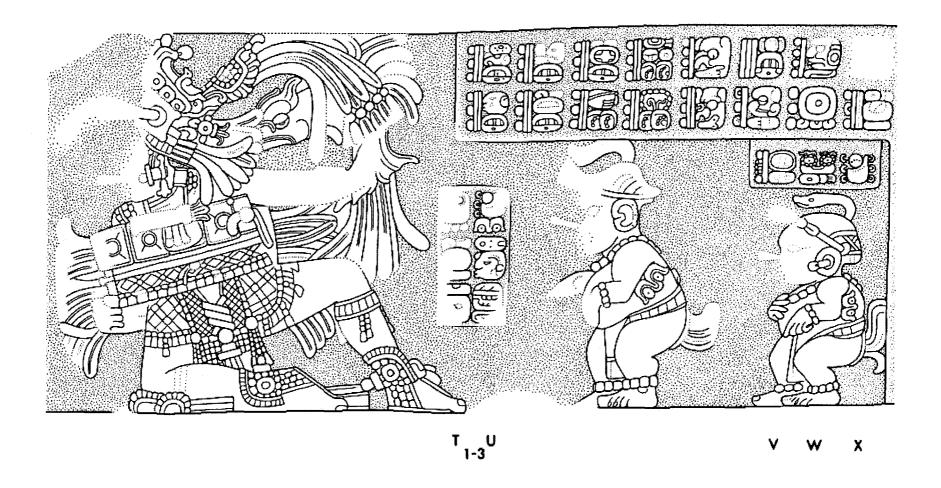


Figure 39. Yaxchilan Hieroglyphic Stair 2 Step VII detail.
Drawing by Ian Graham (*Corpus of Maya Hieroglyphic Inscriptions*, Vol. 3, Part 3, p. 160) reproduced courtesy of the President and Fellows of Harvard College.

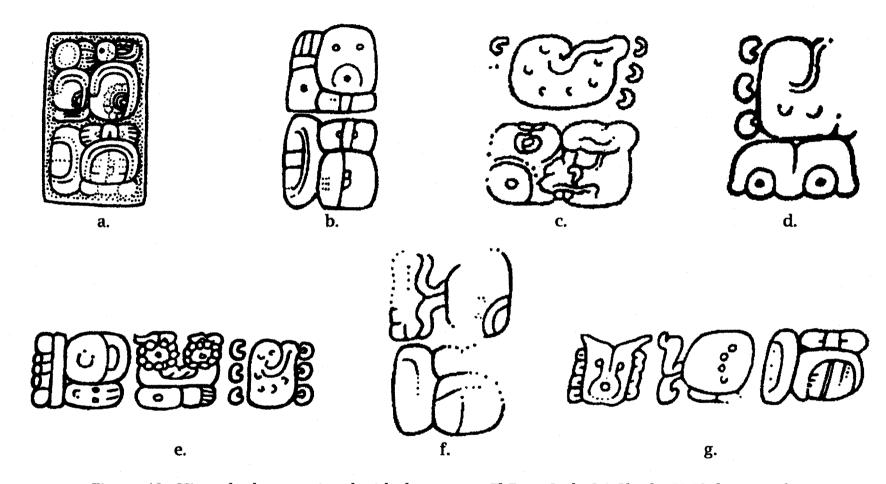


Figure 40. Hieroglyphs associated with dwarves: a, El Peru Stela 34 Glyphs I1-I2; b, Dos Pilas Stela 15 Glyphs G1-G2; c, Motul de San José Stela 4; d, Yaxchilan HS 2 Step VII Glyph U1; e, Yaxchilan HS 2 Step VII Glyphs V-X; f, Xultun Stela 24 Glyphs I2-I3; g, Xultun Stela 25 Glyphs A7-A9. a: Drawing by Phillip J. Wanyerka (1997:88) used by permission. b-g: Drawings by Stephen D. Houston (1992:Figures 3, 4a, 4c, 4e, 5c, 5d) used by permission.

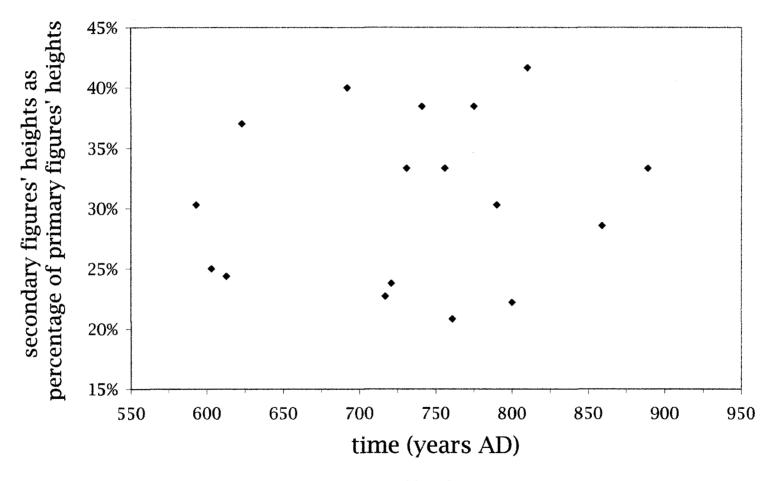


Figure 41. Secondary figures' heights as percentages of primary figures' heights on dwarf-motif monuments.

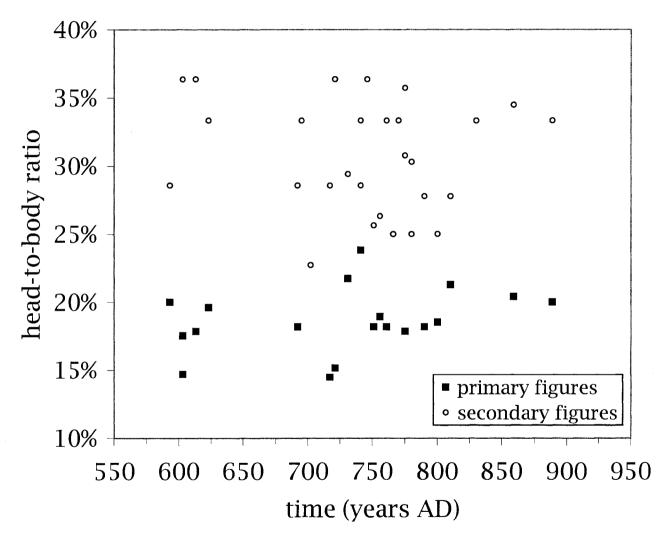
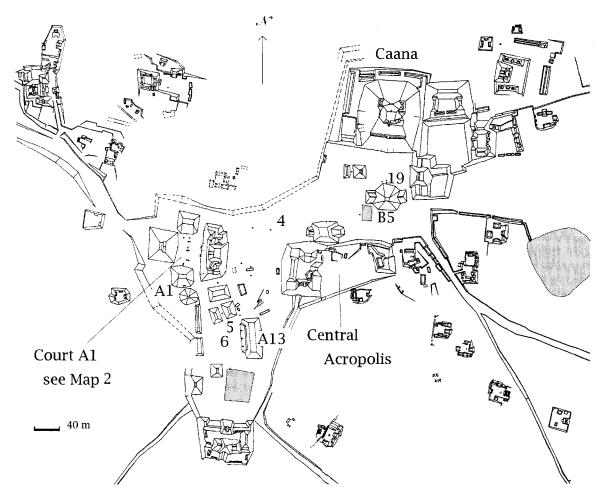
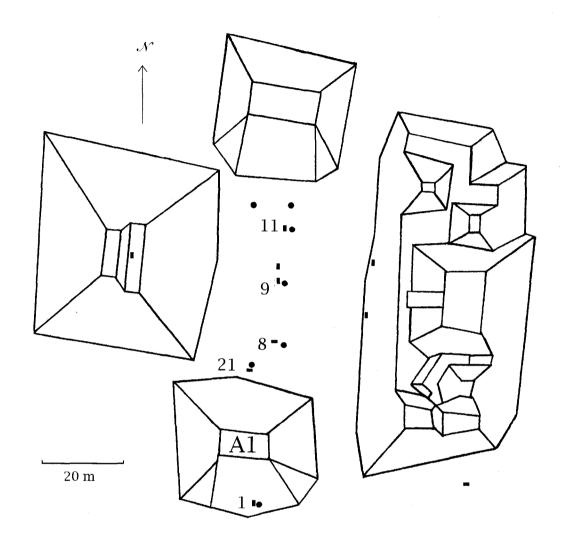


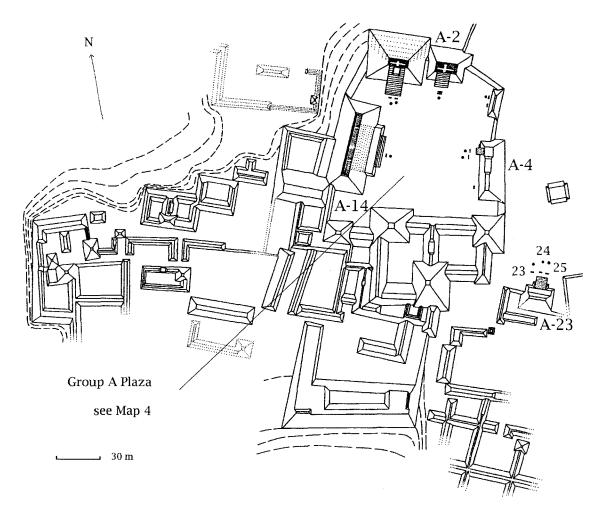
Figure 42. Proportions of primary and secondary figures on dwarf-motif monuments.



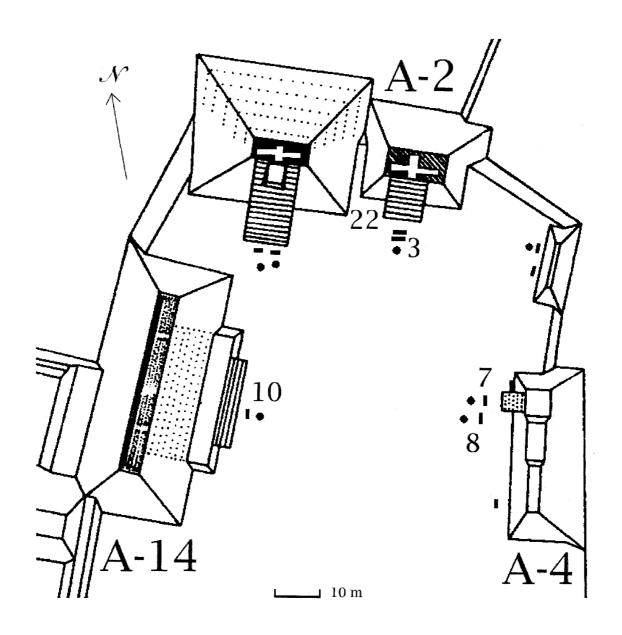
Map 1. Dwarf-motif monuments at Caracol: Groups A and B detail. After Beetz and Satterthwaite (1981:Figure 44), used by permission of the University of Pennsylvania Museum, and A. Chase and D. Chase (1987:Figures 46-47), used by permission of the Caracol Archaeological Project.



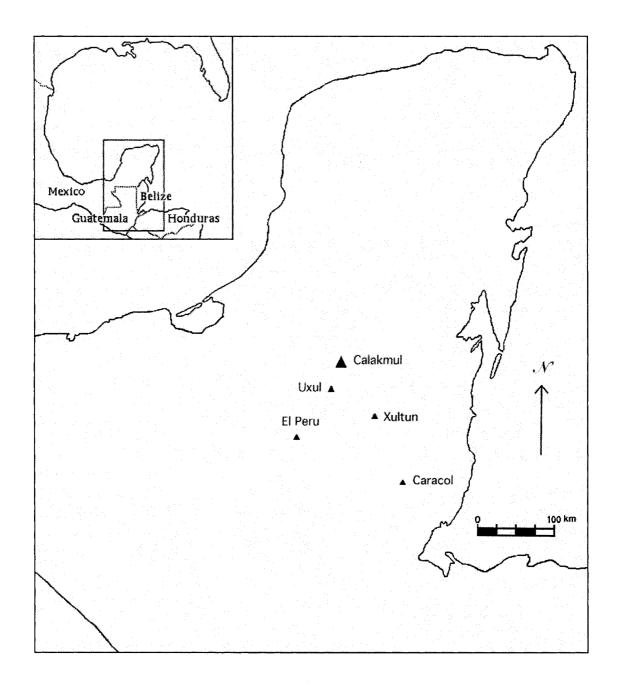
Map 2. Dwarf-motif monuments at Caracol: Court A1 detail. After Beetz and Satterthwaite (1981:Figure 44), used by permission of the University of Pennsylvania Museum, and A. Chase and D. Chase (1987:Figures 46-47), used by permission of the Caracol Archaeological Project.



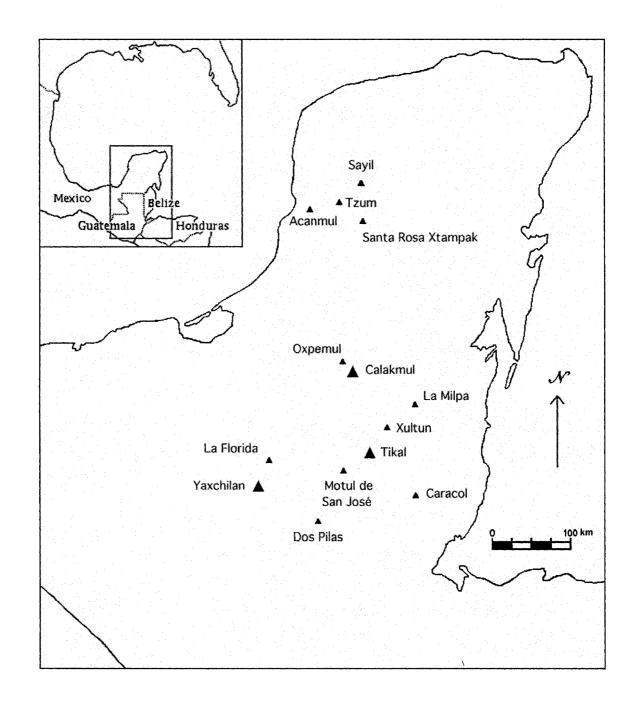
Map 3. Dwarf-motif monuments at Xultun: Group A detail. After *Corpus of Maya Hieroglyphic Inscriptions*, Vol. 5, Part 1, p. 6-7, reproduced courtesy of the President and Fellows of Harvard College.



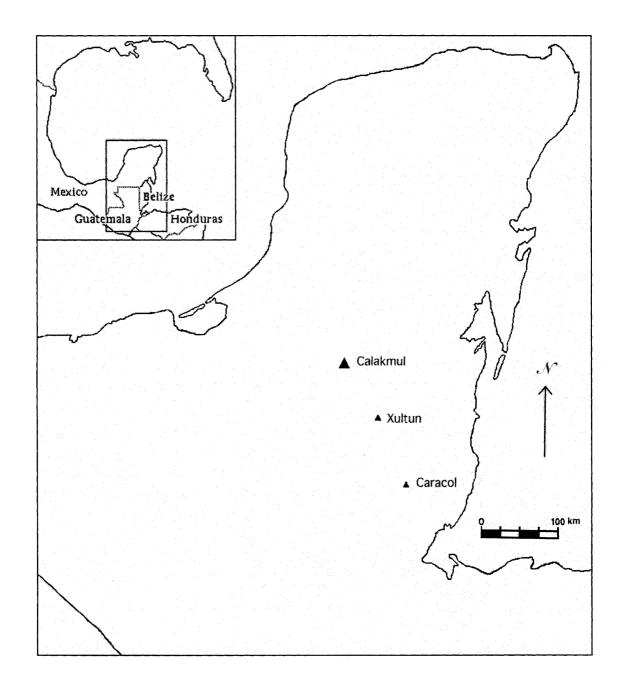
Map 4. Dwarf-motif monuments at Xultun: Group A plaza detail. After *Corpus of Maya Hieroglyphic Inscriptions,* Vol. 5, Part 1, p. 6-7, reproduced courtesy of the President and Fellows of Harvard College.



Map 5. Sites with dwarf-motif monuments from 9.7.10.0.0 to 9.13.0.0.0 (A.D. 583 to A.D. 692). After Sharer and Traxler (2006:Figure 1.1) used by permission of Stanford University Press.



Map 6. Sites with dwarf-motif monuments from 9.13.3.0.0 to 9.18.0.0.0 (A.D. 695 to A.D. 790). After Sharer and Traxler (2006:Figure 1.1) used by permission of Stanford University Press.



Map 7. Sites with dwarf-motif monuments from 9.18.10.0.0 to 10.3.0.0.0 (A.D. 800 to A.D. 889). After Sharer and Traxler (2006:Figure 1.1) used by permission of Stanford University Press.