
3 Constructing Maya Communities

Ethnography for Archaeology

by John W. Fox and
Garrett W. Cook

Given that millions of traditional Maya live today, it is surprising how little ethnography has figured into reconstructions of their ancient societies. Early Mayanists pointed out many continuities between the present and the past. For example, de Borhegyi (1956) argued that a conservative Maya folk culture had adapted to state institutions on its own terms in the course of being dominated for successive 500–600-year intervals by its own elite (the Classic period), a Mexicanized elite (the Postclassic), and a European elite (the colonial period to the present). While the living Maya of Chiapas and Guatemala provided homologies for interpreting the Classic Maya during the 1960s, the continuity approach has had relatively little impact on mainstream archaeology. What cultural lens is appropriate for interpreting the residue of Maya civilization? Certainly epigraphy and ethnohistory written by the Maya themselves temper modernist Western perceptions, but it is recent uses of ethnography that have resulted in breakthroughs such as the discoveries that Classic rulers called forth their ancestors (Schele and Freidel 1990) in shamanic rituals like those enacted by lineage heads on hilltop altars in Guatemala today, that basic iconographic elements and cosmological principles have endured since the Classic period (Freidel, Schele, and Parker 1993, Fox 1996), and that ancestor veneration like that of today is expressed in the design of Classic-period ceremonial centers (McAnany 1995).

We examine the continuity between the present-day emic social organization of local communities (Carmack 1966, Vogt 1969) and the earlier principles of lineage alliance that allowed the construction of successively larger blocs of communities nested within the aboriginal segmentary state. The organizational formats are culled from colonial dictionaries, conquest-period native chronicles, present-day oral narratives, and ethnography. We suggest that Classic Maya archaeology would benefit from the guidance of ethnography just as epigraphy has complemented and corrected some of the excesses in

interpretation from the materialist theoretical perspective.

In this study, segmentary lineages in highland Guatemala and Yucatan are traced from the Classic-Postclassic transition (ca. A.D. late 800s–900s) to the present to show how they aggregated into egalitarian and hierarchical polities. Lineages split, migrated long distances to fuse with conquered peoples in new localities, and amalgamated with scattered fraternal lineages when threatened (on rebellions, dispersals, and shifting states, see Tambiah 1985:322–26; Kelly 1985:72). The Maya community was made up of intermarrying patrilineages that shared a patron deity and replicated this pattern within successively larger aggregations. Lineages competed for rank and special prerogatives; such political struggles constitute much of the dynamics expressed in Classic-period epigraphy and Postclassic ethnohistory. Accordingly, from ethnography, ethnohistory, archaeology, and mythology we summarize lineage alliances for the Postclassic, ca. A.D. 900–1520s, political roles of lineages within land-sharing sodalities from the colonial period to the present, and evidence for status and wealth differentials between lineages.¹

Case studies of segmentary lineages in the Quiché municipality of Momostenango in the densely populated highlands of Guatemala and the Yucatec village of Ox Mul in the frontier rain forest of Belize delineate nearly opposite ends of the spectrum of community size and traditionalism and may speak to pan-Maya commonalities, past and present.² Our survey begins in the highlands, where lineages are better documented.

A Quiché Model for Lineage Sodalities

AMAK, TINAMIT, AND CHINAMIT

The Quiché lineages were organized in communities called *amaks* and *chinamits*. In the colonial dictionaries, both are equated with “hamlet” (*aldea* [see Villacanas 1692, de Coto 1983, Zuñiga ca. 1610]). Ximenez (1929, vol. 1:130) calls *amaks* “small rural communities” extending from a fortified central town (*tinamit*) “like the legs of a spider,” though “unified as single body” (*u xe amak* [*Popol Vuh* 1971 (ca. 1554):228]). *Amak* seems to be a general term meaning a community segment tied through kinship to other such bodies. A rural *amak* owed allegiance to the capital (*amak tecpan*) and maintained obligations across the state (de Coto 1983:262).

1. Cook and Fox investigated Ox Mul, a Yucatec village in western Belize, during 1991–93 under the auspices of the Department of Archaeology, Belmopan, Belize. Ox Mul translates as “Three Hills,” a reference to the altar-sized pre-Hispanic mounds there. Fox and Melinda A. Goetz mapped Ox Mul (fig. 1) and Goetz drafted figures 2–4 with funding from the Baylor University Research Council.

2. Ox Mul is the name used by its Yucatec-descended villagers; its official name is omitted here. Ox Mul lies 6 km from Tipu, founded ca. A.D. 1300 and the capital of the semiautonomous polity Dzulunicob (“Foreign People”) during the 17th century (Graham, Jones, and Kautz 1985:207; Jones 1989:9).

Gradations of generational depth (*le'el*) from common ancestors within the lineage (*alaxik* [*Popol Vuh* 1971 (ca. 1554):214]) defined duties and obligations between *amaks*. Thus patriliney ranged from a *minimal lineage*, with allied brothers and their children, through a *principal lineage* including at least grandparents and grandchildren in a single *amak* or *chinamit* to a *major lineage*, with shared descent more than five generations removed, often extending over several *amaks* or *chinamits* as a result of fission (see C'oyoi 1973 [ca. 1560]:292).³

For the Quiché, each centrally placed town (*amak tinamit*) in the provinces was surrounded by rural *amaks* originally settled by "little segments" (*ch'uti amak* [*Popol Vuh* 1971 (ca. 1554):219, 247; C'oyoi 1973 (ca. 1560):299]). The *amak* "lords/spokesmen" convened "within the walled town of buildings covered in lime plaster" [*Popol Vuh* 1971 (ca. 1554):163; C'oyoi 1973 (ca. 1560):294–95]. There, the *aj'ovaram* (*ajawarem* or "lordly") *amak*, based upon seniority of descent, formed a governing council [*Popol Vuh* 1971 (ca. 1554):170, 228; C'oyoi 1973 (ca. 1560):273, 276, 292]. Together, the urban and rural kindred comprised the *nima amak* ("major segment") or *nimaguil amak* ("greatest segment"), which in turn massed into the *onojel amak* ("all together") [*Popol Vuh* 1971 (ca. 1554):157, 170, 226, 235; C'oyoi 1973 (ca. 1560):273], 13 segments conjoined, *ox lajuy u ka amak* [*Popol Vuh* 1971 (ca. 1554):155]). Therefore, various gradations of *amaks* were distinguished by adjectives and by context. Occasionally the levels of *amaks* are consecutively listed (e.g., *ch'uti amak*, *nima amak*, *onojel amak* [e.g., Yax 1989 (1562):53]) when the nested segments massed together for particular events.

A *chinamit* consisted of two or more minimal or principal lineages plus perhaps several families of recent arrival who shared lands and a temple or shrine complex; thus the term *chinamit* is used when referring to territory (e.g., Yax 1989 (1562):55, 82). Often an original intruder patrilineage married into the autochthonous one and came to control corporate religious symbols, thus asserting dominance. The coresident in-law lineages (*ji*, *ji'a*, *jiatz*, or *jatz* [*Popol Vuh* 1971 (ca. 1554):215; de Coto 1983:130; Ximenez 1985:273]; see Carbonell Pastor's [1973] *concuñado* and Munson [1991:320] for *jatzul*) held lesser power. The senior-ranked lineage also married into other *amaks* across the state (Hill and Monaghan 1987:47, 58, 74). The term *chinamit* and its post-conquest equivalent, *calpul*, also referred to either a hamlet or its head (*aj tz'alam* [C'oyoi 1973 (ca. 1560):322; Alvarez Arévalo 1987:27, 37]) or even to the *nim ja* ("big house") or dominant lineage (Carmack 1977:10; Tedlock 1989:498–99). The *chinamit*'s external affairs

were guided by the ascendant lineage, which spoke for the coresident in-law lineage(s) under a gloss of reciprocity.

The early regal-ritual capital in the center of the state modeled the rural landholding *chinamit*, composed originally of two minimal/principal lineages. It eventually grew to four major lineages by adding two nearby lineages but retained the *chinamit* scheme by dividing into "sun" and "moon" moieties. This "royal *chinamit*" was conceptualized as a *tulan* or sacred city (Utatlan; cf. Chichen Itza and Mayapan) and was the focal point of the solar calendar, integrating the provincial *chinamits*. Thus, instead of a single royal lineage there were four major lineages counterpoised, although one lineage was superordinate in power and ritual authority for as long as three centuries. Full quadripartition denoted the four cardinal points (R. Fox 1977:55; J. Fox 1989:668–69). But political organization was an ongoing process; lineages vied for symbols of cosmic authority and occasionally switched alliances and calendric identities. Lineages were thus political players in their own right.

LINEAGES IN MYTHOLOGY AND IN PROXEMICS

Complementary oppositions structure mythology. The myth of the Hero Twins in the *Popol Vuh* of the Quiché, some of whose characters and scenes are depicted on polychrome ceramics of the Classic period, includes episodes of complementary opposition between fraternal lineages. In synopsis, the first brothers, 1 Junajpu and 7 Junajpu, are the father and uncle of two sets of sons. The elder sons, 1 Monkey and 1 Artisan, emblematic of the Ajaw and Sakic lineages at Utatlan, are born of a woman of their own community, Ixbaquiyalo. The younger Hero Twins, Junajpu and Ixbalanque, emblematic of the Cawek and Nijaib lineages, are born of a mother (Ixquic) from an elite lineage in an enemy community. Their father, 1 Junajpu, represents the line of the celestial warriors and their mother the underworldly lords of Xibalba (*xib* 'fear', also the root for male in-laws, e.g., *xibinel* 'patrilineal kinsmen of one's wife'). The spittle of the sacrificed 1 Junajpu impregnates Ixquic, who takes refuge with her in-laws (virilocality). Eventually, the Twins overcome their rival stepbrothers and vanquish the enemy in-laws who killed their father. Thus, it is progeny of elite parents from antithetical *chinamits* (e.g., the *amak* of Xibalba) who are sanctioned to form the "royal *chinamit*." The myth structures "our lineage" against rivals in ascending order of consanguineal and affinal distance. The victorious Twins, emblematic of the dualism underlying Quiché social organization, rise as the sun and moon—the apical ancestors. Then, in the Fourth Sun of the *Popol Vuh*, the first humans are formed, and their descendants disperse to *amak*, *chinamit*, and *tinamit*. These three terms first appear at this point in the epic and only after the "celestial royal *chinamit*" has been established, making the new state safe for humankind.

Segmentary dynamics are manifested spatially at the pioneer Quiché *tinamit*, Jakawitz (A.D. 900s) of the

3. The colonial lexicons distinguish the lineage of birth (*alaxik* 'sons and daughters of women'; *cajolaxik* 'sons of men', as in *xa jun ka quiquel, ka comajil chu vi k' alaxik*, 'he is our blood [same seed] and our patrilineage' [de Coto 1983: 248, 314]). Suggesting complementary opposition, three adjoining *calpules* in Sacapulas in 1614 were said to be brothers under a single patron god who contested a grouping of three other *calpules* (Borie 1982:94).

Fourth Sun. The two lineages, the Ajaw and the Cawek, maintained small temples and initially one lineage house (Carmack, Fox and Stewart 1975:116), which in various contexts is referred to as an *amak* (e.g., Yax 1989 [1562]:49, 80). Upon abandoning Jakawitz for Utatlan (A.D. 1100s), the Nijaib and Sakic lineages joined the original two through complementary opposition, so that the Cawek and the Sakic became the moiety of the sun whereas the Ajaw and the Nijaib were the moiety of the moon. Each of the four major lineages replicated the basic building configurations (*Popol Vuh* 1971 [ca. 1554]:214; e.g., Wallace 1977:31–39, 47).

Lineages split off at Utatlan to colonize 13 territories where smaller versions of the lineage-temple complex symbolized ideational authority amid new subject lineages (J. Fox 1977:86–91; 1987:chap. 6; 1993: fig. 14.6). The newly conquered “vassals and companions” worked the agricultural estates and resided among their new Quiché in-laws on *chinamits* (C’oyoi 1973 [ca. 1560]:281, 300). The flexible Quiché incorporated peoples as the predatory and segmentary Nuer in Africa adopted the Dinka (Kelly 1985:109–10, 236–42).

The *Annals of the Cakchiquels* also tell how vanquished peoples were incorporated into an expansive Quichéan polity. When the four confederated Cakchiquel segments conquered the Akajal, the Cakchiquel split and relocated (Xajil 1953:89–90; Carrasco 1963, 1971). Each intrusive Cakchiquel segment intermarried with an indigenous Akajal segment on a newly apportioned estate; thenceforth the Akajal were termed “vassal kindred” (Xajil 1953:104). At the capital, Iximche, the Cakchiquel organized 13 *chinamits*, headed by 13 caciques, who fought as 13 divisions of warriors (Xajil 1953:74, 91, 95; Carrasco 1988:4). Three Cakchiquel-style plazas were built among three Akajal-style plazas at Chuapec Quecajol Nimaabaj, corroborating union of Cakchiquel with the Akajal vassals; similarly, two Cakchiquel plazas were paired with two Pokom plazas at Mixcu, the archaeological Chinautla Viejo (Fox 1978a:205; 1978b:16–23).

ONE MILLENNIUM OF NIJAIB SEGMENTATION

To delineate segmentary behaviors through time, we trace the Nijaib lineage from its formation ca. A.D. 975, outside Jakawitz, through its relocation to Utatlan ca. A.D. 1150 to its division within the pueblo of Momostenango ca. 1300s–1700s and the competition to control the integrating patron saints that followed. The ethnohistories retroactively historicize the Nijaib’s migration from the lowlands as one of the four original Quiché minimal lineages—a small group of young men under the cacique Balam Agaab (Totonacapan 1953:172). From conjunctive lines of evidence, however, we offer a less memorable beginning. The Nijaib gain historical visibility only several generations after the Ajaw and Cawek had settled at Jakawitz and married local women (*ixoquil amak* [*Popol Vuh* 1971 (ca. 1554):215; C’oyoi 1973 (ca. 1560):288]). They may in fact have formed when Ajaw women from the fortified Jakawitz (*onojel amak*

[*Popol Vuh* 1971 (ca. 1554):64, 196, 208–9] virilocally relocated to the Vuk Amak center Chujuyup, 2.5 km away (Fox 1989:664–65).⁴ We have seen that intrusive *amaks* married subordinated indigenes (e.g., Chomi Jup [Xajil 1953:86]). Outsider males eventually could join the *amak* as low-status newcomers on the basis of descent from a patrilineal ancestor of their mothers (*Popol Vuh* 1971 [ca. 1554]:251–52)—a hint at possible bilateral descent among elites with otherwise patrilineal rules of descent. Jakawitz and Chujuyup continued to be occupied through the A.D. 1000s (Brown 1985:274–75) as a two-tiered *chinamit* with the Ajaw and their patron deity, Jakawitz/1 Junajpu, superordinate. (This was the counterpart of the first-born god of the Classic Palenque triad, G-I.) With growth, the Nijaib elevated Awilix as their new patron “hidden on a mountaintop” (Totonacapan 1953:178–80) adjoining Chujuyup (still called “Place of Awilix”), whereas the earlier site Chujuyup at its foot became the *chinamit* of Aj Nijaib (Nijaib I 1957 [ca. 1550]:73). In mythology, Awilix’s avatar, Ixbalanque (moon), was the last-born of the triad, following Junajpu of the Cawek, the second-born.⁵

Nijaib translates as “great houses,” perhaps in reference to the large size of the seven early sites identified with the indigenous communities of the Quiché basin, the Vuk Amak (Carmack, Fox, and Stewart 1975).⁶ On the basis of their earlier ties in and about Jakawitz, the Nijaib and the Ajaw joined in a moiety at Utatlan (Wallace 1977:35). Yet the Nijaib (also known as “warriors of the night”) surpassed the Ajaw (“ritualists of Venus”) in power and size as the Cawek’s comrades-in-arms. Each of the Nijaib principal lineages held a separate ritual function under the highest-ranked office of Ajpop Galel Nijaib (*Popol Vuh* 1971 [ca. 1554]:231, 251–52).

Minimal lineages divided and relocated short distances to the 30-some *chinamits* surrounding Utatlan (*tzam chinamital* [C’oyoi 1973 (ca. 1560):294; Carmack 1981:249–56]). Where preserved, they contain a small temple for the patron *cabawil*, an image of wood or of stone (Xajil 1953:119; *Popol Vuh* 1971 [ca. 1554]:160, 183), and a lineage house (*nim ja*). This masonry structure, covered in lime plaster, was usually built close to an earlier earthen-mound site, suggesting complementa-

4. Chujuyup was linked with the hamlet of Quilaba 2 km directly north (originally Quilaja, “where the sun rises”), both being under the jurisdiction of the *aldea* Santa Rosa Chujuyup, at the foot of Jakawitz. Thus Quilaba would have been a local kinship group receiving wives from the Cawek. Both Quilaba and Chujuyup have small sites with mounds.

5. Later, Chujuyup and PaAwilix were called the *chinamit* Aj Nijaib, suggesting their place of origin (Nijaib I 1957 [ca. 1550]:73). The two other parcels were distinguished as Quilaba (Aj Quiliyaj/Iquilya) and Jakawitz (Aj Tinamit [Nijaib I 1957 (ca. 1550):72–73; C’oyoi 1973 (ca. 1560):38] or Chitinamit today).

6. At Utatlan, two other Vuk Amak lineages may have been added to the Nijaib, for local ceramics dating from the A.D. 700s–1100s and two single mound sites, radiocarbon-dated about A.D. 900 (Freter 1981:62–63), underlie the Quiché horizon there. Freter (1981:65) argues that the intrusive Quiché reorganized the Vuk Amak already there as their forebears had incorporated the Vuk Amak of Chujuyup and of Quilaba.

rily opposed intrusive and local lineages (J. Fox 1977:91–92).

Next, Nijaib and Cawek secondary segments (*ka amak*) migrated about 40 km west to Chuwa Tzak, the aboriginal Momostenango (C'oyoi 1973 [ca. 1560]:280, 299). The four Nijaib documents (1542–58) recount that battles led by one Ixquin Nijaib were the basis for claiming land fiefs; 22 *chinamits* came to be headed by Nijaib and Cawek caciques (e.g., Nijaib I 1957 [ca. 1550]; Nijaib II 1957 [1558]; C'oyoi 1973 [ca. 1560]:275, 292). In their own words, “their engendered sons captured mountains” as “military contingents of brothers,” so that the “first-born sons could take titles after their own benches/lineage houses” (the interiors of lineage houses were enclosed with council benches [*Popol Vuh* 1971 (ca. 1554):231, 251–52; C'oyoi 1973 (ca. 1560):293, 296]). The “conquerors of the towns” thus “inserted themselves among the vanquished” (C'oyoi 1973 [ca. 1560]:278, 297). A single west-facing temple for Awilix and two lineage houses suggest that the Nijaib initially dominated Chuwa Tzak, the *chi-amak-chi-tinamit* (“lineage town” [Nijaib II 1957 (ca. 1550):98]), as the administrative center for “all of the surrounding rural *amak*” (*Chua' Tzak ruc' ronojel amak* [C'oyoi 1973 (ca. 1560):23]). Apparently the local population was held in check by proximity to the “older brothers,” the *nima amak* centered at Utatlan, which could furnish warriors within two days (C'oyoi 1973 [ca. 1560]:299).

In modern Momostenango (Cook 1981), the *chinamit* model of Hill and Monaghan (1987) describes the *aldea*, where endogamy is the general rule; some lineages can be traced back 10–12 generations. Shamanic ritual integrates the various levels of the community, beginning with the “mother/father of the lineage” (*chuch kajaw rech alaxik*) and passing through the *aldea* (cf. *chinamit*) level to paired ritualists for the entire municipality (cf. *tinamit*).⁷ A lineage descended from a colonial cacique often leads an *aldea* and oversees a communalistic cult honoring the image of a saint (which replaced the pre-Hispanic *cabawil*). Incessant competition to control the patron saint among the elite lineages/*aldeas* is manifested in different mythic charters. The *cofradías* were once sodalities for individual *chinamits*—indeed, a *cofradía* is still called a *calpul*, and the *cofradía* system is called the “13 divisions” (*oxlajuj chop*).

Descendants of the Nijaib lineage, the Vicentes, and the Herreras, probably descendants of the Cawek lineage, remain contentiously opposed in controlling the town's patron image, Santiago, and maintain different historical sagas and rituals to support their respective claims (see appendices 1 and 2).⁸ This patron image has

7. In successive levels of ritual integration, (1) the lineage priest (*chuch kajaw*) mediates between the ancestral dead and the living at a hilltop lineage altar (*warabal ja* ‘sleeping house’), (2) the *chuch kajaw re ri aldea* performs rituals for the *aldea*, and (3) two *chuch kajawyub re ri tinamit* render offerings on behalf of the municipality at the four sacred mountains/cardinal points bounding the municipality.

8. The *cofradías* in the town center bring Santiago to visit Santa Isabel in rural San Vicente. The competing Herrera claim to Santi-

ago is also honored each year by a similar visit to the Herrera chapel in *aldea* Pueblo Viejo, near the ruins of Chuwa Tzak.

9. Three sites immediately south of Cerro Iquilaja may relate to a Cawek presence ca. A.D. 1300s (J. Fox 1978a:128–30).

10. The main trunk was headed by Francisco Izquin Nijaib, the cacique of Chuwa Tzak, who controlled Santa Cecilia. A new minimal lineage was headed by Francisco's brother, Juan Galé Nijaib (Nijaib I 1957 [ca. 1550]:70–76). Next, Francisco's grandson, Diego Vicente, founded Momostenango 6 km east of Chuwa Tzak. Continued competition within the Vicente major lineage and within the *tinamit* of Momostenango pressed Diego to found the *parcialidad* of San Vicente Buenabaj (Alvarez Arévalo 1987:9), complete with *títulos* and a new patron, María Concepción, which was later replaced by Santa Isabel.

11. According to oral history, the Vicentes failed to unite Momostenango. In fact, the younger generation of Vicentes later sided with the coresident in-laws within the *parcialidad* and pushed Diego from power. The Herreras also suffered a setback when the image of Santiago was transferred from Pueblo Viejo (Chuwa Tzak) to a lineage segment in the town center.

been kept in the Catholic church since the 1920s; it is referred to as the “morning star” (*nima ch'umil* [Cook 1981, Tedlock 1982]). The morning star is conceptualized by Quiché informants as the small red harbinger of the sun (José Fernandez, personal communication); in Momostenango, both the Red Dwarf and the first Mam first appear over the easternmost mountaintop shrine, Iquilija (Tedlock 1982:99–101, 147). Recinos (1957:74) pointed out that in Nijaib I Iquilija is the namesake of the earlier *chinamit* on Cawek-held lands near Jakawitz.⁹ Rival female patrons held by the Nijaib descendants as syncretized versions of Awilix (Nijaib II 1957 [1558]:99) are kept in a western *aldea*; they are said to be Santiago's women. The Nijaib major lineage subdivided many times in Momostenango.¹⁰

The contradictory Vicente and Herrera narratives suggest that during the early-colonial-period episodes attributed to Diego Vicente, three separate Vicente splits formed new *chinamits*. The Vicentes intermarried with local lineages in each, forming the three *parcialidades*. When outmaneuvered, lineage segments sought new territories. The new *parcialidades* had similar patron images, perpetuating astronomical and lineage identities. The pre-Hispanic “Toltec” mythico-legendary migration model conferred legitimacy on emigrant lineages throughout the colonial period and still persists in oral history. Lineage leadership was genealogical and charismatic. Intergenerational conflict linked cohorts from several lineages. A coalition of Herrera lineages eventually outmaneuvered the Vicentes, displacing them from Pueblo Viejo. There was little centralized linkage of the 13 (emically) or 22 (etically) *aldeas* prior to the 1920s. Several major lineages combined to accomplish short-term goals, but no single cacique permanently led more than a *chinamit*. Fission and relocation thwarted dominance by any single major lineage.¹¹ The prominence of Spanish saints that syncretized pre-Hispanic deities rose or fell with the political fortunes of their lineages. A ladino caudillo and his indigenous allies centralized the town administratively in the 1920s and elevated Santiago as its overarching icon. The 13 patron images were

moved from the rural lineage god-houses (*armitas*) to the central cathedral, symbolizing the dominance of the *cabecera*, and the *cofradías* ceased to represent rural solidarities.

The Yucatec Case

HISTORY AND CONTEXT

The Quiché and the Yucatec founders of Ox Mul may descend from migrants from the western Maya frontier at the close of the Classic period (Sabloff and Willey 1967, Thompson 1970, Carmack 1981). "Three brothers" led an expedition north to Chichen Itza (Landa 1941), while three or four kindred males led minimal lineages south to Jakawitz whose descendants eventually colonized Chuwa Tzak/Momostenango (Carmack 1981:141–43). Mayapan may have been colonized from Chichen (cf. Roys 1962:38, 52; Smith 1971:4; Adams 1977:262).

The states of Postclassic Yucatan rose and fell cyclically like those of the Quiché and Cakchiquel. In Yucatan, 13 regional groups, called the 13 petals of the plumeria, also organized segmentary states (Xiu n.d. [1557–1819]:45; Mani 1979:80, 87). The provinces were administered by deputies (*aj caluas* [Xiu n.d. [1557–1819]:51–52]) premised on the solar *katun* cycle. Accordingly, the *Chilam Balam of Mani* (Mani 1979:82) prophesies centralization "when rivalries end in Katun 1 Ajaw (ca. 1304), when brotherhood will return," and also predicts the collapse of Mayapan in A.D. 1461. Mayapan's smaller successor was Mani, which translates as "finished or completed cycle," or "now that it is passed" (e.g., Xiu n.d. [1557–1819]:71; Edmonson 1986:53, 298).

The villagers of Ox Mul assert that four families migrated in 1847, at the onset of the Caste War, about 500 km from Mani to found Ox Mul in 1876.¹² The warring Santa Cruz Maya took refuge along the headwaters of the Río Hondo (Reed 1964:141), and the opposing Chan ("Serpent") Maya secluded themselves along the Macal branch of the Belize, the next river-drainage south. Thus the two warring factions became neighbors again.¹³ Like the confederated village triads of the Santa Cruz (Jones 1977*b*), Ox Mul of the Chan Maya allied itself with the villages of Socutz and Bullet Tree Falls, each 12 km away.¹⁴ However, the abandoned nearby site of Tipu,

founded in the A.D. 1300s, suggests earlier migrations from Yucatan.¹⁵

In 1995 Ox Mul consisted of some 800 persons clustered around three municipal buildings and the Catholic church (fig. 1). Until the 1960s, surrounding lands were treated as commons. The village lies along a low ridgetop, and residence is virilocal (Thompson 1930, Villa Rojas 1969)—91% of the households are located within major lineages in four neighborhoods: (1) 80% of the households in the highest section, northeast, are Tzib; (2) 70% in the lowest cluster, southwest, are Canto; (3) 50%, strung along a sharp ridgetop, southeast, are Mai; and (4) Tzib and Canto equally divide the northwest quadrant (figs. 2–4). Generally, fathers furnish land and a house upon the marriage of their sons, and widows return to their natal lineages. Fences partition principal lineages; minimal lineages include a house for a couple and the houses of its married sons, which may enclose a small traditional patio or follow a linear arrangement according to birth order. Since about 1900, eight other lineages have married in, so there are now twelve patrilineages in all.

Fission and fusion over six generations in Ox Mul furnish details usually lacking on how individuals initiate new lineages: Spatial distance between house-clusters/lineages reflects genealogical distance. About 80% of the members of each of the town's six churches, the principal sodalities of the village, belong to two paired patrilineages, forming a kind of modern *chinamit*.¹⁶ Lineage leadership within churches is charismatic and prophetic, retaining a visionary, shamanic core reminiscent of the Talking Cross of the 1850s (Dumond 1977:106), the colonial *Chilam Balam* prophecies, and the Postclassic oracles of Cozumel and Chichen Itza (Sabloff and Rathje 1975; Edmonson 1982, 1986). A senior male from the superordinate lineage leads the congregation as did the cacique of the *chinamit*. Churches split along lineage and generational lines when they reach adult memberships of 60 to 100, or about 175 to 250 persons. Male outsiders marry into the village, initiating minimal lineages with ambilocal residence.

SEGMENTATION AND RELIGIOUS COLLECTIVITIES

By the 1960s, village factionalism was beginning to be expressed in Pentecostalism, which emphasizes local prophetic and charismatic leadership (Chordas 1980:166) and thus lends itself to segmentation. As counterparts of *chinamits*, the Pentecostal churches experience traditional lineage fission and fusion. A coterie of brothers and their wives, led by a charismatic vision-

12. At least a dozen place-names are remembered as stopovers in the migration. Patronymics in Ox Mul—Tzib (Dzib), Mai (May), Howe (Hau), and Canto (Kantu/Kantun)—are listed for Tekit, Mani, adjacent to the abandoned Mayapan, in 1688 (Roys 1957:66–67). However, the Tzib and Mai families also moved to the Belizean-Mexican border area in 1622 (Jones 1989:166–67).

13. Ox Mul's location away from the river was selected for security from the Santa Cruz partisans (Cervantes 1990:12; Tzul 1993:10).

14. Was Socutz, founded in the 1860s (Massarelli 1972), related to its nearby namesake, the 1655 Zaczuuz? Tipu and Zaczuuz intermarried between 1615 and 1622 (Jones 1989:287; Scholes and Thompson 1977:46). Thompson (1977:9) proposes that the Belizean Maya mixed intruders from successive migrations. The *Matricula*

de Tipu (1655) lists Mai, Hau, and Panti, which figure prominently at Ox Mul.

15. Ox Mul mirrors the earlier Tipu, with an equivalent-sized Catholic church, a few municipal buildings, and a population that grew to approximately 1,000 over 120 years (Jones 1989:116).

16. The genealogies of all of the families of the village from the 1820s on are recorded.



FIG. 1. Settlement pattern of Ox Mul, Cayo District, Belize.

ary, founded each of the churches. Three churches (Rey de Reyes, Familia de Dios, and Fuente de Agua Vive) exhibit two lineages balanced in membership, and in two others (Rey de Paz and Cristo Vive) one lineage numerically dominates the other (fig. 5).¹⁷

Initially, the Catholic church and two Pentecostal churches, Rey de Paz and Rey de Reyes, were spaced like the points of an isosceles triangle and served as foci of factional conflict. Later churches subdivided and were built on the village peripheries. Autonomy and rivalry are pervasive. The Pentecostal churches convene simultaneously so that the electrically amplified preaching and music of each drowns out the competition. However, since membership shifts in only the occasional exogamous marriage, the more intensive rivalries arise within each congregation.

The office of *alcalde* rotated among the four earlier lineages (Cervantes 1990:28). In 1990, the Pentecostal Council of Pastors emerged as a new theocratic authority, undermining the civic office of chairman/*alcalde*. The Council of Pastors, in essence, is the local govern-

ment, recalling the "representative governance" of the 19th-century Santa Cruz Maya (Jones 1989) and the approximately half-dozen spokesmen for assembled lineages, the Pokom *molam* (Miles 1957:777-81).

Individuals who construct *chinamit*-like churches enlist the support of their cogenenerational kin. Rey de Paz was founded in 1962, when a young Tzib prophet persuaded his younger brothers to support his vision of a new way of life and broke away from the Catholic church (agent-centered change that reduced his marginality and empowered his lineage). About 20 years later, the next generational cohort of Tzib and Mai males rebelled against the aging prophet and his brothers to establish Cristo Vive after an elder had publicly prophesied the founding of a new church.

Lineage segmentation occurs, then, when younger men feel that their aspirations are thwarted by the senior generation and enlist the support of their peers. The cohort breaks from the major lineages and relocates with persons bearing the patronymics of the parental bodies. This quest by younger power brokers and their clientele is rationalized as a "calling."¹⁸ If land is available, out-migration is also an option.

17. Of the 40 marriages recorded in three churches during the past decade, 33 (82%) were within the church. In exogamous church marriages, women "virilocally" join the churches of their husbands.

18. The original major lineages split to form Pentecostal congregations based on the egalitarianism of "Christian brotherhood."

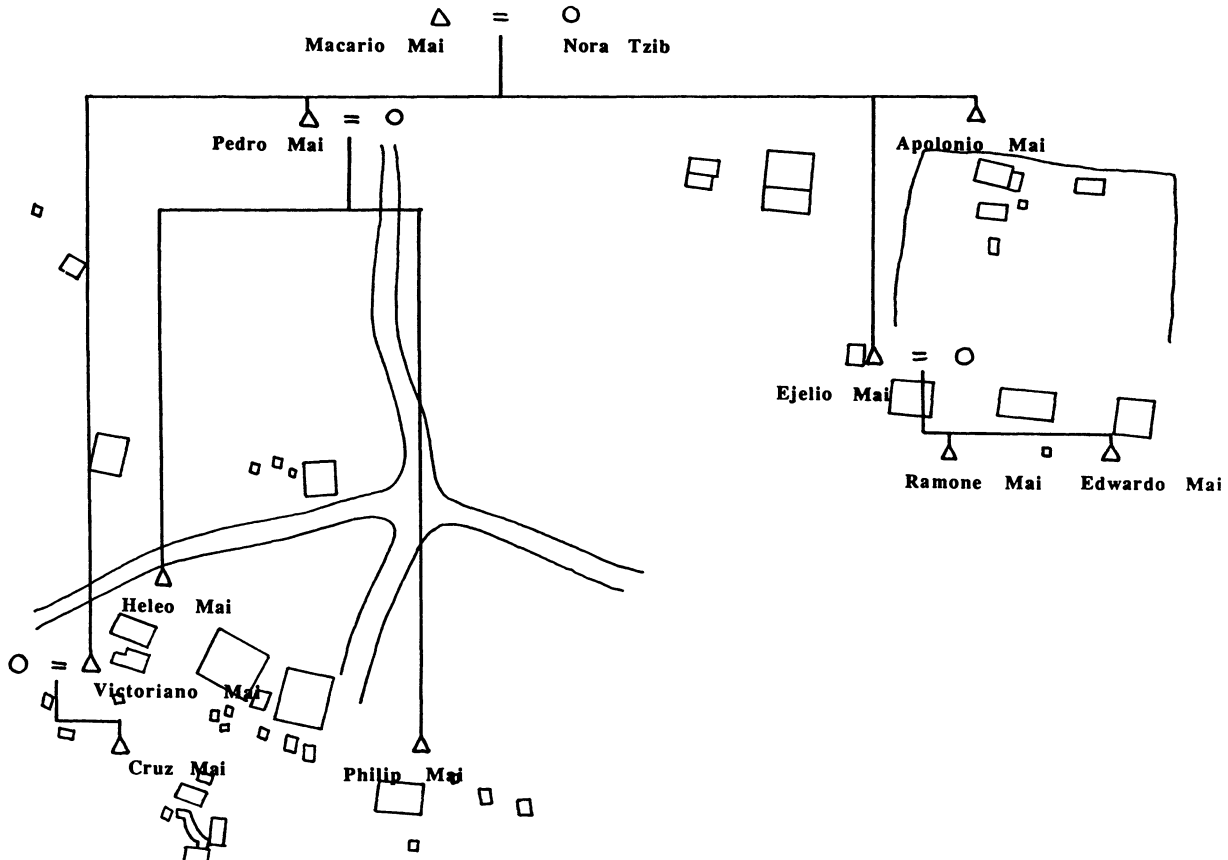


FIG. 2. *Distribution of Mai households in the southeastern barrio, Ox Mul.*

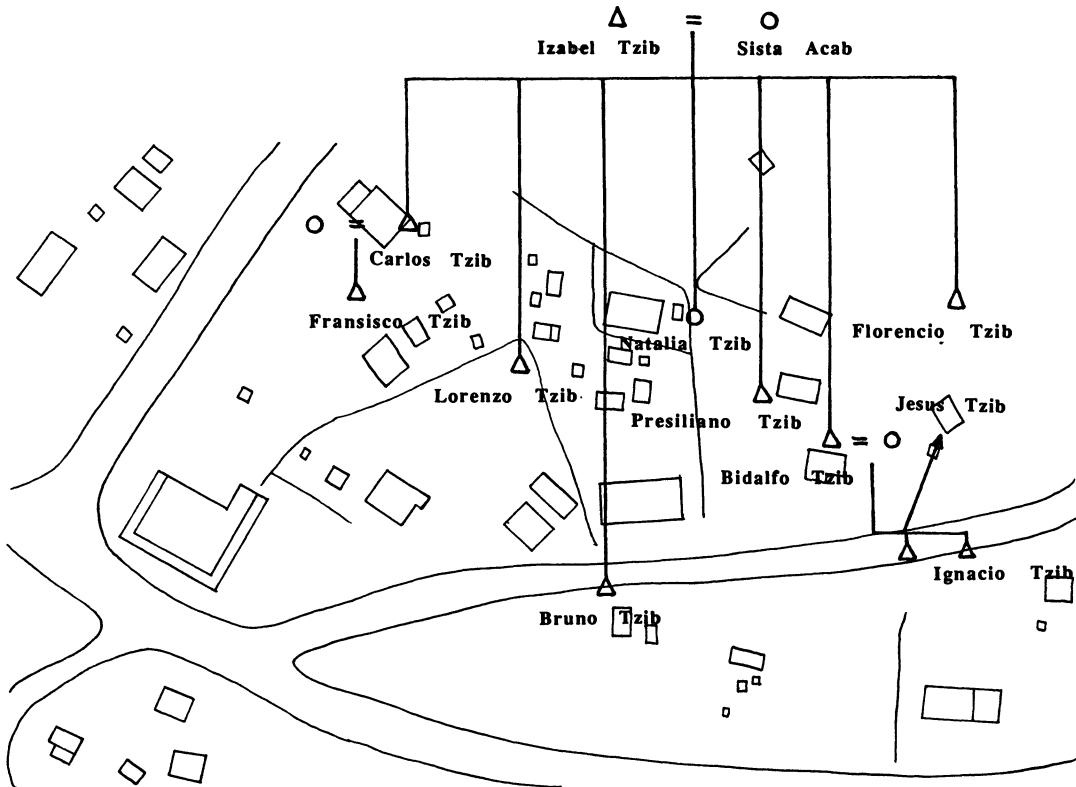


FIG. 3. *Distribution of Tzib households within the northeastern barrio, Ox Mul.*

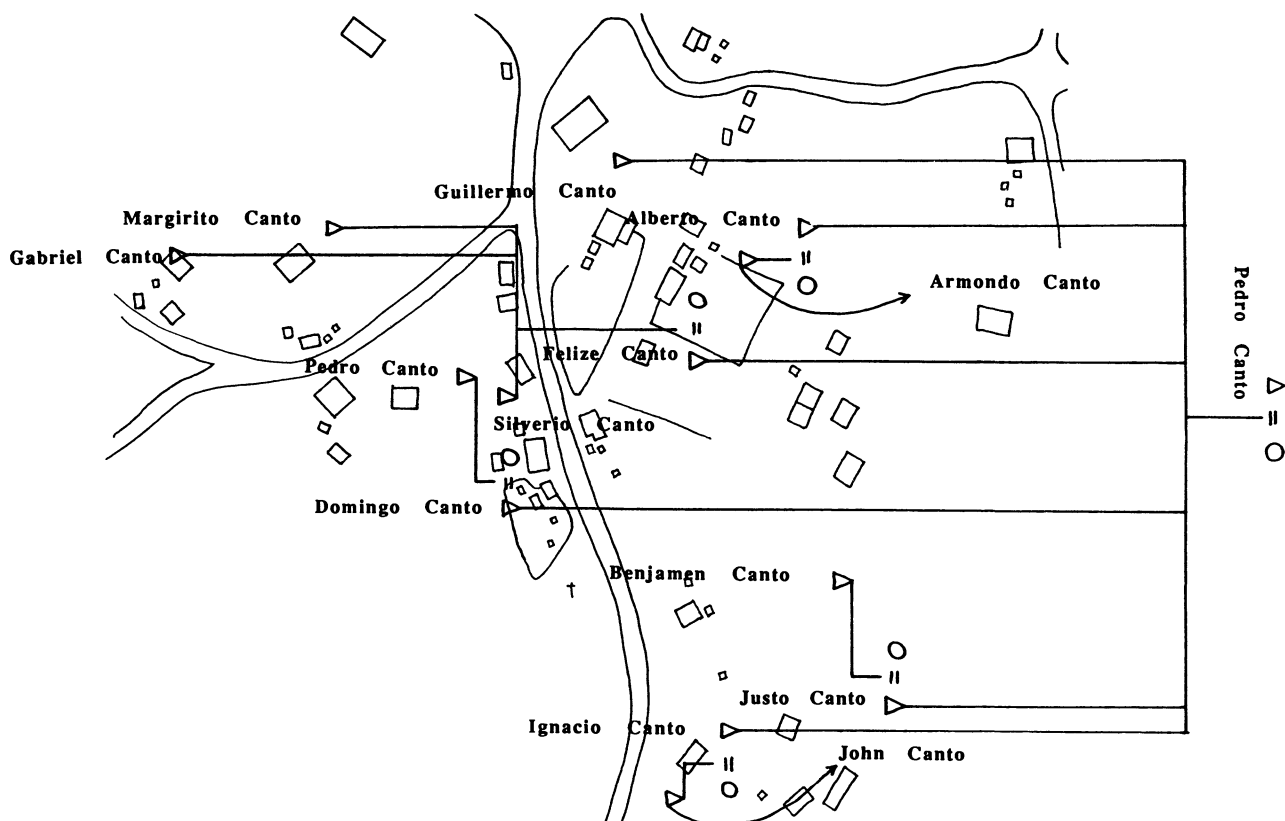


FIG. 4. Distribution of Canto households within the southwestern barrio, Ox Mul.

Mayan Principles of Segmentation

Our two contrasting cases of unranked village lineages and ranked state lineages demonstrate alliance, fission, and fusion at different scales in Maya societies. Similar lineage scaffolding in the two cases ranged from just dozens of persons but allied within regional village triads, in frontier enclaves at Jakawitz or Ox Mul to hundreds of thousands in Postclassic states. And segments could disarticulate, migrate, or realign themselves. The fact that actions were constrained by norms that were similar in very different environments and historical periods argues against environmental necessity theories, and ethnography makes the actions of individual actors clearly visible. In contrast, the archaeology of the Classic period extends into a 2d millennium removed from the actual social behaviors.

Complementarily opposed lineage groupings spurred competition. Factionalism promoted segmentation, as when the sons of Quik'ab plotted against him or when Diego Vicente was forced from power by his sons and their allies (Brumfiel and Fox 1993). Two lineages vied for control of the rituals of a *chinamit*, and *chinamits* competed among themselves to have their patron deities represent larger collectivities. Ultimately, moieties contended to control the regal-ritual offices of state and to make their patron gods paramount. For example, the Cawek patron, Tojil, became the god of state and received

"gifts" from throughout the realm. This tribute transferred to Utatlan was fashioned by the Aj Toltecat into symbols of rank (Nijaib I 1957 [ca. 1550]:107). Therefore, the Cawek spokesman for the ancestral god was the *de facto* head of state.

Individual segments may be seen in the pairing of the Ajaw and the Cawek in separate plazas at Jakawitz, the pairing of the *chinamits* of Chujuyup and Quilaja respectively with the Ajaw and the Cawek, and the division of the four major lineages into moieties and their sharing of a plaza at Utatlan. At Mayapan the rival Xiu, Itza, Cocom, and Canel cooperated in the *multepal* government, though they openly fought in other contexts (e.g., Mani 1979:82–83; Xiu n.d. [1557–1819]:45–48, 75; Landa 1941:40), as did their descendants, the Chan and Santa Cruz Maya, during the Caste War.

Alliances allowed segmentation to occur in predictable and manageable episodes, but overbearing hierarchy spurred flight. The *Chilam Balam of Mani* (Mani 1979:83–87) says that "the farmers threw off the yoke of the overlords" late in aboriginal times and migrated south. These disassociations were framed within the 20-year *katun* prophecies, so that the calendrical rationale for amalgamation could instantaneously change and the segments could relocate. Thus migration was an effective political strategy. Aspirations for autonomy and land motivated generational cohorts—lineages divided when the *chinamit* membership reached some 175–250,

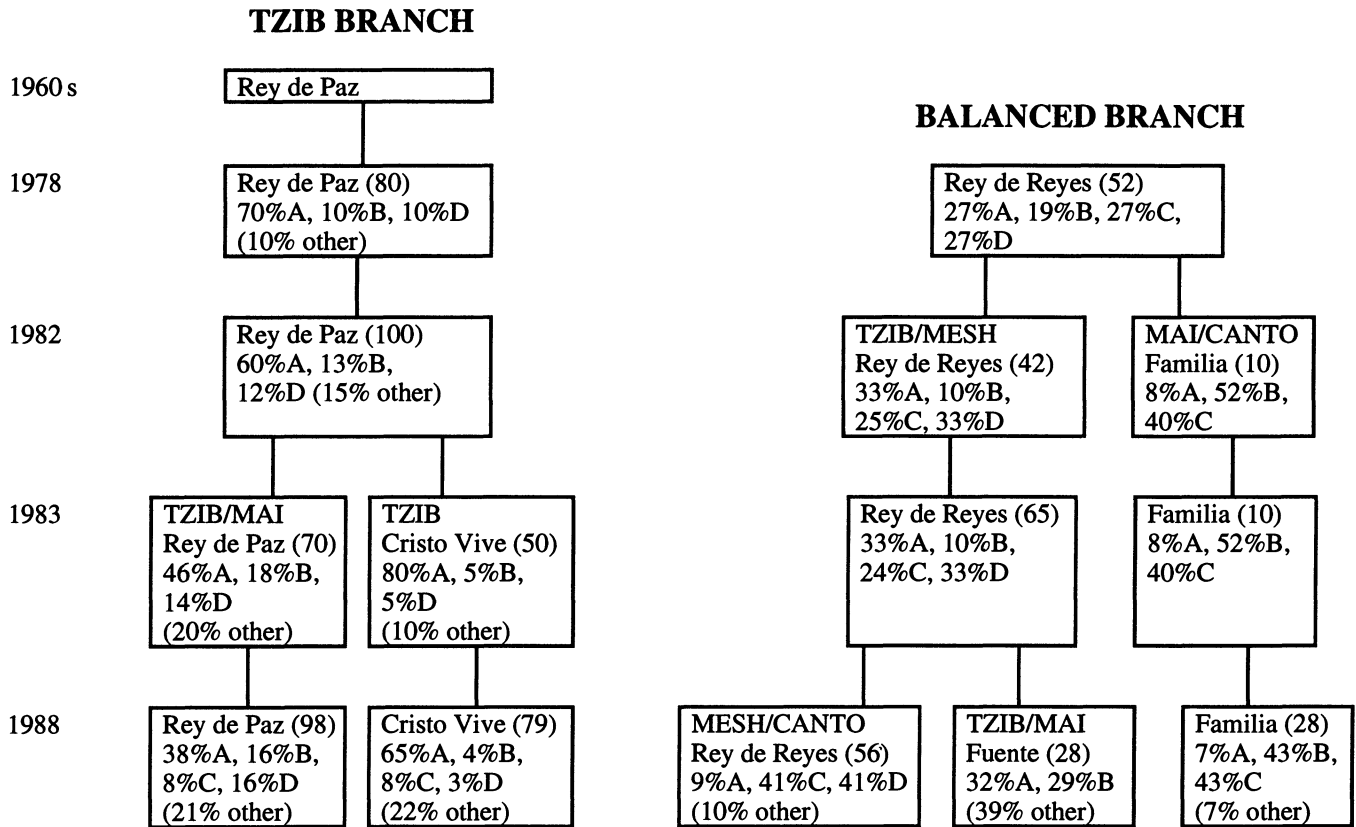


FIG. 5. A “genealogy” of Ox Mul’s Pentecostal churches shows the origin and subsequent splitting of two major branches. The Tzib-branch congregations are dominated numerically by Tzibs, ranging from 80% to 38% of a congregation but with the highest proportion of any other patronymic at 18% or less. There are, however, two intermarrying Tzib lineages in Ox Mul. In balanced-branch congregations two or more patronymics are represented at 30% or higher with no numerically dominant patronymic. In the diagram, Tzibs are A, Mais B, Cantos C, and Meshes D. Cohs currently make up about 20% of Rey de Paz and Howes about 10% of Cristo Vive. The “other” category includes these and other Maya and mestizo families. The approximate number of adults in each congregation is noted in parentheses.

recalling the *calpulli* in Acalan (see J. Fox 1987a:104).¹⁹ Three or four allied minimal lineages migrated en masse, and communities partitioned into three or four barrios. The four-part royal *chinamit* was divided according to the cardinal directions.²⁰ Lineages transported images of individual deities to represent both old and new identities.²¹ The local gods were subordinated to the tutelary god of a group that achieved the most power.²²

19. The ethnohistories mention population growth and the need for additional lands for the next generation (e.g., C’oyoi 1973 [ca. 1560]:296).

20. A moiety line divided the capital as well as the state at Mayapan, and in both the Itza were east and the Xiu were west (Edmonson 1986). For the Quiché the Cawek were east and the Nijajb west.

21. The traveling images were power symbols. When offshoot groups radiated from Yucatan to Ixpimienta and Tipu in the 1300s–1600s and from Utatlan to Chuwa Tzak in the 1300s, a patron god image was carried along (Mani 1979:86; *Popol Vuh* 1971 [ca. 1554]:158).

22. The center point of the state was the Temple of K’ucumatz at Utatlan, where the four world directions intersected. Thirteen gods were worshipped at Chichen Itza (Xiu n.d. [1557–1819]:39, 45).

The smallest possible self-reproducing social unit was the *chinamit/calpul*, which was a political entity in its own right but constructed of lineages. Superordination of one lineage over another was ritualized by control of the communalistic god cult, the god-house, and the patron deity’s fiesta. The higher-status lineage brokered external relations and exogamously allied itself with other elite lineages. Aboriginal historiography recounted the ancestral owners of land.

Once new communities were militarily subjugated, the state elite maintained fairly loose center-to-periphery control through ritual and kinship. Elite lineage exogamy was simply transposed from the *nima amak* of the royal *chinamit* to the geographically removed *ch’uti amaks*, which had intermarried with the indigenous lineages to form *chinamits*. A time-proven pattern was merely transferred to new localities. Thus the *nima amak* served as an umbrella for the *ch’uti amaks* dispersed throughout the provinces, as the *ch’uti amaks* there bound the lineages (*alaxiks*) into rural *chinamits*.

The *amak* system also organized the military. “Older

and younger brothers" united the *nima amak* with the various *ch'uti amaks* (e.g., C'oyoi 1973 [ca. 1560]:96). Correspondingly, each of the 13 provinces of the state was led by one of 13 heads of the *chinamits* (Nijaib I 1957 [ca. 1550]:93). Perhaps 13 provinces surrounded the royal *tinamit* of Utatlan, just as Chuwa Tzak, a provincial *tinamit*, was surrounded by "13" *chinamits*. Following this scheme, the capital was divided into moieties, each likened to a lineage within a *chinamit*; for example, at Utatlan the Cawek/Sakic moiety dominated the Nijaib/Ajaw moiety, as both the Cawek and the Nijaib dominated their own partners.

Nonetheless, in only four generations the provincial *ch'uti amaks* grew into *nima amaks* themselves; larger numbers and their long-standing local alliances allowed them to stand on their own. But after about eight generations, provincial *tinamits* rebelled in the north (Balamija, Sacapultec; cf. the rebellion of the outermost provinces [Southall 1956:249, 252–60]). However, the *tinamits* of about five generations' depth in the southwest remained firmly bound to Utatlan.

The Postclassic *chinamit* scheme depended upon complementary opposition to assemble a state polity but was not effective at binding two states; one royal lineage would always be subordinate. True to form, four states in the Guatemalan highlands were complementarily opposed on the eve of the conquest: the Quiché and Tzutujil were allied against the Cakchiquel and Pipil (Carmack 1981:140).

Yet larger Maya segmentary states may have existed pairing elite with lesser-ranked lineages—the *chinamit* principle—on each level of amalgamation. Within the Postclassic realm, the more senior "spokesman" lineage at Chichen Itza ritually dominated its Quichéan counterpart; together at least symbolically, these states acted like a two-lineage *chinamit*. Accordingly, the Quiché lineages sent their first-born sons to render homage to the Feathered Serpent god-image administered by Aj Nacxit at the lowland *tulan* (e.g., *Relaciones de Yucatán* 1898 [1579–81]:120–21, 176; *Popol Vuh* 1971 [ca. 1554]:215–16).

Did the Classic Maya utilize segmentary principles? We note that 13 provincial dependencies (*tzul* [Schele 1992]) surrounded Tikal, as at Utatlan, Iximche, and Mayapan.

Appendix 1: The Diego Vicente Saga

The following summarizes an oral narrative of a Vicente *principal* and *chuch kajaw* of the canton San Vicente Buenabaj recorded in 1976 (Cook 1981:678–85):

Diego Vicente came from Mexico to Pueblo Viejo [i.e., Chuwa Tzak], which he found to be an *aldea* and nothing more [supporting the idea of descent through an Ajaw ancestress virilocally dwelling at Chujuyup, who would have brought to her children the "pedigree" of Tulan Zuyua]. Diego persuaded the four *principales* [for four segments at Pueblo Viejo] to accompany him to Spain to be granted a charter to establish a town. He

obtained the image of Santiago on a hill in the City of Spain [an adaptation of the *Popol Vuh's* three lineage princes' returning to Tulan to obtain the symbols of statecraft from Nacxit]. Diego moved the *cabecera* from Pueblo Viejo to its present location. He surveyed the land, purchased the land from Malacatancito with his own money, and obtained titles. [His mother was from Malacatancito, bordering Momostenango, and therefore this suggests that cacique lines practiced exogamy and that the mother's lineage conveyed certain property rights and alliances.] Diego led the *principales* around looking for the best place to found the new town center and was instructed in his dreams by Santiago to locate it in its present place. There he was joined by his sister, Ana María Vicente Masariej, who brought an image of Santa Isabel that she had found on a riverbank. They built the first church. As a result of enmity that developed in the new pueblo, Diego left with his sister. [He relocated to form a *parcialidad* with affinal kin, his wives and the husband of his sister, representing two or three intermarrying minimal lineages.] They settled briefly at Pasanyap in the *aldea* Tierra Colorado, leaving Vicente settlers there as they moved on. [The lineage split once again, though some of the patrilineage, among them Diego's brother(s), remained at Pasanyap.] Finally, they established a new *parcialidad* in the high country west of Momostenango, and in his anger he buried the *títulos* to Momostenango [presumably the Nijaib I–IV chronicles] in a hidden place. [The image and *títulos* are controlled by the patriarch of an elite lineage.] In the new *parcialidad*, San Vicente Buenabaj, Diego established a church for María Concepción, having lost the two patron saints earlier. [An outmaneuvered elite lineage lost control of the original icon of incorporation and relocated to a new *parcialidad* organized around another patron image whose identity was a "spin-off" of the previous patron's.] He revived a religious cult around a *cabawil* kept in a cave and took sacrificial victims from passersby on the highway. A group of neighbors including the Little Captain destroyed the *cabawil* with the aid of Diego's sons, and this brought about the death of Diego Vicente. [The cacique succumbed when his sons joined with partisans of the *nagual* of Santiago, the Little Captain, to destroy the embodiment of Diego's personal power, the *cabawil*—that is, the members of the *parcialidad* rejected the cacique's charismatic authority. This paralleled the overthrow of the ruler Quik'ab by his sons. At this time Santiago may have been the Cawek's/Herrereras' patron. This narrative parallels part 4 of the *Popol Vuh* (Cook 1981:501).]

Appendix 2: The Origins of Patrón Santiago

The following is a summary of an oral text recounted by an Herrera elder in 1976. The full text is in Cook (1981:685–86):

The old people say that the Herrereras came from Spain originally and brought the image of Patrón Santiago. [The Herrereras also assert a foreign pedigree, on the *tulan*

model, to justify "speaking" for other lineages.] The image was kept in a shrine house in Pueblo Viejo, but in the morning it was gone. They found it in Momostenango and brought it back, but in the morning it was gone again. This happened several times, and finally the Herreras of Pueblo Viejo let it stay in the town center [suggesting that struggles for control of patron images are interpreted in folklore as traveling images, e.g., paralleling the reappearing image of Santa Cecilia in PaNaxjit (Carmack 1981:358), which may have also been a Nijaib estate (cf. traveling Buddhas in "galactic states" [Tambiah 1985:329]).] Diego Vicente founded Momostenango and ordered the building of a church. The original church [which was destroyed in an earthquake] stood where the municipal palace (*cabildo*) is now. Sixty years ago Santiago was kept in my grandfather's brother's house in the town center, but it wasn't well cared for. The chickens roosted over it. In the time of General Teodoro Cifuentes, he ordered that the *cofrades* take it to the church [the new church that the ladino caudillo Cifuentes built about 1920]. It left the Parcialidad Herrera and became patron of the pueblo.

Closing Comment

ARTHUR A. DEMAREST

Department of Anthropology, Vanderbilt University, Nashville, Tenn. 37235, U.S.A. 8 VII 96

It is both exciting and frustrating to participate in the ongoing debate on the nature of Classic Maya political organization. The intellectual excitement comes from our access to archaeological, ethnohistorical, and epigraphic data on the ancient Maya which is detailed enough to allow us to draw upon the rich world ethnographic record for comparative models. Archaeologists find themselves able—for once—to participate in general anthropological debates on "chiefdoms," "segmentary states," "ethnicity," and even the nature of political identity. Fox and Cook's paper here exemplifies this ability to debate and discuss a wide range of comparative ethnographic data and current issues. Even more satisfying is the fact that we are generating models which can be immediately tested in the field, as exemplified by the ongoing archaeological researches that the Chases describe.

Yet our frustration in this debate arises from the protean nature of Maya social and political formations and the tendency of archaeologists to mistake that variability in the data itself for disagreement about approaches to its interpretation. The principal source of disagreement, although not the only one, about modeling ancient Maya political organization arises from the fact that the scholars are deriving and/or testing their models using different segments of the range of Maya state forms. These political forms varied across a huge geo-

graphical area and a temporal span of at least two millennia. Thus, I consider it not improbable that both the segmentary model of Fox and Cook and the unitary model of the Chases may accurately portray the societies they describe (though both require further archaeological and historical testing).

The kinship-based segmentary structure proposed by Fox and Cook does seem to describe Maya political organization in certain periods and places. They make a cogent argument for such organizational principles in the expansionistic Postclassic highland Maya states (see also J. Fox 1987, 1989), and it seems probable that many small Classic-period polities may have relied upon such kinship-based political structures (cf. McAnany 1995). It may be that segmentary, kinship-based organization represents a fundamental aspect of Maya society—an initial basic set of organizing principles. Equally convincing, however, is the Chases' interpretation of Classic-period Caracol as a more centralized, non-kinship-based, unitary state (see also Chase, Chase, and Haviland 1990).

They may both be correct, and I suspect that yet other forms of political organization were present among the Classic-period Maya. Different sets of organizational principles seem to underlie different Maya formations; for example, the massive polities at Tikal and Calakmul, with their wide networks of political alliance (e.g., Culbert 1991; Marcus 1993; Folan 1992; Martin and Grube 1994, 1995), the vigorous but short-lived conquest states at Chichen Itza and Seibal (e.g., Andrews 1990, Andrews and Robles 1985, Willey et al. 1975, Sabloff and Willey 1967, Demarest and Escobedo 1996), the intrusive expansionist dynasty of the Petexbatun region (e.g., Demarest et al. 1991; Mathews and Willey 1991; Houston and Mathews 1985; Demarest 1992b, 1993, 1996), and the council-based political structures of Yaxuna, the Puuc sites, and 8th-century Copan (e.g., Freidel 1983, 1992; Freidel, Suhler, and Krochock 1990; Andrews and Sabloff 1986; Fash 1988, 1991) may each reflect a differing set of organizing principles. Our task as archaeologists and historians is to plot this variability and then look for common threads—not to argue about which data set represents the "true" form of Maya political organization.

The principal thing to keep in mind as we conduct our researches is not only the variability but also the instability of Maya social organization over time and space. Indeed, during certain periods Maya polities and Maya dynasties may have been consciously or unconsciously experimenting with different political formations as they coped with periods of intense external pressure or influence. In such unstable periods the Maya Lowland political situation may have been like that of late medieval Europe, in which polities ranged in size from tiny fiefdoms to the sprawling (but poorly integrated and unstable) Holy Roman Empire (see Hammond 1991). Even the rationale for local control varied, and there was constant experimentation with forms of polity and modes of legitimation throughout the late Middle Ages. In the Maya world such periods of experimenta-

tion and heightened variability include the early transition to statehood and shift in political ideology at the end of the Preclassic, the century preceding the Classic Maya collapse, and the radical attempts to reformulate Maya societies in the Terminal Classic and Early Postclassic periods. Indeed, what Mayanists should seek is not so much a model of ancient Maya political organization as an explanation for the failure of the Maya to achieve stable, cumulatively developing political economies.

In this regard, the proponents of the segmentary-state model are correct in seeking a model that explains both the great variability in scale and extent of Maya political formations and the failure to achieve nucleated forms with long-term stability in development. The Chases have mischaracterized the segmentary model in their assertion that it does not accommodate variability; fluctuations in scale and great instability over time are very characteristic of segmentary states, and the model specifically addresses the issue of variability. In contrast, the unitary-state model that the Chases propose for Caracol may be a successful negative challenge to the segmentary model, but it does not better address the issue of variability. It also fails to explain why lowland Maya civilization did not develop into the hegemonic but economically powerful conquest states characteristic of Postclassic Mexico and the Andes. Caracol, Tikal, and other polities may have achieved unitary-state structure, but they represented short-lived exceptions rather than the rule (cf. Marcus 1993; Freidel 1986, 1992; Demarest 1992a; Martin and Grube 1994).

At the same time, while I believe that Fox, Cook, and other advocates of the segmentary-state model are asking the right questions, they have slightly fudged their answers. The Chases are correct in arguing that many Classic-period Maya polities were not organized on principles of kinship and lineage. It is difficult to envision a segmentary-state model without the central organizing feature of lineage organization. As the Chases have argued, the existence of nucleated, urban states such as Caracol, Calakmul, and Tikal is hard to reconcile with the centrifugal nature of lineage-based segmentary organization. Moreover, some of the best-understood Maya polities were constructs in which the elite was unrelated in terms of kinship to the population. For example, on the southern periphery of Maya civilization at Copan and Quirigua, Classic Maya dynasties dominated a non-elite population that is archaeologically and was probably ethnically not Classic Maya (e.g., Schortman 1986, Demarest 1988). In the Petexbatun we have documented how a foreign dynasty from Tikal imposed itself on that region and established an expanding polity over an unrelated local population (Houston and Mathews 1985; Houston 1993; Demarest and Valdes 1991, 1993, 1994a, b). In the Terminal Classic period at Seibal and Chichen Itza warlords established brilliant and eclectic but short-lived conquest states that may have pulled together a diverse population from the surrounding area (Andrews 1990, Freidel 1986, Demarest and Escobedo 1996). In these cases and probably many others, it is difficult to

envision segmentary structure because the states were initially organized from diverse populations on principles unrelated to kinship.

An even more fundamental problem with the model is that it purports to solve the central question referred to above—why Classic Maya states did not evolve into more centralized polities like those of the Postclassic elsewhere. The segmentary-state model in its original form (Southall 1956, 1988) and in these subsequent versions posits that because of internal structural constraints “segmentary states, unlike chiefdoms, would not progressively evolve into unitary states” (Fox et al., above). The concept of a self-inhibiting or “nonevolutionary” political structure has long been debated in reference to Marx’s flawed musings on “the Asiatic mode of production” and attempts by Wittfogel and others to revive this concept (e.g., Wittfogel 1957). This “Oriental despotism” model and aspects of the segmentary-state model share the flaw of failing to recognize that culture change—including political change—often takes the form of radical reorganization. Historical developments, like evolution in general, often involve radical structural reformulations. “Punctuated-equilibrium” models have been used to explain many of the critical transformations in pre-Columbian history, including the formation of the Teotihuacan and Classic Maya polities, Terminal Classic political experiments in Yucatan, at Copan, and at Seibal, and the formation and expansion of the Aztec and Inca hegemonic empires (e.g., Freidel 1981, 1986, 1992; Andrews and Sabloff 1986; Fash 1988, 1991; Demarest and Escobedo 1996; Conrad and Demarest 1984). To argue that a form of political or social organization prevents further development is implicitly to assume that change must always take the form of gradual evolution from preexisting earlier forms. This assumption ignores the more complex understanding of change that has developed in all of the sciences and social sciences in the past several decades. So, while I agree that Fox, Cook, and others are addressing the central mystery of the limited development of Maya polities, I believe that they cannot correctly address that problem through assumptions about self-limiting political structures.

The Chases’ article raises a simple and direct empirical challenge not only to the segmentary-state model but to any model of decentralized Maya political organization. They argue for vast nucleated populations at Caracol on a scale well beyond previous estimates for Maya states (cf. Culbert and Rice 1990). Of even greater theoretical importance, they posit state control of fundamental aspects of economic infrastructure, specifically a vast system of agricultural terraces and utilitarian roadways. I have long argued that the principal problem in Maya archaeology was our failure to demonstrate any connection between the basic economic infrastructure of Maya society and its political leadership (e.g., Demarest 1992a). The Chases in their article and ongoing researches have directly responded to this challenge. If they are correct in their archaeological interpretations, Caracol and possibly other Classic Maya states were far too large, economically powerful, and nucleated to fit

easily into a segmentary-state or any other decentralized model of Maya political organization. Their empirical findings from and interpretations of Caracol will be judged by the results of future researches and review by other archaeologists of the specifics of the Caracol data. Given the scale they propose for the Caracol polity, the scrutiny will be intense.

Beyond the empirical questions, one can disagree with several aspects of the Chases' theoretical proposal of unitary-state organization as an alternative to decentralized models. With an appreciation for the variability of Maya political organization, Caracol, Calakmul, and other nucleated and powerful states could be accommodated as one end of a range of forms of the Maya state. The large scale and unitary state structure that they propose for Caracol certainly does not apply to most of the Maya polities recovered archaeologically or recorded ethnographically.

Another objection to their discussion is that it does not address the causes of the instability and variability in Maya political form and the failure of Maya society to achieve cumulatively evolving political structures like those of Central Mexico, the Andes, and Mesopotamia. As I have said, I believe that the challenge to archaeologists is not to find the "true" form of Maya political organization but to try to understand the causes of the great variability in Maya political structures in time and space. Any such understanding of Maya political history also must address the meaning of the Classic Maya collapse and the failure of the Maya world—nearly half of Mesoamerica—to develop any type of cumulatively evolving, hegemonic conquest state. Other core areas for the rise of early civilization did develop such polities. Yet in the southern lowland region, the Peten, *most* Maya states (whatever their nature) disintegrated at the end of the Classic period into simpler political formations with much smaller populations and a radically reduced investment in power-enhancing elite architecture, monuments, and ritual (e.g., Culbert 1973, Culbert and Rice 1990, Freidel 1986, Demarest and Escobedo 1996). The unitary-state model as the Chases present it here fails to address these central issues. While Fox and Cook's segmentary-state model can easily address these issues directly (see, e.g., Dunham 1990), the answers given overemphasize the role of kinship in Classic Maya politics and imply logically unacceptable internal structural constraints on culture change.

I have attempted to create a bridge between such models by proposing the application of a form of Tambiah's galactic-polity model to the Classic Maya. This model, developed originally for the historical kingdoms of Southeast Asia, sought to explain the dynamics of those kingdoms by noting the redundant structure of political hierarchies, their resulting tendency toward usurpation and instability, the extreme dependence of leadership on ideology and ritual, and the difficulty, given these features, of sustaining cumulatively evolving states (Tambiah 1976, 1977; Demarest 1984, 1992*b*). I have also noted that such instability is increased by the pressures for dispersion caused by the brilliant adaptation of the

Classic Maya to their rain-forest environment (Demarest 1992*a, b*; 1996; Demarest and Valdes 1991, 1993, 1994*a*; Valdes and Demarest 1993).

The Chases are correct in noting that this model differs greatly from the segmentary-state model, as does Richard Fox's regal-ritual city concept (R. Fox 1977), in that galactic polities were not organized along lines of kinship. It shares with segmentary-state models, however, an appreciation for the hierarchical redundancy and instability of Maya political formations. Furthermore, the galactic-polity model stresses the dependency for power of leaders on theater-state ritual and ideology rather than control of infrastructure (Demarest 1992*a*; cf. Geertz 1980). Together the problems of a redundant hierarchy and ideological dependency help to explain the instability and volatility of galactic polities. All of these aspects of the model apply well to the Classic Maya and could help to explain their volatile political history.

The galactic-polity concept does *not* represent "the" model of Classic Maya political formations; there is no such model. However, it does address several of the major problems of understanding Classic Maya polities, especially the expansion and contraction of their spheres of influence. It should join segmentary-state and unitary-state models as a guide to understanding different specific segments of the long political history of the Maya world.

In their concluding remarks the Chases incorrectly dismiss the galactic-polity model as overly dependent on epigraphy, with the result that it overemphasizes charismatic leadership. I first applied this model to the Maya area in the early 1980s to try to explain some of the initial findings regarding the Late Preclassic (*pre-epigraphic*) histories of early Maya centers such as Mirador and Preclassic Tikal (Demarest 1984, 1986). I used no epigraphic data, nor did I emphasize any aspect of individual histories. The Chases' criticism seems to have little to do with my applications of the model or Tambiah's original major points and much more with later considerations of it by Maya epigraphers (e.g., Houston 1993). I proposed Tambiah's model as one possible explanation for the *inversely* correlated trajectories of florescence and decline of early Maya states as seen in their periods of architectural activity (Demarest 1984). The expansion and contraction of Maya hegemonies, their emphasis on public theater-state rituals, the weakness of the leadership's managerial functions or infrastructural control, and many other features seemed comparable to the Southeast Asian polities and political dynamics as described by Tambiah, Geertz, and others (Tambiah 1976, 1977, 1985; Geertz 1980; Demarest 1992*a*).

The Chases also argue that many aspects of the Southeast Asian states described by Tambiah, Geertz, and others differ in specific important characteristics from Maya civilization. This argument is spurious and potentially isolationist, since any use of comparative ethnography or history involves the *selective* comparison of similar aspects of different societies to yield some insights into the one under study. Models and the data

bases that generate them do not need to be imposed wholesale to be of use in comparative history and anthropology. I would only argue that aspects of the galactic-polity model do lead us to focus on structural characteristics and dynamics central to an understanding of the variability and the instability of Maya states. Even with the new rich epigraphic data, we need comparative ethnography and history to provide alternative interpretations of Maya culture history and to provide historiographic guidelines for the interpretation of the propagandistic elite "emic" perspective of Maya monumental inscriptions. Unlike some cynics, I agree completely with Marcus, Schele, Freidel, Mathews, Stuart, Houston, Grube, and others that the inscriptions provide our best data for the interpretation of Maya political organization (see, e.g., Marcus 1976, 1983*b*, 1992, 1993; Mathews 1985, 1988, 1991; Culbert 1988; Schele and Freidel 1990; Stuart and Houston 1989). They can do so, however, only when this historical record is skeptically processed by historiographic interpretation guided by comparative history and ethnography. Mayanists should not isolate themselves from comparative anthropology and history.

In the coming decades, models of Maya political dynamics should be generated from epigraphic data and comparative studies and then tested, as the Chases and others are doing, by archaeological and ethnohistorical researches. Such projects, instead of seeking to discover the true form of the Maya state, should focus on the central issues of Maya political history: the instability and variability of Maya politics, the phenomenon of the collapse, and the failure of any of the Classic period's lowland political formations to give rise to urban, nucleated, and economically powerful Postclassic states. As we wrestle with these issues we should remember that our greatest challenges—and our frustrations—come from the protean nature of the Maya state itself.

References Cited

- ADAMS, RICHARD E. W. 1974. "A trial estimation of Classic Maya palace populations at Uaxactun," in *Mesoamerican archaeology: New approaches*. Edited by N. Hammond, pp. 285–96. Austin: University of Texas Press.
- . 1977. *Prehistoric Mesoamerica*. Boston: Little, Brown.
- ADAMS, RICHARD, E. W., AND R. D. JONES. 1981. Spatial patterns and regional growth among Maya cities. *American Antiquity* 46:301–22.
- ADAMS, RICHARD E. W., AND W. D. SMITH. 1981. "Feudal models for Classic Maya civilization," in *Lowland Maya settlement patterns*. Edited by W. Ashmore, pp. 335–49. Albuquerque: University of New Mexico Press.
- ADAMS, ROBERT MC C. 1966. *The evolution of urban society*. Chicago: Aldine.
- ALVAREZ ARÉVALO, MIQUEL. 1987. *Manuscriptos de Covalchaj*. Museo del Popol Vuh Colección de Documentos Históricos I.
- ANDREWS, ANTHONY. 1983. *Maya salt production and trade*. Tucson: University of Arizona Press.
- ANDREWS, ANTHONY P. 1990. The fall of Chichen Itza: A preliminary hypothesis. *Latin American Antiquity* 1:258–67. [AAD]
- ANDREWS, ANTHONY P., AND F. ROBLES C. 1985. "Chichen and Coba: An Itza-Maya standoff in the Early Postclassic Yucatan," in *The Lowland Maya Postclassic*. Edited by Arlen Chase and Prudence Rice, pp. 62–72. Austin: University of Texas Press. [AAD]
- ANDREWS, E. WYLLYS, V., AND JEREMY SABLOFF. 1986. "Classic to Postclassic: A summary discussion," in *Late Lowland Maya civilization: Classic to Postclassic*. Edited by Jeremy Sabloff and E. W. Andrews V, pp. 433–56. Albuquerque: University of New Mexico Press. [AAD]
- AWE, JAIME J. 1985. Archaeological investigations at Caledonia, Cayo District, Belize, M.A. thesis, Department of Anthropology, Trent University, Peterborough, Ont., Canada.
- ASHMORE, WENDY, AND GORDON R. WILLEY. 1981. "A historical introduction to the study of Lowland Maya settlement patterns," in *Lowland Maya settlement patterns*. Edited by W. Ashmore, pp. 3–18. Albuquerque: University of New Mexico Press.
- BALL, JOSEPH W. 1977. "The rise of the northern chiefdoms," in *The origins of Maya civilization*. Edited by R. E. W. Adams, pp. 101–32. Albuquerque: University of New Mexico Press.
- . 1993. *Cahal Pech, the ancient Maya, and modern Belize: The story of an archaeological park*. San Diego: San Diego State University Press.
- . 1994. "Northern Maya archaeology: Some observations on an emerging paradigm," in *Hidden among the hills: Maya archaeology of the northwest Yucatan Peninsula*. Edited by H. J. Prem, pp. 389–96. (Acta Mesoamericana 7.) Möckmühl: Verlag von Flemming.
- BALL, JOSEPH W., AND JENNIFER T. TASCHEK. 1991. Late Classic Lowland Maya political organization and central-place analysis: New insights from the Upper Belize Valley. *Ancient Mesoamerica* 2:149–65.
- BECKER, MARSHALL J. 1973. Archaeological evidence for occupational specialization among the Classic period Maya at Tikal, Guatemala. *American Antiquity* 38:396–406.
- BENTLEY, G. CARTER. 1986. Indigenous states of Southeast Asia. *Annual Review of Anthropology* 15:275–305.
- BERLIN, HEINRICH. 1958. El glifo "emblema" en las inscripciones Mayas. *Journal de la Société des Americanistes* 47:III–19.
- BLANTON, RICHARD, STEPHEN KOWALEWSKI, GARY FEINMAN, AND JILL APPEL. 1981. *Ancient Mesoamerica: A comparison of change in three regions*. New York: Cambridge University Press.
- BLOCH, MAURICE. 1961. *Feudal society*. Chicago: University of Chicago Press.
- BORHEGYI, STEPHAN F. DE. 1956. The development of folk and complex cultures in the southern Maya area. *American Antiquity* 21:343–56.
- BORIE, GRETA Z. 1982. *Amaq': An emic model of organization for the Highland Maya*. Master's thesis, Department of Anthropology, University of Pennsylvania, Philadelphia, Pa.
- BOSERUP, ESTER. 1965. *The conditions of agricultural growth*. Chicago: Aldine.
- BROWN, KENNETH L. 1985. "Postclassic relationships between the Highland and Lowland Maya," in *The Lowland Maya Postclassic*. Edited by A. F. Chase and D. Z. Chase, pp. 270–81. Austin: University of Texas Press.
- BRUMFIEL, ELIZABETH M. 1995. "Heterarchy and the analysis of complex societies: Comments," in *Heterarchy and the analysis of complex societies*. Edited by Robert M. Ehrenreich, Carole L. Crumley, and Janet E. Levy, pp. 125–31. Archaeological Papers of the American Anthropological Association 6.
- BRUMFIEL, ELIZABETH M., AND JOHN W. FOX. Editors. 1993. *Factional competition and political development in the New World*. Cambridge: Cambridge University Press.
- BULLARD, WILLIAM, R., JR. 1960. The Maya settlement pattern in northeastern Peten, Guatemala. *American Antiquity* 25:355–72.
- . 1964. "Settlement pattern and social structure in the southern Maya lowlands during the Classic period." *Actas y Memorias, XXXV Congreso Internacional de Americanistas, México, 1962*, vol. 1, pp. 278–87. Mexico City.

- CANCIAN, FRANK. 1976. Social stratification. *Annual Review of Anthropology* 5:227-48.
- CARBONELL PASTOR, FERNANDO. 1973. *Gramática Quiché*. Guatemala: Instituto Indigenista Nacional.
- CARMACK, ROBERT M. 1966. La perpetuación del clan patrilineal en Totonicapan. *Antropología e Historia de Guatemala* 18(2):43-60.
- . 1976. "La estratificación quichéana prehispánica." in *Estratificación social en la Mesoamérica prehispánica*. Edited by R. M. Carmack, pp. 245-77. Mexico City: Instituto Nacional de Antropología e Historia de México.
- . 1977. "Ethnohistory of the central Quiché: The community of Uatlan," in *Archaeology and ethnohistory of the central Quiché*. Edited by D. T. Wallace and R. M. Carmack, pp. 1-19. Institute for Mesoamerican Studies, State University of New York, Albany, publ. 1.
- . 1981. *The Quiché Mayas of Uatlan*. Norman: University of Oklahoma Press.
- CARMACK, ROBERT M., JOHN W. FOX, AND RUSSELL E. STEWART. 1975. *La formación del reino quiché*. Instituto de Antropología e Historia, special publ. 7.
- CARNEIRO, ROBERT L. 1967. On the relationship between size of population and complexity of social organization. *Southwestern Journal of Anthropology* 23:234-43.
- . 1992. "Point counterpoint: Ecology and ideology in the development of New World civilizations," in *Ideology and pre-Columbian civilizations*. Edited by A. Demarest and G. Conrad, pp. 175-203. Santa Fe: School of American Research Press.
- CARRASCO, PEDRO. 1963. La endogamia según un documento Cakchiquel. *Tlalocan* 4:97-119.
- . 1971. "Social organization of ancient Mexico," in *Handbook of Middle American Indians*, vol. 10. Edited by G. F. Ekholm and I. Bernal, pp. 349-75. Austin: University of Texas Press.
- . 1988. Territorial and kinship segments in pre-Spanish highland Guatemala and Central Mexico and their role in political conflict. Paper presented to the symposium "Factional Competition and Political Development in the New World," 46th International Congress of Americanists, Amsterdam.
- CERVANTES MARTÍNEZ, RAMÓN W. 1990. Un pueblo de fugitivos: Etnografía e historia oral de un pueblo maya del centro de Belice. Master's thesis, Escuela Nacional de Antropología e Historia, México, D.F.
- CHASE, ARLEN F. 1992. "Elites and the changing organization of Classic Maya society," in *Mesoamerican elites: An archaeological assessment*. Edited by D. Z. Chase and A. F. Chase, pp. 30-49. Norman: University of Oklahoma Press.
- . n.d. "Politics, politics, and social dynamics: 'Contextualizing' the archaeology of the Belize Valley and Caracol," in *New developments in the archaeological of the Belize Valley*. Edited by J. Garber and J. Awe. MS.
- CHASE, ARLEN F., AND DIANE Z. CHASE. 1987. *Investigations at the Classic Maya city of Caracol, Belize: 1985-1987*. Pre-Columbian Art Research Institute Monograph 3.
- . 1991. Mixing archaeology and touristic development at Caracol. *Belize Today* 5(5):12-13.
- . 1992. "Mesoamerican elites: Assumptions, definitions, and models," in *Mesoamerican elites: An archaeological assessment*. Edited by D. Z. Chase and A. F. Chase, pp. 3-17. Norman: University of Oklahoma Press.
- . 1994. "Details in the archaeology of Caracol, Belize: An introduction," in *Studies in the archaeology of Caracol, Belize*. Edited by D. Z. Chase and A. F. Chase, pp. 1-11. Pre-Columbian Art Research Institute Monograph 7.
- . 1995. Visions of empire: Economy, society, and power at Caracol, Belize. Paper presented at the 94th annual meeting of the American Anthropological Association, Washington, D.C., November 18.
- . 1996. An embarrassment of riches: Mid-level Maya and nation-building at Caracol, Belize. *Archaeology* 49(5). In press.
- . n.d. *Investigations at Caracol, Belize: 1988-1993*. Pre-Columbian Art Research Institute Monograph 8.
- CHASE, ARLEN F., NIKOLAI GRUBE, AND DIANE Z. CHASE. 1991. *Three Terminal Classic monuments from Caracol, Belize*. Research Reports on Ancient Maya Writing 36.
- CHASE, ARLEN F., AND PRUDENCE M. RICE, Editors. 1985. *The Lowland Maya Postclassic*. Austin: University of Texas Press.
- CHASE, DIANE Z. 1986. "Social and political organization in the land of cacao and honey: Correlating the archaeology and ethnohistory of the Postclassic Lowland Maya," in *Late Lowland Maya civilization*. Edited by J. A. Sabloff and E. W. Andrews, pp. 347-77. Albuquerque: University of New Mexico Press.
- . 1992. "Postclassic Maya elites: Ethnohistory and archaeology," in *Mesoamerican elites: An archaeological assessment*. Edited by D. Z. Chase and A. F. Chase, pp. 118-34. Norman: University of Oklahoma Press.
- CHASE, DIANE Z., AND ARLEN F. CHASE. 1988. *A Postclassic perspective: Excavations at the Maya site of Santa Rita Corozal, Belize*. Pre-Columbian Art Research Institute Monograph 4.
- . 1992. "An archaeological assessment of Mesoamerican elites," in *Mesoamerican elites: An archaeological perspective*. Edited by D. Z. Chase and A. F. Chase, pp. 303-17. Norman: University of Oklahoma Press.
- . Editors. 1994. *Studies in the archaeology of Caracol, Belize*. Pre-Columbian Art Research Institute Monograph 7.
- CHASE, DIANE Z., ARLEN F. CHASE, AND WILLIAM A. HAVILAND. 1990. The Classic Maya city: Reconsidering "The Mesoamerican urban tradition." *American Anthropologist* 92: 499-506.
- CHORDAS, THOMAS J. 1980. "Catholic Pentecostalism: A new word in a new world," in *Perspectives on Pentecostalism: Case studies from the Caribbean and Latin America*. Edited by Stephen D. Glazier. Washington, D.C.: University Press of America.
- CLAESSEN, HENRI J. M. 1978. "The early state: A structural approach," in *The early state*. Edited by H. J. M. Claessen and P. Skalnik, pp. 533-96. The Hague: Mouton.
- . 1992. Segmentary and state are strange bedfellows. Paper presented at the symposium "The Segmentary State and the Classic Lowland Maya," Cleveland State University, Cleveland, Ohio.
- COHEN, RONALD, AND ALICE SCHLEGEL. 1968. "The tribe as a socio-political unit: A cross-cultural examination," in *Essays on the problem of tribe*. Edited by J. Helm, pp. 120-46. Seattle: University of Washington Press.
- COHEN, RONALD, AND ELMAN R. SERVICE. Editors. 1978. *Origins of the state*. Philadelphia: Institute for the Study of Human Issues.
- CONRAD, GEOFFREY, AND ARTHUR DEMAREST. 1984. *Religion and empire: The dynamics of Aztec and Inca expansionism*. Cambridge: Cambridge University Press. [AAD]
- COOK, GARRETT W. 1981. Supernaturalism, cosmos, and cosmogony in Quichéan expressive culture. Ph. D. diss., State University of New York at Albany, Albany, N.Y.
- COOK, GARRETT W., AND JOHN W. FOX 1994. Sacred journeys. Paper presented at the Mesa Redonda de Palenque, Mexico.
- C'ŌYŌI. 1973 (ca. 1560). "Título C'oyoi," in *Quichéan civilization*. Translated and edited by Robert Carmack, pp. 265-345. Berkeley: University of California Press.
- CRUMLEY, CAROLE L. 1995. "Heterarchy and the analysis of complex societies," in *Heterarchy and the analysis of complex societies*. Edited by Robert M. Ehrenreich, Carole L. Crumley, and Janet E. Levy, pp. 1-5. Archaeological Papers of the American Anthropological Association 6.
- CULBERT, T. PATRICK. 1973. *The Classic Maya collapse*. Albuquerque: University of New Mexico Press.
- . 1991. "Politics in the northeast Peten, Guatemala," in *Classic Maya political history: Hieroglyphs and archaeological evidence*. Edited by T. P. Culbert, pp. 128-46. Cambridge: Cambridge University Press.
- . 1995. Warfare and the segmentary state. Paper presented at the Primera Mesa Redonda de Palenque, September.
- CULBERT, T. PATRICK, LAURA J. KOSAKOWSKY, ROBERT E. FRY, AND WILLIAM A. HAVILAND. 1990. "The population of

- Tikal, Guatemala," in *Precolumbian population history in the Maya Lowlands*. Edited by T. P. Culbert and D. S. Rice, pp. 103–21. Albuquerque: University of New Mexico Press.
- CULBERT, T. PATRICK, AND DON S. RICE. Editors. 1990. *Precolumbian population history in the Maya Lowlands*. Albuquerque: University of New Mexico Press.
- DE COTO, FRAY TOMÁS. 1983. *Thesaurus verborum: Vocabulario de la lengua cakchiquel v(el) Guatemalteca, nuevamente hecho y recopilado con sum estudio, trabajo y erudición*. Edited by René Acuna. México, D.F.: Universidad Nacional Autónoma de México.
- DEMAREST, ARTHUR A. 1984. Conclusiones y especulaciones acerca de El Mirador. *Mesoamerica* 7:138–50. [AAD]
- . 1986. *The archaeology of Santa Leticia and the rise of Maya civilization*. Tulane University Middle American Research Institute Monograph 52. [AAD]
- . 1988. "The Salvadoran frontier," in *The civilization of the southeastern Classic Maya*. Edited by Elizabeth Boone, pp. 335–94. Washington, D.C., Dumbarton Oaks Foundation/Trustees for Harvard University. [AAD]
- . 1992a. "Ideology in ancient Maya cultural evolution: The dynamics of galactic polities," in *Ideology and pre-Columbian civilizations*. Edited by A. Demarest and G. Conrad, pp. 135–57. Santa Fe: School of American Research Press.
- . 1992b. The Petexbatun Regional Archaeological Project: War, peace, and the collapse of the Maya civilization. Paper presented at the 47th International Congress of Americanists, New Orleans, La. [AAD]
- . 1993. The violent saga of a Maya kingdom. *National Geographic* 183:94–111. [AAD]
- . 1996. "War, peace, and the collapse of a native American civilization," in *A natural history of peace*. Edited by Thomas Gregor, pp. 215–48. Nashville: Vanderbilt University Press. [AAD]
- DEMAREST, ARTHUR A., AND H. ESCOBEDO. 1996. "El Proyecto Arqueológico Punta de Chimino: Objetivos, descubrimientos, interpretaciones preliminares," in *IX simposio de investigaciones arqueológicas en Guatemala*. Guatemala: Museo Nacional de Arqueología y Etnología. [AAD]
- DEMAREST, A., T. INOMATA, H. ESCOBEDO, AND J. PALKA. 1991. *Proyecto Arqueológico Regional Petexbatun: Informe preliminar 3, Tercera temporada*. Guatemala: Instituto de Antropología e Historia de Guatemala. [AAD]
- DEMAREST, A., AND J. A. VALDES. 1991. "Conclusiones preliminares e interpretaciones de la temporada de campo de 1991: Resumen y revisión general," in *Proyecto Arqueológico Regional Petexbatun: Informe preliminar 3, Tercera temporada*. Guatemala: Instituto de Antropología e Historia de Guatemala. [AAD]
- . 1993. "Proyecto Arqueológico Regional Petexbatun: Resultados y perspectivas de la cuarta temporada," in *VI simposio de investigaciones arqueológicas en Guatemala*. Edited by J. P. Laporte, H. Escobedo, and S. V. de Brady, pp. 155–58. Guatemala: Museo Nacional de Arqueología y Etnología. [AAD]
- . 1994a. "Regresión política y el colapso de la civilización Maya en la región Petexbatun," in *VIII simposio de investigaciones arqueológicas en Guatemala*. Guatemala: Museo Nacional de Arqueología y Etnología. [AAD]
- . Editors. 1994b. *Proyecto Arqueológico Regional Petexbatun: Informe preliminar 36, Sexta temporada*. Guatemala: Instituto de Antropología e Historia de Guatemala. [AAD]
- DE MONTMOLLIN, OLIVIER. 1989. *The archaeology of political structure: Settlement analysis in a Classic Maya polity*. Cambridge: Cambridge University Press.
- DRENNAN, ROBERT D. 1988. "Household location and compact versus dispersed settlement in prehispanic Mesoamerica," in *Household and community in the Mesoamerican past*. Edited by Richard Wilk and Wendy Ashmore, pp. 273–93. Albuquerque: University of New Mexico Press.
- DUMOND, DON E. 1977. "Independent Maya of the late nineteenth century: Chiefdoms and power politics," in *Anthropology and history in Yucatan*. Edited by Grant D. Jones, pp. 103–38. Austin: University of Texas Press.
- DUNHAM, PETER S. 1990. Coming apart at the seams: The Classic development and the demise of Maya civilization, a segmentary view from Xnaheb, Belize. Ph.D. diss., State University of New York at Albany, Albany, N.Y.
- . 1992. Summary remarks. Paper presented at the symposium "The Segmentary State and the Classic Lowland Maya," Cleveland State University, Cleveland, Ohio.
- DUNNING, NICHOLAS P., AND JEFF K. KOWALSKI. 1994. Lords of the Hills: Classic Maya settlement patterns and political iconography in the Puuc region, Mexico. *Ancient Mesoamerica* 5:63–95.
- EARLE, TIMOTHY K. 1987. Chiefdoms in archaeological and ethnohistorical perspective. *Annual Review of Anthropology* 16:279–308.
- EDMONSON, MUNRO S. Translator and editor. 1971. *The book of counsel: The Popol Vuh of the Quiché Maya of Guatemala*. Middle American Research Institute, Tulane University, publ. 35.
- . Translator and editor. 1982. *The ancient future of the Itza: The book of Chilam Balam of Tizimin*. Austin: University of Texas Press.
- . Translator and editor. 1986. *Heaven-born Merida and its destiny: The book of Chilam Balam of Chumayel*. Austin: University of Texas Press.
- EVANS-PRITCHARD, E. E. 1940. *The Nuer*. Oxford: Oxford University Press.
- FARRISS, NANCY M. 1984. *Maya society under colonial rule: The collective enterprise of survival*. Princeton: Princeton University Press.
- FASH, WILLIAM L. 1988. A new look at Maya statecraft from Copan, Honduras. *Antiquity* 62:157–59. [AAD]
- . 1991. *Scribes, warriors, and kings: The city of Copan and the ancient Maya*. London: Thames and Hudson.
- FASH, WILLIAM L., AND ROBERT J. SHARER. 1991. Sociopolitical developments and methodological issues at Copan, Honduras. *Latin American Antiquity* 2:166–87.
- FEINMAN, GARY, AND JILL NEITZEL. 1984. Too many types: An overview of sedentary prestate societies in the Americas. *Advances in Archeological Method and Theory* 7:39–102.
- FLETCHER, LARAINA A., JACINTO MAY HAU, LYNDIA M. FLOREY FOLAN, AND WILLIAM J. FOLAN. 1987. *Un análisis estadístico preliminar del patrón de asentamiento de Calakmul*. Campeche: Universidad Autónoma del Sureste.
- FOLAN, WILLIAM J. 1992. Calakmul, Campeche: A centralized urban administrative center in the northern Peten. *World Archaeology* 24:158–68.
- FOLAN, WILLIAM J., E. R. KINTZ, AND L. A. FLETCHER. 1983. *Coba: A Classic Maya metropolis*. New York: Academic Press.
- FOLAN, WILLIAM J., JOYCE MARCUS, AND W. FRANK MILLER. 1995. Verification of a Maya settlement model through remote sensing. *Cambridge Archaeological Journal* 5(2).
- FOLAN, WILLIAM J., JOYCE MARCUS, SOPHIA PINCEMIN, MARÍA DEL ROSARIO DOMÍNGUEZ CARRASCO, LARAINA FLETCHER, AND ABEL MORALES LÓPEZ. 1995. Calakmul: New data from an ancient Maya capital in Campeche, Mexico. *Latin American Antiquity* 6:310–34.
- FORTES, MEYER. 1945. *The dynamics of kinship among the Talsi*. London: Oxford University Press.
- . 1953. The structure of unilineal descent groups. *American Anthropologist* 55:17–21.
- FOX, JOHN W. 1977. "Quiché expansion processes: Differential ecological growth bases within an archaic state," in *Archaeology and ethnohistory of the Central Quiché*. Edited by D. T. Wallace and R. M. Carmack, pp. 82–87. Institute for Mesoamerican Studies. State University of New York, Albany, publ. 1.
- . 1978a. *Quiché conquest*. Albuquerque: University of New Mexico Press.
- . 1978b. Chinautla Viejo (Mixco): Un sitio estratégico en la frontera Pokoman-Cakchiquel. *Anales de la Sociedad de Geografía e Historia* 51:13–26.
- . 1981. The Late Postclassic eastern frontier of Mesoamer-

- ica: Cultural innovation along the periphery. *CURRENT ANTHROPOLOGY* 22:321-46.
- . 1987. *Maya Postclassic state formation*. Cambridge: Cambridge University Press.
- . 1988. "Hierarchization in Maya segmentary states," in *State and society: The emergence and development of social hierarchy and political centralization*. Edited by J. Gledhill, B. Bender, and M. Larsen, pp. 103-12. London: Unwin Hyman.
- . 1989. On the rise and fall of *tulans* and Maya segmentary states. *American Anthropologist* 91:656-81.
- . 1993a. "Political cosmology among the Quiché Maya," in *Factional competition and political development in the New World*. Edited by E. M. Brumfiel and J. W. Fox, pp. 158-70. Cambridge: Cambridge University Press.
- . 1993b. "Conclusions: Moiety opposition, segmentation, and factionalism in New World political arenas," in *Factional competition and political development in the New World*. Edited by E. M. Brumfiel and J. W. Fox, pp. 199-206. Cambridge: Cambridge University Press.
- . 1996. Quiche founding events in petroglyphs, astronomy, and settlement patterns. Paper presented at the 12th Texas Symposium, "Paradigms of Power: Genesis and Foundation in Mesoamerica," 20th Maya Meetings, Austin, Tex.
- FOX, RICHARD G. 1977. *Urban anthropology: Cities in their cultural setting*. Englewood Cliffs: Prentice-Hall.
- FREIDEL, DAVID. 1981. "Civilization as a state of mind," in *The transition to statehood in the New World*. Edited by Grant Jones and Robert Kautz, pp. 188-227. Cambridge: Cambridge University Press. [AAD]
- . 1983. "Political systems in lowland Yucatan: Dynamics and structure in Maya settlement," in *Prehistoric settlement patterns: Essays in honor of Gordon R. Willey*. Edited by Evon Vogt and Richard Leventhal, pp. 375-86. Albuquerque: University of New Mexico Press. [AAD]
- . 1986. "Terminal Classic lowland Maya: Successes, failures, and aftermaths," in *Late Lowland Maya civilization*. Edited by Jeremy Sabloff and E. W. Andrews V, pp. 409-30. Albuquerque: University of New Mexico Press. [AAD]
- . 1992. "Children of the first father's skull: Terminal Classic warfare in the northern Maya lowlands and the transformation of kingship and elite hierarchies," in *Mesoamerican elites: An archaeological assessment*. Edited by Diane Z. Chase and Arlen F. Chase, pp. 99-117. Norman: University of Oklahoma Press. [AAD]
- FREIDEL, DAVID A., AND JEREMY A. SABLOFF. 1984. *Cozumel: Late Maya settlement patterns*. New York: Academic Press.
- FREIDEL, DAVID, LINDA SCHELE, AND JOY PARKER. 1995. *Maya cosmos: Three thousand years on the shaman's path*. New York: William Morrow.
- FREIDEL, D. A., C. SUHLER, AND R. KROCHOCK. 1990. *Yaxuna Archaeological Survey: A report on the 1989 field season and final report on phase one*. Dallas: Department of Anthropology, Southern Methodist University. [AAD]
- FRETER, ANN CORINNE. 1981. Was the "Quiché state" a state? A reanalysis of the Utatlan residence zone data. Master of Arts thesis, Department of Anthropology, University of Houston, Houston, Tex.
- FRIED, MORTON H. 1967. *The evolution of political society: An essay in political anthropology*. New York: Random House.
- FRITZ, JOHN M. 1986. Vijayanagara: Authority and meaning of a South Indian imperial capital. *American Anthropologist* 88:44-55.
- FRITZ, JOHN M., GEORGE MICHELL, AND M. S. NAGARAJA at RAO. 1984. *Where kings and gods meet: The royal centre Vijayanagara, India*. Tucson: University of Arizona Press.
- GANN, THOMAS W. F., AND J. ERIC S. THOMPSON. 1931. *The history of the Maya*. New York: Scribner.
- GEERTZ, CLIFFORD. 1980. *Negara: The theatre state in nineteenth-century Bali*. Princeton: Princeton University Press.
- GLUCKMAN, MAX. 1956. *Custom and conflict in Africa*. Oxford: Basil Blackwell.
- GOODENOUGH, WARD. 1970. *Description and comparison in cultural anthropology*. Chicago: Aldine.
- GRAHAM, ELIZABETH A., GRANT D. JONES, AND ROBERT R. KAUTZ. 1985. "Archaeology and ethnohistory on a Spanish colonial frontier: An interim report on the Macal-Tipú project in western Belize," in *The Lowland Maya Postclassic*. Edited by Arlen F. Chase and Prudence M. Rice, pp. 206-14. Austin: University of Texas Press.
- GRUBE, NIKOLAI. 1994. "Epigraphic research at Caracol, Belize," in *Studies in the archaeology of Caracol, Belize*. Edited by D. Z. Chase and A. F. Chase, pp. 83-122. Pre-Columbian Art Research Institute Monograph 7.
- HAMMOND, NORMAN. 1975. Maya settlement hierarchy in northern Belize. *Contributions of the University of California Archaeological Research Facility* 27:40-55.
- . 1991. "Inside the black box: Defining Maya polity," in *Classic Maya political history*. Edited by T. Patrick Culbert, pp. 253-84. Cambridge: Cambridge University Press. [AAD]
- HARRISON, PETER D. 1969. "Form and function in a Maya palatine group." *Verhandlungen des XXXVIII Internationalen Amerikanistenkongresses*, vol. 1, pp. 165-72. Stuttgart-Munich.
- . 1986. "Tikal: Selected topics," in *City-states of the Maya*. Edited by E. Benson, pp. 45-71. Denver: Rocky Mountain Institute for Pre-Columbian Studies.
- HARRISON, PETER D., AND BILLY L. TURNER. Editors. 1978. *Prehispanic Maya agriculture*. Albuquerque: University of New Mexico Press.
- HASSIG, ROSS. 1985. *Trade, tribute, and transportation: The sixteenth-century political economy of the Valley of Mexico*. Norman: University of Oklahoma Press.
- HAVILAND, WILLIAM A. 1968. Ancient Lowland Maya social organization. *Middle American Research Institute Publication* 26:93-107.
- . 1970. Tikal, Guatemala, and Mesoamerican urbanism. *World Archaeology* 2:186-98.
- . 1972. A new look at Classic Maya social organization at Tikal. *Cerámica de Cultura Maya* 8:1-16.
- HAYDEN, BRIAN. 1994. "Village approaches to complex societies," in *Archaeological views from the countryside: Village communities in early complex societies*. Edited by G. M. Schwartz and S. E. Falconer, pp. 198-206. Washington, D.C.: Smithsonian Institution Press.
- HENDERSON, JOHN S., AND JEREMY A. SABLOFF. 1993. "Reconceptualizing the Maya cultural tradition," in *Lowland Maya civilization in the eighth century A.D.* Edited by J. A. Sabloff and J. S. Henderson, pp. 445-76. Washington, D.C.: Dumbarton Oaks.
- HILL, ROBERT M., II. 1989. Social organization by decree in highland Guatemala. *Ethnohistory* 36:170-98.
- HILL, ROBERT M., II, AND JOHN MONAGHAN. 1987. *Continuities in Highland Maya social organization: Ethnohistory in Sacapulas, Guatemala*. Philadelphia: University of Pennsylvania Press.
- HODDER, IAN. 1986. *Reading the past*. London: Barsworth.
- . 1987. *The archaeology of contextual meanings*. Cambridge: Cambridge University Press.
- HOUSTON, STEPHEN D. 1987. "Notes on Caracol epigraphy and its significance," appendix 2 in *Investigations of the Classic Maya city of Caracol, Belize: 1985-87*. Pre-Columbian Art Research Institute Monograph 3.
- . 1993. *Hieroglyphs and history at Dos Pilas: Dynastic politics of the Classic Maya*. Austin: University of Texas Press.
- HOUSTON, STEPHEN D., AND PETER MATHEWS. 1985. *The dynastic sequence of Dos Pilas, Guatemala*. Pre-Columbian Art Institute Monograph 1.
- JOHNSON, ALLEN W., AND TIMOTHY EARLE. 1987. *The evolution of human societies: From foraging group to agrarian state*. Stanford: Stanford University Press.
- JONES, GRANT D. 1977a. "Introduction," in *Anthropology and history in Yucatan*. Edited by Grant D. Jones, pp. xi-xxiv. Austin: University of Texas Press.
- . 1977b. "Levels of settlement alliance among the San Pe-

- dro Maya," in *Anthropology and history in Yucatan*. Edited by Grant D. Jones, pp. 139–89. Austin: University of Texas Press.
- . 1989. *Maya resistance to Spanish rule: Time and history on a colonial frontier*. Albuquerque: University of New Mexico Press.
- KELLY, RAYMOND C. 1985. *The Nuer conquest: The structure and development of an expansionist system*. Ann Arbor: University of Michigan Press.
- KINTZ, ELLEN R., AND LARAINÉ A. FLETCHER. 1983. "A reconstruction of the prehistoric population at Coba," in *Coba: A Classic Maya metropolis*. Edited by W. J. Folan, E. R. Kintz, and L. A. Fletcher, pp. 191–210. New York: Academic Press.
- KIRCHHOFF, PAUL. 1955. The principles of clanship in human society. *Davidson Anthropological Society Journal* 1:1–11.
- KUPER, ADAM. 1982. Lineage theory: A critical retrospect. *Annual Review of Anthropology* 11:71–95.
- KURJACK, EDWARD B. 1974. *Prehistoric Lowland Maya community and social organization: A case study at Dzibilchaltun, Yucatan, Mexico*. Middle American Research Institute publ. 38.
- LANDA, DIEGO DE. 1941. *Relación de las cosas de Yucatán*. Translated by Alfred M. Tozzer. Papers of the Peabody Museum 18.
- LAPORTE, JUAN PEDRO. 1994. *Ixtontón, Dolores, Petén: Entidad política del noroeste de las montañas mayas*. Universidad de San Carlos Atlas Arqueológico de Guatemala 2.
- MC ANANY, PATRICIA. 1995. *Living with the ancestors: Kinship and kingship in ancient Maya society*. Austin: University of Texas Press.
- MANI. 1979. *The Codex Pérez and the book of Chilam Balam of Mani*. Translated by Eugene R. Craine and Reginald G. Rein-dorp. Norman: University of Oklahoma Press.
- MARCUS, JOYCE. 1973. Territorial organization of the Lowland Classic Maya. *Science* 180:911–16.
- . 1976. *Emblem and state in the Classic Maya lowlands: An epigraphic approach to territorial organization*. Washington, D.C.: Dumbarton Oaks.
- . 1983a. "On the nature of the Mesoamerican city," in *Prehistoric settlement patterns*. Edited by E. Vogt and R. Leventhal, pp. 195–242. Albuquerque: University of New Mexico Press.
- . 1983b. Lowland Maya archaeology at the crossroads. *American Antiquity* 48:454–88.
- . 1992. *Mesoamerican writing systems: Propaganda, myth, and history in four ancient civilizations*. Princeton: Princeton University Press.
- . 1993. "Ancient Maya political organization," in *Lowland Maya civilization in the eighth century A.D.* Edited by J. A. Sabloff and J. S. Henderson, pp. 111–83. Washington, D.C.: Dumbarton Oaks.
- . 1995. Where is Lowland Maya archaeology headed? *Journal of Archaeological Research* 3:3–53.
- MARTIN, SIMON, AND NIKOLAI GRUBE. 1994. Evidence for macropolitical organization amongst Classic Maya lowland states. MS. [AAD]
- . 1995. Maya super-states. *Archaeology* 48(6):41–46.
- MASSARELLI, MARCELLA. 1972. Maya settlement in the Cayo District, British Honduras. Paper presented at the annual meeting of the American Anthropological Association, Toronto, Ont.
- MATHEWS, PETER. 1985. "Maya Early Classic monuments and inscriptions," in *A consideration of the Early Classic period in the Maya lowlands*. Edited by Gordon Willey and Peter Mathews, pp. 5–54. Institute for Mesoamerican Studies, State University of New York, Albany, publ. 10.
- . 1988. *The sculpture of Yaxchilan*. Ann Arbor: University Microfilms.
- . 1991. "Classic Maya emblem glyphs," in *Classic Maya political history: Hieroglyphs and archaeological evidence*. Edited by T. P. Culbert, pp. 19–29. Cambridge: Cambridge University Press.
- MATHEWS, PETER, AND GORDON WILLEY. 1991. "Prehistoric politics of the Pasión region: Hieroglyphic texts and their archaeological evidence," in *Classic Maya political history*. Edited by T. Patrick Culbert, pp. 30–71. Cambridge: Cambridge University Press.
- MICHELIS, JOSEPH W. 1977. "Political organization at Kaminaljuyu: Its implications for interpreting Teotihuacan influence," in *Teotihuacan and Kaminaljuyu: A study in prehistoric culture contact*. Edited by William T. Sanders and Joseph W. Michels, pp. 453–67. University Park: Pennsylvania State University Press.
- MILES, SUZANNE W. 1957. The sixteenth-century Pokom-Maya: A documentary analysis of social structure and archaeological setting. *Transactions of the American Philosophical Society* 47:731–81.
- MORGAN, LEWIS H. 1880. A study of the houses of the American aborigines. *Archaeological Institute of North America, Annual Report of the Executive Committee* 1:29–80.
- MORLEY, SYLVANUS G. 1924. Archaeology. *Carnegie Institution of Washington Yearbook* 22:267–73.
- . 1946. *The ancient Maya*. Stanford: Stanford University Press.
- MORLEY, SYLVANUS G., GEORGE W. BRAINERD, AND ROBERT J. SHARER. 1983. 4th edition. *The ancient Maya*. Stanford: Stanford University Press.
- MUNSON, JO ANN. 1991. *Diccionario Cackchiquel central y Español*. Guatemala City: Instituto Lingüístico de Verano de Centroamérica.
- NIJAIB I. 1957 [ca. 1550]. "Título de las casa Ixquin-Nehaib, Señora del territorio de Otzoya," in *Crónicas indígenas de Guatemala*. Edited by Adrian Recinos, pp. 71–94. Guatemala City: Imprenta Universitaria.
- NIJAIB II. 1957 [1558]. "Título real de Don Francisco Nehaib," in *Crónicas indígenas de Guatemala*. Edited by Adrian Recinos, pp. 95–111. Guatemala City: Imprenta Universitaria.
- NIJAIB III. 1973 [1542]. "Appendix III: Título Nijaib III," in *Quichéan civilization*. Edited and translated by Robert M. Carmack, pp. 349–52. Berkeley: University of California Press.
- NIJAIB IV. 1973 [1555]. "Appendix IV: Título Nijaib IV," in *Quichéan civilization*. Edited and translated by Robert M. Carmack, pp. 353–55. Berkeley: University of California Press.
- PEEBLES, CHRISTOPHER S., AND SUSAN M. KUS. 1977. Some archaeological correlates of ranked societies. *American Antiquity* 42:421–48.
- PLOG, FRED, AND STEADMAN UPHAM, 1983. "The analysis of prehistoric political organization," in *The development of political organization in native North America*. Edited by E. Tooker and M. Fried, pp. 199–213. Washington, D.C.: American Ethnological Society.
- POPE, CYNTHIA. 1994. "Preliminary analysis of small chert tools and related debitage at Caracol, Belize," in *Studies in the archaeology of Caracol, Belize*. Edited by D. Z. Chase and A. F. Chase, pp. 148–56. Pre-Columbian Art Research Institute Monograph 7.
- POTTER, DANIEL L., AND ELEANOR M. KING. 1995. "A heterarchical analysis of industrial organization," in *Heterarchy and the analysis of complex societies*. Edited by Robert M. Ehrenreich, Carole L. Crumley, and Janet E. Levy, pp. 17–32. Archaeological Papers of the American Anthropological Association 6.
- PROSKOURIAKOFF, TATIANA. 1960. Historical implications of a pattern of dates at Piedras Negras, Guatemala. *American Antiquity* 25:454–75.
- . 1963. Historical data in the inscriptions of Yaxchilan, pt. 1. *Estudios de Cultura Maya* 3:149–67.
- . 1964. Historical data in the inscriptions of Yaxchilan, pt. 2. *Estudios de Cultura Maya*. 4:177–201.
- PULESTON, D. E. 1978. "Terracing, raised fields, and tree cropping in the Maya lowlands: A new perspective in the geography of power," in *Pre-Hispanic Maya agriculture*. Edited by P. Harrison and B. Turner, pp. 225–45. Albuquerque: University of New Mexico Press.
- RATHJE, WILLIAM L. 1973. "Trade models and archaeological problems: The Classic Maya and their E-group complex." *XL Congresso Internazionale degli Americanisti*, vol. 4. Genoa.

- RECINOS, ADRIAN. 1957. *Crónicas indígenas de Guatemala*. Guatemala City: Imprenta Universitaria.
- REED, NELSON. 1964. *The caste war of Yucatán*. Stanford: Stanford University Press.
- Relaciones historico-geográficas de las provincias de Yucatán, Tabasco*. 1898 (1579–81). Vol. 1. (Colección de Documentos Inéditos Relativos al Descubrimiento, Conquista y Organización de las Antiguas Posesiones Españolas 11.) Madrid: Real Academia de la Historia.
- RENFREW, COLIN. 1982. "Polity and power: Interaction, intensification, and exploitation," in *An island polity: The archaeology of exploitation in Melos*. Edited by C. Renfrew and M. Wagstaff, pp. 264–90. Cambridge: Cambridge University Press.
- RENFREW, COLIN, AND JOHN F. CHERRY. Editors. 1986. *Peer-polity interaction and socio-political change*. Cambridge: Cambridge University Press.
- RINGLE, WILLIAM M., AND E. WYLLYS ANDREWS V. 1990. "The demography of Komchen, an early Maya town in northern Yucatan," in *Precolumbian population history in the Maya lowlands*. Edited by T. P. Culbert and D. S. Rice, pp. 215–43. Albuquerque: University of New Mexico Press.
- ROYS, RALPH L. 1957. *The political geography of the Yucatan Maya*. Carnegie Institution of Washington publ. 613.
- . 1962. "Literary sources for the history of Mayapan," in *Mayapan, Yucatan, Mexico*. Edited by H. E. D. Pollock et al., pp. 25–86. Carnegie Institution of Washington publ. 619.
- SABLOFF, JEREMY A., AND E. WYLLYS ANDREWS V. Editors. 1986. *Late Lowland Maya civilization: Classic to Postclassic*. Albuquerque: University of New Mexico Press.
- SABLOFF, JEREMY A., AND WILLIAM L. RATHJE. 1975. *Changing pre-Columbian commercial systems*. Peabody Museum Monographs 3.
- SABLOFF, JEREMY A., AND GORDON R. WILLEY. 1967. The collapse of the Maya civilization in the southern lowlands: A consideration of history and process. *Southwestern Journal of Anthropology* 23:311–36.
- SAHLINS, MARSHALL D. 1961. The segmentary lineage: An organization of predatory expansion. *American Anthropologist* 63:322–45.
- SANDERS, WILLIAM T. 1989. "Household, lineage, and state at eighth-century Copan, Honduras," in *The house of the Bacabs, Copan, Honduras*. Edited by D. Webster, pp. 89–105. Washington, D.C.: Dumbarton Oaks.
- . 1992. "Ranking and stratification in prehispanic Mesoamerica," in *Mesoamerican elites: An archaeological perspective*. Edited by D. Z. Chase and A. F. Chase, pp. 278–91. Norman: University of Oklahoma Press.
- SANDERS, WILLIAM T., JEFFERY PARSONS, AND ROBERT SANTLEY. 1979. *The Basin of Mexico: Ecological processes in the evolution of civilization*. New York: Academic Press.
- SANDERS, WILLIAM T., AND BARBARA J. PRICE. 1968. *Mesoamerica: The evolution of a civilization*. New York: Random House.
- SANDERS, WILLIAM T., AND DAVID L. WEBSTER. 1988. The Mesoamerican urban tradition. *American Anthropologist* 90:521–46.
- SCARBOROUGH, VERNON L. 1991. "Water management adaptations in nonindustrial complex societies: An archaeological perspective," in *Archaeological method and theory*. Edited by M. B. Schiffer, vol. 3, pp. 101–54. Tucson: University of Arizona.
- . 1993. "Economic aspects of water management in the prehispanic New World," in *Research in economic anthropology*, suppl. 7. Edited by Vernon L. Scarborough and Barry Isaac. Greenwich, Conn.: JAI Press.
- . 1994. Maya water management. *National Geographic Research and Exploration* 10:184–99.
- SCARBOROUGH, VERNON L., MATTHEW E. BECHTER, JEFFREY L. BAKER, GARRY HARRIS, AND FRED VALDEZ JR. 1995. Water and land at the ancient Maya community of La Milpa. *Latin American Antiquity* 6:98–119.
- SCHELE, LINDA. 1992. "The groups of the cross at Palenque," in *Workbook for the 15th Hieroglyphic Workshop*, pp. 188–210. Austin: Department of Art History, University of Texas.
- . 1995. The wars of Pacal. Paper presented at the Primera Mesa Redonda de Palenque, Mexico, September.
- SCHELE, LINDA, AND DAVID FREIDEL. 1990. *A forest of kings*. New York: William Morrow.
- SCHELE, LINDA, AND PETER MATHEWS. 1991. "Royal visits and other intersite relationships among the Classic Maya," in *Classic Maya political history: Hieroglyphs and archaeological evidence*. Edited by T. P. Culbert, pp. 226–52. Cambridge: Cambridge University Press.
- SCHOLES, FRANCE V., AND ERIC S. THOMPSON. 1977. "The Francisco Pérez probanza of 1654–1656 and the matrícula of Tipu, Belize," in *Anthropology and history in Yucatan*. Edited by G. D. Jones, pp. 43–68. Austin: University of Texas Press.
- SCHORTMAN, EDWARD M. 1986. "Interaction between Maya and non-Maya along the Late Classic Southeast Maya periphery," in *The Southeast Maya periphery*. Edited by Patricia Urban and Edward Schortman, pp. 114–37. Austin: University of Texas Press. [AAD]
- SERVICE, ELMAN R. 1962. *Primitive social organization*. New York: Random House.
- . 1971. *Cultural evolutionism: Theory and practice*. New York: Holt, Rinehart and Winston.
- . 1975. *Origins of the state and civilization*. New York: Norton.
- . 1978. "Classical and modern theories of the origins of government," in *Origins of the state*. Edited by Ronald Cohen and Elman R. Service, pp. 21–34. Philadelphia: Institute for the Study of Human Issues.
- SHAFFER, HARRY J., AND THOMAS R. HESTER. 1983. Ancient Maya chert workshops in northern Belize, Central America. *American Antiquity* 48:519–43.
- . 1986. Maya stone-tool craft specialization and production at Colha, Belize: Reply to Mallory. *American Antiquity* 51:158–66.
- SHARER, ROBERT J. 1993. "The social organization of the Late Classic Maya: Problems of definition and approaches," in *Lowland Maya civilization in the eighth century A.D.* Edited by J. A. Sabloff and J. S. Henderson, pp. 91–110. Washington, D.C.: Dumbarton Oaks.
- SINOPOLI, CARLA M. 1994. The archaeology of empires. *Annual Review of Anthropology* 23:159–80.
- SKINNER, G. WILLIAM. 1977. *The city in Late Imperial China*. Stanford: Stanford University Press.
- SMITH, CAROL A. 1976. "Exchange systems and the spatial distribution of elites: The organization of stratification in agrarian societies," in *Regional analysis*, vol. 2, *Social systems*. Edited by C. A. Smith, pp. 309–74. New York: Academic Press.
- SMITH, MICHAEL E. 1994. "Social complexity in the Aztec countryside," in *Archaeological views from the countryside: Village communities in early complex societies*. Edited by G. M. Schwartz and S. E. Falconer, pp. 143–59. Washington, D.C.: Smithsonian Institution Press.
- SMITH, M. G. 1956. On segmentary lineage systems. *Journal of the Royal Anthropological Institute* 86:39–80.
- SMITH, ROBERT E. 1971. *The pottery of Mayapan*. 2 vols. Papers of the Peabody Museum 66.
- SOUTHALL, AIDAN W. 1956. *Alur society: A study in process and types of domination*. Cambridge: Heffer.
- . 1988. The segmentary state in Africa and Asia. *Comparative Studies in Society and History* 30:52–82.
- SPENCER, CHARLES S. 1990. On the tempo and mode of state formation: Neoevolutionism reconsidered. *Journal of Anthropological Archaeology* 9:1–30.
- STEIN, GIL. 1994. "Segmentary states and organizational variation in early complex societies: A rural perspective," in *Archaeological views from the countryside: Village communities in early complex societies*. Edited by G. M. Schwartz and S. E. Falconer, pp. 10–18. Washington, D.C.: Smithsonian Institution Press.
- STEPHENS, JOHN L. 1841. *Incidents of travel in Central America, Chiapas, and Yucatan*. 2 vols. New York: Harper.
- STUART, DAVID, AND STEPHEN HOUSTON. 1989. Maya writing. *Scientific American* 261(2):82–89. [AAD]

- TAMBIAH, STANLEY J. 1976. *World conqueror and world renouncer*. Cambridge: Cambridge University Press.
- . 1977. The galactic polity: The structure of traditional kingdoms in Southeast Asia. *Annals of the New York Academy of Sciences* 293:69–97.
- . 1985. *Culture, thought, and social action*. Cambridge: Harvard University Press.
- TEDLOCK, BARBARA. 1982. *Time and the Highland Maya*. Albuquerque: University of New Mexico Press.
- . 1989. Review of: *Continuities in Highland Maya social organization: Ethnohistory in Sacapulas*, by R. M. Hill II and John Monaghan (Philadelphia: University of Pennsylvania Press, 1987). *American Anthropologist* 91:498–99.
- . 1991. From participant observation to the observation of participation: The emergence of narrative ethnography. *Journal of Anthropological Research* 47:69–94.
- TEDLOCK, DENNIS. 1985. *Popol Vuh: The Mayan book of the dawn of life*. New York: Simon and Schuster.
- THOMPSON, EDWARD J. 1886. Archaeological research in Yucatan. *Proceedings of the American Antiquarian Society* 4:248–54.
- THOMPSON, J. ERIC S. 1927. *The civilization of the Maya*. Field Museum of Natural History Anthropology Leaflet 25.
- . 1930. *Ethnology of the Mayas of southern and central British Honduras*. Field Museum of Natural History Anthropological Series 27(2).
- . 1931. *Archaeological investigations in the southern Cayo District, British Honduras*. Field Museum of Natural History Anthropological Series 17(3), publ. 301.
- . 1954. *The rise and fall of Maya civilization*. Norman: University of Oklahoma Press.
- . 1970. *Maya history and religion*. Norman: University of Oklahoma Press.
- . 1977. "A proposal for constituting a Maya subgroup, cultural and linguistic, in the Peten and adjacent regions," in *Anthropology and history in Yucatan*. Edited by Grant D. Jones, pp. 3–42. Austin: University of Texas Press.
- TOTONICAPAN. 1953. *Title of the Lords of Totonicapan*. Translated by Delia Goetz and Dionisio José Chonay. Norman: University of Oklahoma Press.
- TOURTELLOT, GAIR, JEREMY A. SABLOFF, AND KELLI CARMEAN. 1992. "Will the real elites please stand up? An archaeological assessment of Maya elite behavior in the Terminal Classic period," in *Mesoamerican elites: An archaeological assessment*. Edited by D. Z. Chase and A. F. Chase, pp. 80–98. Norman: University of Oklahoma Press.
- TRIGGER, BRUCE G. 1991. Constraint and freedom: A new synthesis for archaeological explanation. *American Anthropologist* 93:551–69.
- TZUL, ALFONSO. 1993. *After 100 years: The oral history and traditions of San Antonio, Cayo District, Belize*. Belize: Maya Institute of Belize.
- UPHAM, STEADMAN. 1987. "A theoretical consideration of middle-range societies," in *Chiefdoms in the Americas*. Edited by R. D. Drennan and C. A. Uribe, pp. 345–68. Lanham, Md.: University Press of America.
- . 1990. "Analog or digital? Toward a generic framework for explaining the development of emergent political systems," in *The evolution of political systems: Sociopolitics in small-scale sedentary societies*. Edited by S. Upham, pp. 87–115. Cambridge: Cambridge University Press.
- VALDES, JUAN ANTONIO, AND ARTHUR DEMAREST. 1993. "Conclusiones generales de la temporada de campo de 1993," in *Proyecto Arqueológico Regional Petexbatun: Informe preliminar, quinta temporada*. Edited by Juan Antonio Valdes, Antonio Foias, Takeshi Inomata, Hector Escobedo, and Arthur Demarest, pp. 189–92. Guatemala: Instituto de Antropología e Historia de Guatemala. [AAD]
- VILLACANAS, BENITO DE, CA. 1692. *Arte y vocabulario de la lengua cakchiquel*. MS.
- VILLA ROJAS, ALFONSO. 1969. "The Maya of Yucatan," in *Handbook of Middle American Indians*. Edited by Robert Wauchope, vol. 7(1). Austin: University of Texas Press.
- VOGT, EVON Z. 1961. Some aspects of Zinacantan settlement pattern and ceremonial organization. *Estudios de Cultura Maya* 1:131–45.
- . 1964. "Some implications of Zinacantan social structure for the study of the ancient Maya." *Actas y Memorias, XXXV Congreso Internacional de Americanistas*, vol. 1, pp. 307–19. Mexico City.
- . 1969. *Zinacantan: A Maya community in the highlands of Chiapas*. Cambridge: Harvard University Press.
- . 1970. *The Zinacantecos of Mexico: A modern Maya way of life*. New York: Holt, Rinehart and Winston.
- . 1983. "Ancient and contemporary Maya settlement patterns: A new look from the Chiapas highlands," in *Prehistoric settlement patterns*. Edited by E. Vogt and R. Leventhal, pp. 89–114. Albuquerque: University of New Mexico Press.
- WALLACE, DWIGHT T. 1977. "An intra-site locational analysis of Utatlan: The structure of an urban site," in *Archaeology and ethnohistory of the Central Quiché*. Edited by D. T. Wallace and R. M. Carmack, pp. 20–54. Institute for Mesoamerican Studies, State University of New York, Albany, publ. 1.
- WEBSTER, DAVID. 1993. "The study of Maya warfare: What it tells us about the Maya and what it tells us about Maya archaeology," in *Lowland Maya civilization in the eighth century A.D.* Edited by J. A. Sabloff and J. S. Henderson, pp. 415–44. Washington, D.C.: Dumbarton Oaks.
- WENKE, ROBERT J. 1990. 3d edition. *Patterns in prehistory: Humankind's first three million years*. New York: Oxford University Press.
- WILK, RICHARD. 1988. "Maya household organization: Evidence and analogies," in *Household and community in the Mesoamerican past*. Edited by R. Wilk and W. Ashmore, pp. 135–52. Albuquerque: University of New Mexico Press.
- WILLEY, GORDON R. 1956a. "Introduction," in *Prehistoric settlement patterns in the Maya lowlands*. Edited by G. R. Willey, pp. 1–2. Viking Fund Publication 23.
- . 1956b. "Problems concerning prehistoric settlement patterns in the Maya lowlands," in *Prehistoric settlement patterns in the Maya lowlands*. Edited by G. R. Willey, pp. 104–14. Viking Fund Publication 23.
- . 1980. Towards a holistic view of Maya civilization. *Man* 15:249–66.
- WILLEY, GORDON R., WILLIAM R. BULLARD, AND JOHN B. GLASS. 1955. The Maya community of prehistoric times. *Archaeology* 8:18–25.
- WILLEY, GORDON R. AND JEREMY A. SABLOFF. 1993. 3d edition. *A history of American archaeology*. New York: W. H. Freeman.
- WILLEY, GORDON R., A LEDYARD SMITH, GAIR TOURTELLOT, AND IAN GRAHAM. 1975. *Excavations at Seibal, Peten, Guatemala: Introduction*. Memoirs of the Peabody Museum of Archaeology and Ethnology 13 (1 and 2). [AAD]
- WITTFOGEL, KARL A. 1957. *Oriental despotism*. New Haven: Yale University Press.
- WOLF, ERIC. 1982. *Europe and the people without history*. Berkeley: University of California Press.
- XAJIL. 1953 (ca. 1715). *Annals of the Cakchiquels (1493–1600)*. Translated by Adrian Recinos and Delia Goetz. Norman: University of Oklahoma Press.
- XIMENEZ, FRAY FRANCISCO. 1985. *Primera parte del tesoro de las lenguas cakchiquel, quiché y zutuhil, en que las dichas lenguas se traducen a la nuestra española*. Academia de Geografía e Historia de Guatemala, special publ. 30.
- XIU. n.d. [1557–1819]. *Xiu chronicle*. MS, Peabody Museum Library, Harvard University.
- YAX. 1989 [1562]. "El título de Yax," in *El título de Yax y otros documentos quichés de Totonicapan, Guatemala*. Edited and translated by R. M. Carmack and J. L. Mondoch. México, D.F.: Centro de Estudios Mayas, Universidad Nacional Autónoma de México.
- YOFFEE, NORMAN. 1993. "Too many Maya chiefs? (or, Safe texts for the '90s)," in *Archaeological theory: Who sets the agenda?* Edited by Norman Yoffee and Andrew Sherratt. Cambridge: Cambridge University Press.
- ZUÑIGA, DIONYSIUS. ca. 1610. *Diccionario pocomchicallano y castellano-pocomchi de San Cristóbal Cahcoh*. MS.