Chapter 1

THE MAYA AND THEIR CIVILIZATION

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INTRODUCTION: THE GEOGRAPHY, CHRONOLOGY, AND ACHIEVEMENTS OF THE MAYA

The civilization of the ancient Maya flourished through most of the first millennium A.D. in the tropical lowlands of the Yucatán Peninsula and the adjacent regions of the Petén and Belize (Fig. 1.1), occupying an area now divided among the modern countries of Belize, Guatemala, and Mexico, and extending southeast into the more elevated western fringes of Honduras and El Salvador. While Maya civilization was primarily a lowland phenomenon, it both penetrated and shared its origins with the cultures of the highlands of Guatemala to the south of the Petén, where the Mayan language family has its greatest diversity and perhaps its beginnings.

Thus the Maya Area, as traditionally defined, reaches from the northern tip of Yucatán at sea level, south to the mountain basins of the continental divide, and down into the lowlands of the Pacific coast. On the west it reaches almost to the Isthmus of Tehuantepec, a low saddle permitting easy contact between the Pacific and Gulf Coast regions, beyond which rise up the central highlands of Mexico. To the east is a frontier zone in which Maya and neighboring cultures mixed, but where the basins of the Ulua River, flowing into the Caribbean, and the Lempa, running to the Pacific, seem to have formed the boundaries of Maya cultural expansion.

The highlands and the lowlands form the two major environmental units in this area: the former include the steep slope down to the narrow Pacific coastal plain, the towering volcanic peaks of the continental divide and the basins that lie between them, and the older metamorphic highlands to the north of the Motagua and Grijalva rivers, less dramatic in relief but immensely more complex in their ancient geomorphology. Many of the minerals from these regions, such as obsidian and lava from the volcanic zone, and jade and cinnabar from the metamorphic, are found at ancient sites as far north as Yucatán, underlining the economic unity of the Maya Area in pre-Hispanic times. The subtropical and montane forest vegetation of the highlands has been seriously

Fig 1.1 Map of the Maya Area, showing the location of Cuello and of other important Preclassic sites, together with the geological sources of jade and obsidian traded into the Maya Lowlands.

eroded by centuries of cultivation, although areas of cloud forest remain in the Alta Verapaz (see Hammond 1988, Chapter 3, for a series of maps illustrating the environment of the Maya Area).

The geology of the lowlands is essentially a limestone platform, flat and barely emergent from the sea in the north, interrupted by the range of the Puuc hills in southern Yucatán, and becoming more rolling and then hilly into the Petén region of northern Guatemala, where folding and faulting direct the courses of rivers and form the basins of lakes. In southern Belize the granite and sandstone massif of the Maya Mountains pushes up through the limestone, and formed a valued source of stone in ancient times. Although in many ways an ecological continuum, the lowlands have traditionally been divided into north drier and southern rainforest zones.

The lowlands increase gradually in elevation, rainfall, and luxuriance of vegetation from north to south, with the low scrub of northern Yucatán merging into a mixed woodland that in turn becomes the tropical rain forest of the Petén and Belize; precipitation rises from less than 500 mm a year near Mérida in the arid northwest to 3,400 mm in southern Belize and on the edge of the highlands, where the rain-bearing clouds coming in from the Caribbean meet the land mass. Temperatures are tropical throughout the lowlands, except in the subtropical heights of the Maya Mountains in Belize, and the relative humidity is high.

One of the prime distinctions between the northern and southern lowlands is the existence of rivers: in the north the landscape is karstic, with underground drainage and few surface sources of water except occasional lakes and the *cenotes* or swallow-holes that form when the limestone cap over a subterranean river collapses. The higher rainfall of the rain-forest zone remains largely on the surface, forming major river systems such as that of the Usumacinta, flowing into the Gulf of Mexico, the Belize River, and the Rio Hondo, running to the Caribbean. These are navigable in the rainy season, and in places even in the dry season of January–May, providing a network of highways which were certainly used by the ancient Maya: so many major communities lie along the Usumacinta that it has been dubbed the "river of ruins." The headwaters of the San Pedro Martir, one of its tributaries, and those of the Rio Holmul, part of the Rio Hondo drainage, lie so close together that portage between them would have been easy. It has been suggested that the prosperity of Tikal, a major center on the portage route, was partly due to its strategic location.

South of Tikal, in the area between the Caribbean and Gulf Coast drainages, is a district of lakes, the largest of which is Lake Petén Itzá. Several large sites are known, including Yaxha and Tayasal, but the lakes did not seem to be an especial attraction during the main period of Maya civilization. During the last few centuries before the Spanish Conquest they did support one of the major concentrations of people in the southern lowlands.

This final period is known as the Postclassic, and in the formal division of Maya prehistory lasts from *c.* A.D. 900 down to the Conquest after 1500 (Fig. 1.2). It is preceded by the Classic period, A.D. 250–900, defined as the time during which the rulers of Maya polities erected monuments bearing dates in a calendrical system known as the Long Count. This is a quasi-linear marking of time (actually a very long cycle) with a mythological origin in 3114 B.C., probably representing the last creation of the world. Periods of time within it are divided into *baktunob* of about 400 years, *katunob* of 20 years, *tunob* approximating to a year, *uinalob* or months of 20 days, of which there were 18 to a *tun*, and *kinob* or days. The Classic period fell into the late eighth, ninth, and early tenth *baktunob*. This book is not the place in which to go into further detail, but descriptions of the workings of the Classic Maya calendar can be found in the standard textbooks on Maya civilization (eg. Morley *et al.* 1983; Coe 1987; Hammond 1988).

The Classic period thus defined was one in which the main Maya cities had their apogee: Tikal, Yaxchilan, Palenque, Copan, Calakmul, and a host of smaller polities flourished in the south, ruled by dynasties which raised temples and inscriptions to themselves and the glory of their ancestors, while in the north centers such as Cobá, Izamal, and Dzibilchaltun were joined late in the Classic by the Puuc sites such as Uxmal and Sayil, and by the major new polity of Chichén Itzá (Culbert 1991).

Recent studies of the economy and settlement patterns of Classic Maya civilization (Ashmore 1981b; Flannery 1982; Turner and Harrison 1983) have shown that the swidden-farming technique of historic times was augmented in the past by the construction of artificial econiches bringing marginal lands into production. Hillside terracing on steep slopes seems to have been primarily to create extra areas of flat fertile land, while also inhibiting erosion (Turner 1983), but its occurrence on shallower slopes, together with walls running directly downhill, suggests permanent demarcation of the improved land, an assertion of tenure that fits best with short-term fallowing. A second improvement technique, the canalization of wetlands along rivers or in *bajos* to create drained fields, also suggests more intensive cultivation. Both kinds of land improvement are known from at least the beginning of the Classic period, and drained fields appear some centuries earlier at sites such as Cerros and Pulltrouser Swamp. While maize was undoubtedly the principal crop then as now, a wide range of other cultivated plants, orchard crops, and gathered fruits and forest products formed the basis of subsistence. Animal protein came from hunting of deer (some possibly loose-herded), peccary and other forest animals and birds, from the collecting of turtles, fish, and edible mollusks in the rivers (and perhaps in the canals of the drained-field areas), and from domestic dogs. Turkeys were also domesticated, although how early is uncertain.

Maya settlement, long thought to consist of scattered hamlets around sparsely populated ceremonial centers, was shown by the mapping of Tikal in the late 1950s to include more concentrated populations reaching the tens of thousands: it was the perceived imbalance between this raised population density and the accepted swidden-farming economic base that stimulated research into ancient Maya subsistence economics in the 1960s and 1970s (Harrison and Turner 1978). The range of habitation units recorded suggested differential access to resources, and a more stratified society than the simple priest–peasant relationship of rulers and ruled accepted until the 1960s (Becker 1979). The nature of the rulers as secular dynasts became clear with the work of

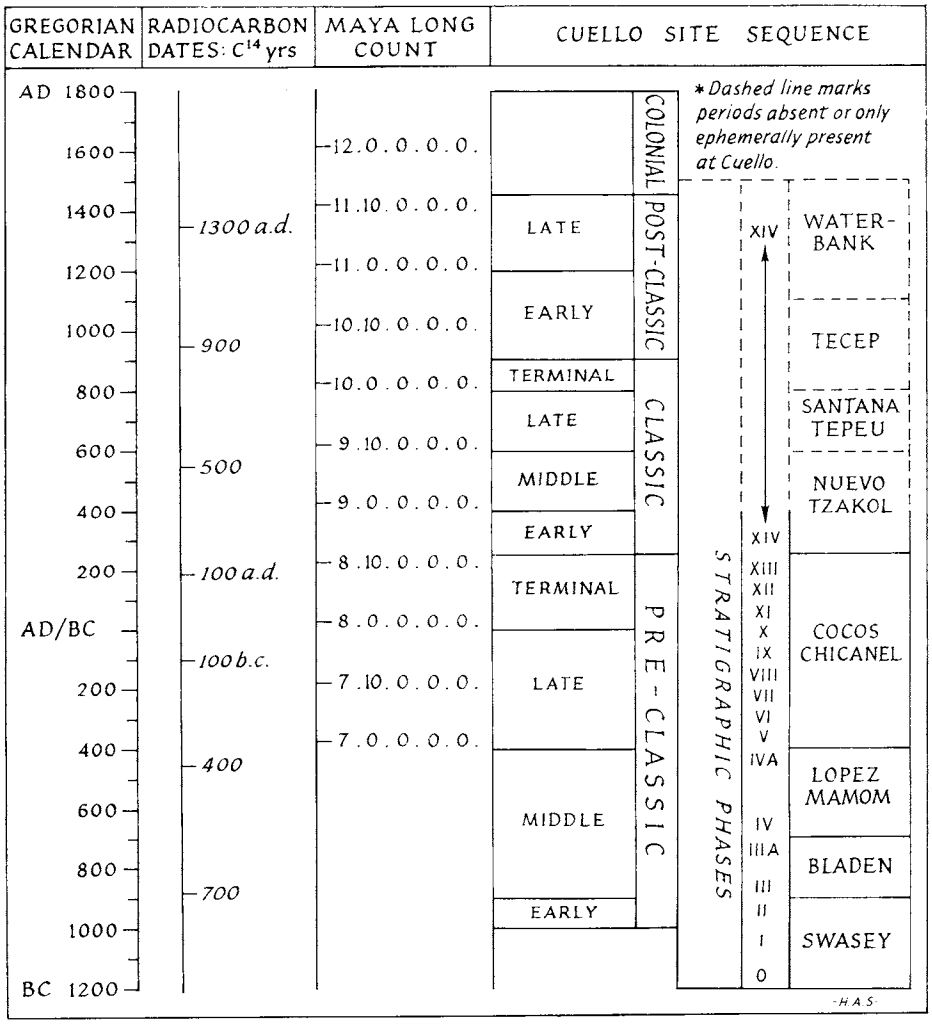

Fig. 1.2 Maya chronology: the Cuello ceramic sequence from the Swasey phase onwards is correlated with stratigraphic phases O–XIV, with the major periods of Maya chronology in general, and with the passage of time in the Maya and Gregorian calendars and in radiocarbon years. For a broad comparison of the Cuello ceramic sequence with those from other Maya lowland sites, see Ashmore (1981b), Fig. 2.2.

Proskouriakoff (1960), and while the "city-state" model of political organization promulgated by Morley (1946) on the basis of Greek parallels still held good, the decipherment of the hieroglyphic inscriptions on dynastic monuments allowed the interactions on those polities and their rulers to be elucidated (for recent summaries of decipherment, see Houston (1988, 1989); for one of political structure and interaction, see Culbert (1988)). The patronage art commissioned by Maya rulers, the relationships with the other-world and underworld deities that it portrayed, and the rituals that linked rulers to their people and their gods have all proved immensely more complex than had been supposed. The changes in understanding are well described by Schele and Miller (1986), a study which in its heavy use of unprovenanced material also illustrates the major problem facing Maya archaeology today: the looting that has removed monuments and burial goods from their contexts and stripped them of much of their value as evidence about Maya society.

Our knowledge of Classic Maya civilization has thus undergone a series of revolutions over the past 30 years: understanding of its economy, social structure, political organization, and ideology has expanded and changed dramatically, and the roots of all of these aspects of Classic society are increasingly recognized as being in the preceding centuries of the Preclassic or Formative period (Adams 1977). This was defined as beginning with the first appearance of forming villages, and ending *c.* A.D. 250 with the appearance of a writing and calendar system used on public monuments, one of the more striking traits of an emergent complex society. The remainder of this introduction reviews recent develop-

ments in our knowledge of the Preclassic, to which the excavations at Cuello have made some contribution.

PRECLASSIC PROBLEMS: THE SITUATION IN 1975

In the mid-1970s, when research began at Cuello, the Maya Preclassic period was widely seen as one of village farming communities, beginning with an initial settlement of the Maya Lowlands in the middle centuries of the first millennium B.C. The chronology of the Preclassic had been first laid out by Robert E. Smith (1955) on the basis of the ceramic sequence established at Uaxactun in the 1930s, and divided into an earlier Mamom and a later Chicanel period, the first beginning *c.* 500 B.C. and the latter lasting from 300 B.C. to A.D. 300. At this later date the Classic period began, with the inception of vaulted architecture, polychrome ceramics, and dated lapidary inscriptions in the Long Count, three markers of élite culture that were taken to demonstrate the emergence of civilization. Subsequent excavations provided parallel Preclassic sequences at Benque Viejo (Xunantunich) and Barton Ramie in the Belize Valley (Thompson 1940: Figs. 4–5; Willey *et al.* 1965), with the definition of a slightly earlier period of occupation than Mamom in the Early Jenney Creek phase at Barton Ramie. At Tikal a comparable phase, designated Eb, was recognized, and the appearance of both vaulted construction and a Long Count date (Stela 29) in what was formally the Late Preclassic suggested that the traits of Classic Maya civilization had been of Preclassic origin (W.R. Coe 1965).

The origins of this Formative tradition remained obscure, but in the late 1960s the excavations by Willey at Altar de Sacrificios and Seibal in the Pasión valley showed that another pre-Mamom area of occupation existed. Defined as Xe at Altar (Adams 1971) and Real Xe at Seibal (Willey 1970; Sabloff 1975), the origins of this ceramic tradition were seen as being in the Maya highland zone on the basis of discoveries by Sedat and Sharer (1972) in Verapaz, where pottery with some Xe traits had been recovered. Sharer and Gifford (1970) preferred an origin as far east as El Salvador, seeing close ties with the Chalchuapa sequence; Adams (1972) in contrast proposed a western lowland origin up the Usumacinta drainage from the Gulf Coast, feeling that the lack of early occupation in the Upper Chixoy basin of the western highlands precluded settlement from that region. Such a riverine pattern of settlement, supported by Sisson's (1970) evidence of occupation on the lower Usumacinta by *c.* 1200 b.c., was also suggested by Puleston and Puleston (1971) for the eastern lowlands.

Radiocarbon dates for the Xe and Real Xe phases of 745 ± 195 b.c. and 660 ± 75 b.c. (GX-172, UCLA 1437) allowed Willey (1970: 318) to place the Xe phase between 800 and 600 B.C.; in the late 1960s calibration of radiocarbon dates as proposed by Suess (1965) had only just begun to make an impact in Old World archaeology, and, since there was no historical chronology that demonstrated the divergence of radiocarbon ages from real time, was not seen as relevant by many working in the New World. Thus radiocarbon ages and solar years were considered to be the same thing, and no formal distinction was made between them in defining chronology. By 1974, however, Berger *et al.* (1974) noted the difference and proposed a beginning of *c.* 900 B.C. in calendar years for Real Xe at Seibal based on calibration of the single radiocarbon date to 850 B.C., reflected also in the final Altar de Sacrificios chronological chart (Willey 1973: Fig. 3). This chart embodied the ceramic analyses of Adams, and from its first version in 1968 placed the beginning of the Middle Preclassic ceramic tradition at 1000 B.C. No early Preclassic occupations were known, although a human presence apparently associated with maize was indicated by the pollen and plant remains from the Laguna de Petenxil core (Cowgill *et al.* 1966) with a radiocarbon date of 2040 ± 160 b.c. (Y-1285), calibrating to > 2500–2310 B.C., and human occupation *c.* 4000 B.C. was argued by Wiseman (1975) on the basis of the Laguna de Eckixil core.

By the mid-1970s an Early Preclassic phase was well established in other regions of Mesoamerica, including the Pacific Coast of Guatemala and Chiapas, the Gulf Coast, and Oaxaca (summarized in Lowe 1978), and even in the Maya Highlands occupation as far back as 1200 B.C. had been proposed (Sharer 1978, III: 115), as well as in the Chontalpa region of the lower Usumacinta (Sisson 1976: 579–81). The absence of Early Preclassic occupation in the Petén and Yucatán began to look exceptional, especially in a region that had later supported a complex society: all of the other major foci of Mesoamerican civilization had long Preclassic sequences.

Thus, the pre-1000 b.c. dates reported from Cuello (Hammond *et al.* 1976, 1977; Hammond 1977a: 60 and note 7; 1977b) were not surprising as such, although the earliness of some of the dates occasioned comment, given the Middle Formative appearance of the ceramics illustrated from the newly defined Swasey phase (Hammond 1975c: 206; 1977b: Figs. 7–9; Hammond *et al.* 1979: Fig. 4), and was remarked on by M.D. Coe (1980: 34–5), followed by Marcus (1983, 1984) and others. These criticisms were entirely justified, as noted in Hammond (1984b: 822), since the ceramics in question were from the end of the Swasey phase as initially defined, which was placed subsequently in the Middle Formative Bladen Xe ceramic complex by Kosakowsky (1983, 1987); in addition, further excavations at Cuello showed that stratigraphic placement of one of the grave groups illustrated (Hammond 1977b: Figs. 8–9; Hammond *et al.* 1979: Fig. 4, nos. 2, 4) was in fact later still, in the later Middle Formative Lopez Mamom phase.

Ceramics apart, the radiocarbon chronology from Cuello was impressive: where the total number of Formative period

dates from the Maya Area was less than two dozen, with no more than five from any one site and not all of those acceptable to the excavators (e.g. Willey 1973: 18), Cuello had 18 dates in good stratigraphic order, together with six other dates considered either far too early (and perhaps run on redeposited charcoal), or far too late. While there were acknowledged gaps in the chronology, especially for the early first millennium b.c. and beginnings of the Middle Formative, the Swasey phase, from which more than a dozen of the dates came, seemed firmly placed in the second millennium b.c. (Berger *et al.* 1979; Hammond *et al.* 1979).

Support for an early beginning to settlement in the Maya Lowlands came from the increasing evidence of social complexity in the Late Preclassic, much of it revealed while the Cuello investigations were in progress. The prescience of W.R. Coe at Tikal (1965) was endorsed by discoveries at Cerros (Freidel 1979; Robertson and Freidel 1986), Edzna (Matheny *et al.* 1983), El Mirador (Matheny 1980, 1986), Komchen (Ringle and Andrews 1988), Lamanai (Pendergast 1981), Seibal (Smith 1982) and elsewhere, showing that massive architecture, sometimes on a scale dwarfing that of the Classic period, had been constructed from perhaps 400 B.C. onwards, in large precincts that argued for substantial and concentrated populations under centralized control. The ideology of the Preclassic and its manifestation in élite iconography began to acquire a coherence of structure and interpretation (Schele and Miller 1986; Freidel and Schele 1988). The beginnings of Maya civilization were placed firmly in the later first millennium B.C., and were increasingly accepted as autochthonous, not the result of direct stimulus from already-advanced societies elsewhere in Mesoamerica. Linkage of the Maya Lowlands with other regions from the early Middle Preclassic onwards was increasingly documented by trace-element analyses of obsidian, recovery of exotic materials such as jade, and recognition of ceramic ties. While the environment, economy, demography and settlement patterns, architecture (apart from a few monumental buildings), mortuary patterns, ceremonial behavior, and ideology of the Maya Preclassic were virtually unknown when work began at Cuello, a decade later there was substantial, if patchy, knowledge of the period which enabled the emergence of Classic civilization to be better comprehended.

To the evidence for early sedentary occupation, with maize agriculture and ceramics, indicated at Cuello and hinted at in other sites where Swasey pottery had been found in small quantities, was added the possibility of a long antecedent preceramic period of gathering and hunting, ending perhaps in a local transition to settled society. Stratigraphic, typological, and/or radiocarbon dating evidence for such preceramic occupation had been found in the highlands at Los Tapiales (Gruhn and Bryan 1977) and the surrounding area of El Quiché (Brown 1980), and in the far north of Yucatán at Loltun Cave (Velasquez 1980). MacNeish *et al.* (1980) then carried out a survey in Belize in which a large number of aceramic sites were recorded; in spite of the lack of stratigraphy and dates, a typological division into six successive phases spanning the period 9000–2000 b.c. was proposed. It began with gatherer–hunters in the tradition of the Clovis manifestation of the southern United States, and proceeded through stages of progressive commitment to localized resources and incipient sedentism until a settled preceramic food-producing society, not unlike the "Pre-pottery Neolithic" of the Near East in conception, was established in the Progreso phase of 3000–2000 b.c. immediately antecedent to the pottery-using Swasey phase. The major problem with this model was that there was no positive evidence that it was valid, as Zeitlin (1984) effectively concedes in a review of the entire Belize Archaic survey program; minor problems included the presence of lithic types designated as early preceramic in Late Formative contexts at both Cuello and Cerros. This is not to say that there is no preceramic in Belize: some of the lithic types do not appear to belong to the inventory of the Formative–Classic–Postclassic Maya continuum, and the Turrialba-variant Clovis point from Ladyville (Hester *et al.* 1981) is as suggestive an indicator of early Holocene human presence as anything from other parts of Mesoamerica. Also, a number of loci in the Maya Area and adjacent Central America have yielded ecofactual evidence, of vegetation disturbance associated with maize pollen, with radiocarbon dates indicating human presence from perhaps the end of the fourth millennium B.C. in calendar years (Rue 1987, 1989). A preceramic phase in Belize antecedent to the first pottery-using villages, whether these were of Swasey date or earlier, is highly likely to have existed, and may have embraced sedentary horticulture in the third and second millennia B.C.

The present situation

The eastern part of the lowlands, and northern Belize in particular, has produced so much information on Preclassic occupations over the past decade that a truly regional research framework has now been built up: the number and distribution of sites has allowed theories about polity and community structure to be proposed (Scarborough 1983, 1985), while the output of the chert-tool workshops at Colha has shown that a Late Formative production economy existed on a regional and not just a local level (Shafer and Hester 1983).

Colha also has a Bladen-equivalent occupation, dubbed Bolay, underlying Mamom and documented with a series of radiocarbon ages that support a calibrated range of 900–500 B.C. and an early Middle Formative position of Bladen, consonant with the Xe links indicated by the initial placing of both Bladen and Bolay in the Xe ceramic sphere (Kosakowsky and Valdez 1982; Kosakowsky 1983; Valdez 1987). I feel that

while contemporaneity with Xe is demonstrable, with both modal and some typological equivalences, the Xe sphere itself is a southwestern Petén entity, probably not reaching as far northeast as Tikal, and that both Bladen and Bolay should be placed in a new ceramic sphere, which should probably be dubbed the Swasey or Bladen sphere (see p. 65). A date of 800–550 ± 60 b.c., calibrating to 1000–520 B.C. on that degree of statistical uncertainty and overlapping Mamom in time, would be consonant with the radiocarbon ages obtained at Cuello, Colha, Seibal, and Altar de Sacrificios, with the Cuello dates falling in the later end of the range at *c.* 900–600 B.C. Bladen-like pottery is also known from Lamanai, El Pozito, Nohmul, San Estevan, and Santa Rita Corozal in northern Belize, although some of this could equally well be of Swasey date given the developmental relationship between the two complexes and the resulting subtlety of distinctions (Kosakowsky 1983, 1987), as well as the small sample numbers from these sites. Valdez (1987, personal communication 1989) indeed suggests that Swasey, Bladen, and Bolay should all be placed in a new Swasey ceramic sphere, spanning presumably the first half of the first millennium B.C. and an area centered on, if not confined to, northern Belize.

A definable Swasey complex has so far been found only at Cuello, where the bulk of the 1,900 sherds and the score of whole vessels analyzed by Pring (1977a) in his definition of the complex were excavated. Pring's Swasey complex was later split by Kosakowsky (1983, 1987), using only material from 1980 excavations, into an earlier Swasey complex defined by 371 sherds and no whole vessels, and the later Bladen defined by over 1,300 sherds and 13 whole vessels. The content and relationships of both complexes, together with the succeeding Lopez Mamom and Cocos Chicanel, are discussed in this book.

Mamom pottery was noted by Pring (1977a) at seven sites, including most of those with Bladen ceramics and also Louisville and Caledonia in Corozal District. The large number of radiocarbon ages from Cuello spanning the period 610–350 ± 50 b.c. (with others outside those limits), and suggesting a maximum span of 800–400 B.C., overlaps both the latter part of the Bladen span and the period conventionally assigned to Mamom of 600–300 B.C. in undifferentiated radiocarbon/calendar years. Within this period the first large rectangular substructures were built at Cuello, in stratigraphic phase IVA (Hammond and Gerhardt 1990), matching the architectural differentiation that developed in Group B at Altar de Sacrificios, where Willey (1973: 30) suggests that élite residences may have occupied the enlarged platforms.

As a result of the 1973–1974 Corozal Project surveys, Chicanel occupation was known at all sites in northern Belize with a later history of florescence, and it was suggested that all prime locations had been occupied by this time. Some which appeared to have been subsequently abandoned, such as Kichpanha, have sinced proved to have a Classic occupation in a different part of the site from that investigated initially, but in others the continuation of prosperity through the Classic period presumed on the basis of major architecture has proved to be wrong: at both Cerros and Nohmul the public buildings proved to be of Preclassic, not Classic date, and to have been abandoned for centuries thereafter (Robertson and Freidel 1986; Hammond *et al.* 1988). Cerros seems to have declined earlier than Nohmul, since the latter was at its peak in the early centuries A.D. and was a major producer of pottery in the "Protoclassic" or "Floral Park" tradition. At this period Cuello also attained its maximum degree of prosperity and size, although this does not seem to have exceeded 3,400 people and the public architecture remained modest in scale. The radiocarbon and calibrated chronology for the site falls within the conventionally accepted limits for Chicanel of 400 B.C.–A.D. 250 in undifferentiated radiocarbon/calendar years.

The chapters that follow detail the investigation of the Formative period occupation of Cuello between 1975 and 1980, with further minor excavations in 1987. An account of these excavations, and of the methods used, is followed by a summary of the stratigraphy and chronology of the site, including both radiocarbon dates and the ceramic sequence. These sections are by Juliette Cartwright Gerhardt, Sara Donaghey, Laura Kosakowsky, Richard Wilk, and me. The evidence that archaeobotany and zooarchaeology can bring to bear on questions of environment and economy is then discussed by Charles Miksicek, and by Elizabeth Wing and Sylvia Scudder. The nature of the Cuello settlement is dealt with in two parts: a detailed account of architectural development in the intensively excavated area of Platform 34, the apparent core of the Formative community, by Gerhardt and Hammond; and an analysis of the surrounding settlement based on test excavations by Richard Wilk and Hal Wilhite.

The people of Cuello as a biological population are examined by Frank and Julie Saul, and their craft technology in ceramics and lithics by Rebecca McSwain, Jay Johnson, and Laura Kosakowsky; some of the other artifacts are discussed by myself. External contacts, most visible in the acquisition of exotic materials, involve local, regional, and long-distance contacts, extending certainly as far as the highlands of Guatemala and possibly west to the Olmec heartland of the Gulf Coast. The ideology of the Preclassic people can be discerned to some degree in their patterns of funerary behavior and offerings, discussed by Cynthia Robin, Juliette Gerhardt, and myself, and in the imagery and iconography of their artifacts. Finally, the importance of Cuello as one of the most intensively excavated and best-documented early Maya sites is summarized and assessed.

Chapter 2

ARCHAEOLOGICAL INVESTIGATIONS AT CUELLO, 1975–1987

Norman Hammond

INTRODUCTION

The Cuello site was discovered during the regional survey of northern Belize carried out by the British Museum–Cambridge University Corozal Project in 1973–74 (Fig. 2.1), and was classified as a "large minor ceremonial center" of level 6, in terms of the regional site hierarchy proposed by Hammond (1975a). The main group of mounds was in *ramonal* woodland east of the Cuello Brothers' rum distillery, but extensive settlement was visible in pasture and *huamil* second growth to the north, west, and south of this. On the south the structures included a number of large platforms with smaller mounds on their tops, and a substantial pyramid, Structure 39, which had been partly bulldozed. Sherds from the core of this included abundant Late Preclassic (Chicanel sphere) material, some Middle Preclassic (Mamom sphere) pottery, and other types not immediately recognizable which were thought to be either earlier or exotic, or both. Given the temporal focus of the Corozal Project on the Preclassic (or Formative) period and the antecedents of Classic Maya civilization, the Cuello site appeared to be of some interest, and was scheduled for investigation in the 1975 field season; work there was designated Operation 17 in the regional program, with the 1974 surface collections being Op. 17A(1), and excavations beginning in 1975 with Op. 17B. The research design changed markedly over the period 1975–80, beginning as part of an avowedly regional study and ending as a single large open-area excavation; the considered results of each season set the objectives for the next, and both logistics and techniques evolved in the light of experience (described in detail in the final excavation report: Hammond n.d.).

MAPPING

The main part of the site was mapped, and the structures numbered, in 1975 (Fig. 2.2); the sequence began with Platform 1, underlying the West Plaza of the ceremonial precinct, Structures 2–17 around and north of it, and Platform 18 and Structures 19–30 below and round the East Plaza. (The

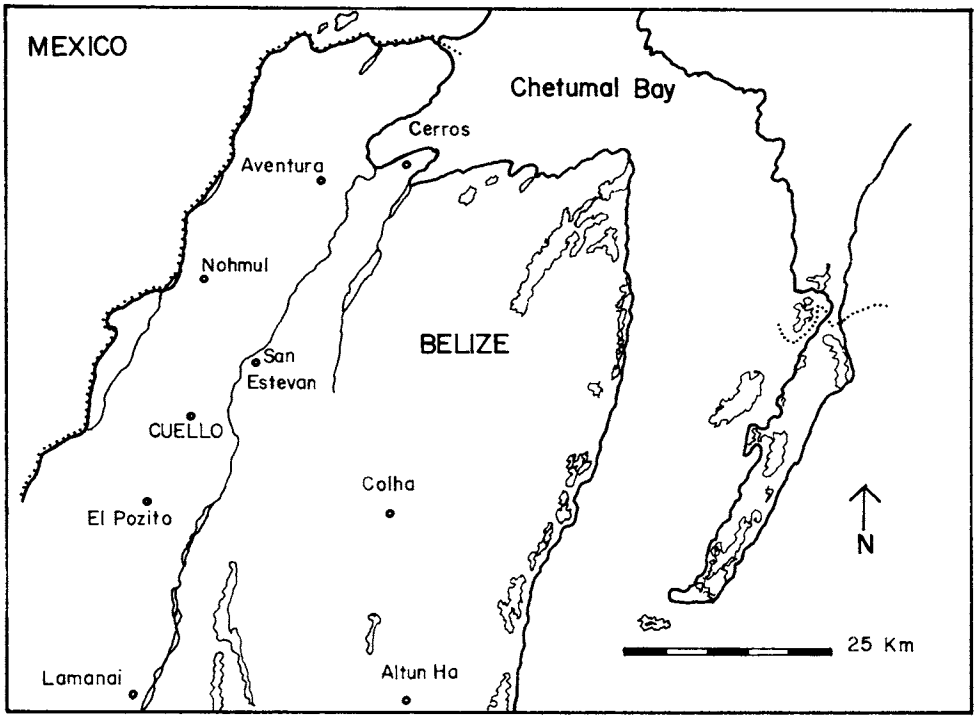

Fig. 2.1 Maya sites in northern Belize, recorded by the Corozal Project regional survey in 1973–74. Cuello is midway between Nohmul and El Pozito, the two major centers on the limestone ridge east of the Rio Hondo.

distinction between Platforms as modifications of the landscape surface and Structures as supports for buildings follows that defined at Lubaantun (Hammond 1975b: 140–1)). The mounds in the area west and south of the main group followed in sequence, and further structures to the north and south were mapped in 1976. The western part of the settlement was mapped in 1980, bringing the total number of structures to 200; the zone east of the ceremonial precinct remained in thick *huamil* throughout the period of investigations at Cuello and was not mapped. Structure numbers above 300 apply to buildings uncovered in excavations on Platform 34.

The known extent of settlement at Cuello runs 1,200 m southwest, 750 m south, 600 m west, and 500 m north from the ceremonial precinct, with the northeast–southwest concentration of mounds that is apparent being the result of local microtopography; areas of lowlying terrain flank Cuello on the other sides, separating the cluster of Platform 90 through Structure 104 from the main body of settlement by some 200 m. The testing program carried out by Wilk and Wilhite (Chapter 6) shows that non-mound occupation also existed, and a rough estimate of population based on the map and test excavations suggests a peak of about 2,600 people in the Late Formative period of maximum occupancy.

Overall site mapping, drafted in the Maudslay convention common in Mesoamerican archaeology (Fig. 2.2), was supplemented for Platform 34 with a contour map at 0.5 m intervals (Fig. 2.3). A site datum at an assumed elevation of 22.00 m above sea level (based on official 1:50,000 maps) and a cardinally oriented grid of 5 × 5 m squares, with an arbitrary origin at 00/00 southwest of Platform 34 and reaching 95 m N/75 m E, allowed any point to be fixed in three dimensions, if necessary to the nearest centimeter (Fig. 2.4). The 30 m N and 40 m E grid lines were used to divide the platform into quadrants for logistical purposes, with major baulks running along these lines being left for access to the excavations, although in some areas they were narrowed, and over the pyramid (Structure 35) eventually removed altogether. A Hilger & Watts 10″ Microptic theodolite was used for overall mapping, and a Zeiss level for surveying in the excavation.

EXCAVATION STRATEGY

When excavations began in 1975, Cuello was one of more than 60 sites documented by the Corozal Project regional survey, many of which appeared worth testing by excavation. The Preclassic pottery collected from the bulldozed Structure 39, and the adjacent ancient quarry which appeared to be the source of its fill, suggested that the nearest undisturbed mound, Platform 34, should be investigated. The large area of the platform, and the relatively small size of the pyramidal Structure 35 on its western end, suggested an architectural discontinuity which would repay examination, the more so