Americae

Debra S. WALKER (ed.), Pre-Mamom Pottery Variation and the Preclassic Origins of the Lowland Maya Philippe Nondédéo Archéologie des Amériques (ArchAm, UMR 8096), CNRS, Paris, France

- 1. This work, which exceeds 600 pages, addresses the topic of the earliest ceramics in the Maya Lowlands. It is composed of 18 chapters divided into five parts. The book begins with three introductory chapters on ceramics and the earliest communities during the transition between the Archaic and Preclassic periods. This is followed by three parts (II-IV) that describe in more detail the earliest productions in Belize, Petén, and the central and northern Yucatán Peninsula. Finally, a final comparative section addresses productions on the Pacific coast and the recontextualization of the earliest lowland ceramics within the material culture of this period. The opus concludes with two appendices: a list of radiocarbon dates from the decisive contexts from which researchers established the chronological ranges and delimitations of their own ceramic complexes, and a complete typological description of all the ceramic types that comprise the pre-Mamom complexes described in this work.
- 2. This book examines the oldest Maya pottery discovered in the lowlands, with the exception of the Guatemalan Highlands and the Pacific coast, which display a very distinct and older tradition, almost a millennium old. This ceramic lacks precise terminology, or uses several names without reaching a consensus. It is generally referred to as "pre-Mamom pottery," with Mamom being the name of the first Maya pottery identified in the 1930s and 1940s at the site of Uaxactun and dated to the Middle Preclassic. With very specific pastes, slips, shapes, decorative elements, and firing processes, this Mamom pottery, almost uniform throughout the Maya Lowlands, shows a high degree of interaction between the different communities of sedentary Maya farmers from 600 BC onward. This

book therefore addresses all ceramic productions that preceded the appearance of Mamom pottery.

3. The volume's editor, Debra S. Walker, points out from the very beginning that there is, however, a consensus among ceramologists in recognizing that, while around 1000 BC the first potters who conceived this pre-Mamom pottery (1000-700/600 BC) were not necessarily Maya, from 600 BC onward, with the appearance of Mamom pottery, they had all become Maya. There is, therefore, a challenge of primary importance through the study of this Mamom pottery, its technical processes and its evolution, which consists of better understanding a broader, more global and multifaceted phenomenon: the "mayanization," the sedentarization and early agricultural practices of these early pottery communities. The editor reviews the genesis of ceramic studies in the Maya area, the terminology adopted, as well as the method of analysis: the typevariety system. It also recalls important definitions, such as that of ceramic complexes, which consist of ceramic assemblages that define the productions of a specific site for a given period, and that of spheres, which is applied when common characteristics are shared between two or more sites, giving these productions a regional scope. While it was possible to establish a Mamom sphere from the complex established at Uaxactun, it seems impossible to identify one for the pre-Mamom phase, since only the chronological aspect has been taken into account to classify its ceramics. It is an older material than Mamom, which was produced between 1000 and 600 BC, but without a clear and precise definition of the assemblages, characteristics, or technical processes. This is due in particular to the great variety and variability of the complexes, and perhaps to the scarcity of correctly dated material from this phase at each site. Sometimes, the ceramic material used for firing is conspicuous by its absence. In fact, only service ceramics are present in the collections, which undoubtedly indicates a continuation of pre-ceramic culinary traditions that used perishable materials.

- 4. Chronologically, Mamom productions belong today to the Middle-Late Preclassic, while those of the Pre-Mamom represent the Middle-Early Preclassic, although some authors tend to consider them part of the Early Preclassic, a period not formally attested in the Maya Lowlands. Furthermore, thanks to the advancement of research on this phase, we are now able to identify two Pre-Mamom sub-phases: an earlier one materialized by the Cuello productions in Belize and the Altar de Sacrificios in Guatemala, and a later one, which is close to the Mamom productions. In any case, the question of the beginning of the Pre-Mamom phase remains open. What is certain is that the particularity of the Mayan Lowlands is the concomitance between the appearance of the cultivation of corn, as a basic food for the diet of and population, and the spread of ceramics, an association that does not exist, for example, on the Pacific coast, where ceramics are much older than agricultural practices. However, everything indicates that the inhabitants of the Maya Lowlands were already living and beginning to exploit the land long before the appearance of the first tableware, but not yet intensively. This is what is revealed by the first occupations of the early pre-Mamom period, whose inhabitants occupied the best arable lands when they settled there, gradually converting these places into permanent settlements.
- 5. The second chapter, by Jon Lohse, examines the long period preceding the introduction of ceramics in the Maya Lowlands, that is, the Preceramic or Archaic period (11650–1000 BC). This author chooses to focus more specifically on its last transitional phase, around 1200-1000 BC, which is characterized by the appearance of pottery around 1100 BC in Belize (Cahal Pech, Actuncan, or Xunantunich). However, Lohse considers that the most likely date for this innovation should be around 1000 BC, a time by which dating contexts are clearer and less dubious. The question of 14C dates, contexts, and dated elements is therefore crucial for establishing valid comparisons and for estimating with certainty the appearance of these older ceramics, which some authors date back to 1200 BC. However, statistical treatments of these same dates drop to around 1100 BC or even around 1000 BC. Based on our current

state of knowledge, the appearance of pottery is believed to be older in the western Maya Lowlands (1200 BC) than in the eastern Maya Lowlands (1100-1000 BC). However, it is important to note that these ceramics do not necessarily mark the beginning of occupation in the region, as cultigen dating dates date back to 6300 BC in Belize (Caye Coco), while in the south of this same region, maize was domesticated beginning in 2700 BC.

- 6. The final phase of the Preceramic is the one that most attracts the attention of researchers because, in addition to determining the end of this stage, what most stimulates scholars is the identification of the first or oldest "Maya." In reality, the Archaic-Preclassic transition should be understood as a process and not as an event, since features such as residential mobility, a broad-spectrum diet, and milpa agriculture gradually established themselves from the end of the Archaic. Among other aspects, the search is being made for the appearance of the first post-Archaic features and, with them, possible external influences that underlie the introduction of these traits, which put an end to this period. In recent years, there have been certain adjustments to place the end of the Archaic around 1100 BC, and no longer 1000 BC, particularly thanks to data from Aguada Fénix, Tabasco, which allow us to trace the beginnings of monumental architecture, agriculture, and ceramic production in the area back to 1200 BC. The question now is to understand the reason for the discrepancies in the time of adoption of some key features (ceramics, sedentary lifestyle, urban planning, monumental architecture, agriculture) depending on the region. Therefore, the issue of dating is a major challenge for tracing these processes.
- 7. The third chapter, written by Robert Rosenswig, addresses the first villages during the Archaic-Preclassic transition in the Maya Lowlands and compares the local panorama with what is happening in the rest of Mesoamerica. For him, the first sedentary Maya potters are the direct descendants of the huntergatherer populations present in the region for millennia. According to him, archaeologists of this transition must face several challenges: sedentarization,

agriculture, and pottery making, which are three parameters that do not go hand in hand and do not constitute an integrated process. They are practices that are established separately, just as their development over time differs from one region to another in the Maya area. These are three parameters that must be analyzed independently. Another challenge, according to him, is to keep in mind that there may have been alternative paths to the two models generally proposed by researchers: on the one hand, nomadic hunter-gatherer populations, and on the other, sedentary farmers. In this sense, none of the potters of the second millennium BC in the rest of Mesoamerica, and particularly from 1900 to 1600 BC on the Pacific coast, in Soconusco, or in Chipas, cultivated maize. The fact that the Maya Lowlands were the last place in Mesoamerica to adopt ceramics is an anomaly in terms of ceramic production, but by no means in terms of subsistence, since various cultivated plants existed in the second millennium BC.

8. Chapters 4 through 6 address ceramic traditions in Belize. Chapter 4 focuses on the famous Cuello pottery, one of the oldest pre-Mamom ceramics, identified through two successive complexes: Swazey and Bladen. The authors, Kerry Sagebiel, Laura Kosakowsky, and Duncan Pring, question whether these two ceramics are two facets of a single complex or two distinct complexes. They also question their position between the Early-Late Preclassic and the Early-Middle Preclassic. Overall, the pottery is technologically sophisticated but simple in its forms, decoration, and execution. Swazey pottery (1000-800 BC) presents a complete assemblage with a certain diversity of forms and the presence of both utilitarian and non-utilitarian vessels, which is not the case with the other ceramic complexes of this period. It contains a high proportion of monochromes (90%), especially bowls and pots. The later Bladen complex (800-600 BC) is distinguished by the appearance of relatively significant forms and types, particularly those with cream slips, while some similarities in modes were found in the Xe ceramics from Altar and Eb from Tikal. This complex has also been identified at numerous other sites in northern Belize, particularly in ritual storage contexts (utilitarian and service ceramics) in the deepest levels of public plazas, at the time of the foundation of these sites. The authors propose creating a sphere for northern Belize, distancing themselves from other

ceramologists who tend to lump the Xe ceramics from Altar and Cuello into a single sphere when, in reality, there are numerous differences between the two traditions. Finally, they conclude by recalling that the Swazey tradition is indigenous, with no ties to the Guatemalan highlands or the Pacific or Gulf coasts. This is no small feat, as until recently the earliest ceramics from the Maya Lowlands were used as an ethnic and cultural diffusion marker within the framework of migration theories.

- 9. Chapter 5 focuses on the Cunil complex at Cahal Pech, dated between 1100 and 900 BC, whose material was found in the lower levels of Plaza B at the site. One-third of the collection comprises slipped and incised ceramics, while the remaining two-thirds are unslipped, which differs from what can be observed in many other contemporary complexes in the region, where the percentages of finishes are higher. According to authors Lauren Sullivan and Jaime Awe, one of the characteristics of this pottery is the presence of volcanic ash in the paste (this can reach about 50%), which is uncommon outside of Cahal Pech for this period. Furthermore, paste analysis indicates that Cunil pottery is local. The ritual deposits associated with this pottery indicate a certain social stratification and the development of exchanges through the deposited artifacts (shell discs, obsidian blades, greenstones, slate, bones and perforated animal teeth, etc.), while in the buildings we observe the progressive adoption of stucco floors that would become widespread in the following phase. Finally, it is through their symbolism that the incised decorative elements on the pottery express the emergence of an elite and the manipulation of a certain ideology as a source of social and political domination.
- 10. Chapter 6 addresses the pre-Mamom architecture and pottery of Pacbitun, a site occupied without interruption until 900 AD. and located upstream of the Belize River. Authors Kaitlin Crow and Terry Powis do not hesitate to classify the oldest material from the site as part of the Terminal Early Preclassic, but without substantiating it. They detail the study of three pre-Mamom structures later covered by a meter-thick fill placed during the Mamom phase. These are apsidal structures separated from each other by a narrow, meter-wide corridor

that forms a passageway. Each construction, erected on the natural substrate, consists of three courses of paired dry stones, and a tamped sascab, both internal and external. The associated sherds, affiliated with the Cunil tradition, belong to the early Mai complex (900-600 BC) and consist of only two groups. The numerous shell-carving debris collected indicate substantial craft production for the needs of the social group, as well as integration into exchange networks. These buildings were covered by two series of later structures, always classified within the Mai complex, whose shapes (rectangular) and dimensions are different, perhaps indicating a certain specialization.

11. Chapter 7, by Takeshi Inomata, introduces Part III, which concerns the pre-Mamom ceramics of Peten. This chapter details the occupation of the Real phase at Ceibal, whose material and contexts come from the main plaza of Group A, where the Group E-type assemblage is found. A total of 53 14C dates associated with a modal analysis were necessary to define the three facets of the pre-Mamom Real complex at Ceibal, which begins around 1000 BC and ends around 700 BC. The peculiarity of Real 1 is the abundance of white slips, while Real 2 ceramics are of better quality with a higher proportion of red slips. The Real 3 material, on the other hand, is more lustrous and is already in the transition with the Mamom sphere. It is comparable to the vast majority of the Xe material from Altar de Sacrificios, actually more recent than the Real complex at Ceibal. The Real 1 ceramics indicate a Chiapas origin for the first inhabitants of Ceibal, where these white ceramics are more widespread, unlike the red slips more characteristic of the Maya area. Ceibal is a gathering place for a population that was still partially mobile. It is in Real 3 that similarities with the Maya Lowlands clearly appear, particularly with the productions of the Belice River, Cuello-Colha or Nakbe.

12. Chapter 8, by Jarek Zralka, Wieslaw Koszkul, Bernard Hermes, Juan Luis Velásquez, Ronald Bishop and Michal Wasilewski, describes the early occupations at the site of Nakum, on the edge of the Holmul River, particularly in the northern sector where a Group E-type complex was later built, important for the social cohesion and identity of the local community. Several levels above

the substratum, found below this last set, yielded pre-Mamom materials that appear to date to the end of this period, in the transition to the Mamom phase. In this same sector, south of the northern plaza, a temascal has been found, the construction of which appears to date to the end of this period. The ceramics associated with these two contexts must be related to Complex 3 at Ceibal (775-700 BC) and show similarities to Complex Eb at Tikal.

13. Chapter 9 jointly analyzes pre-Mamom ceramics from Tikal and Holmul, two neighboring sites in central Petén. The earliest occupations at these two sites are found on hilltops, near rivers or streams. At Holmul, a ceramic level above the natural substratum dates to 1000–900 BC. While at Cival, a chultun and a chamber containing deposited material were dated to around 900–800 BC. Finally, at Tikal, pre-Mamom pottery was found in the fill of a chultun beneath the Group E-type assemblage, suggesting an initial occupation around 850 BC, as at Cival. After analyzing the material from both sites, author Nina Nievens suggests that the pottery from both sites originates from specialized production carried out within the context of banquets or festive events, given the high proportion of highly decorated serving vessels and large plates. Sometimes, as at Holmul, large quantities of faunal remains are part of these deposits placed later, during the Late Preclassic, inside public buildings under construction or modification. These festive events made it possible to attract semi-sedentary populations who had lived on the outskirts to the town center.

14. Chapter 10 addresses the earliest occupations at Nixtun-Ch'ich', a site located at the western end of Lake Petén-Itza. Among the questions posed by Katherine South and Prudence Rice, three aspects will be emphasized: the chronological position of the pre-Mamom complex of Nixtun-Ch'ich' between the Early Preclassic and Early Middle Preclassic periods, the issue of 14C dating, and the differences in evolution between archaic and preclassic populations. The authors wonder whether all the pre-Mamom innovations compared to the archaic period, on the one hand, and the break in development between pre-Mamom and Middle Preclassic Mamom society, on the other, are not sufficient to consider these early pre-Mamom developments to be part of the Early Preclassic period. They therefore adopt the latter terminology and speak of the

Early-Late and Terminal Preclassic to describe the pre-Mamom material identified at this site. The oldest ceramic complex, K'as, dated around 1000 BC, but with few dates, has been identified in an occupation level above the substrate, at the eastern end of the site. It consists mainly of unslipped vessels and shows a still crude workmanship. It precedes the Chich complex, which was clearly pre-Mamom. This more widespread material has been found in pure contexts below the Group E-type assemblage and below the triadic complex. A greater diversity of slipped ceramics and forms is observed there. This earlier occupation at Nixtun-Chich' is also found around Lake Petén-Itza, but with less high proportions of slips. Overall, this pre-Mamom complex presents similarities with the other identified traditions (Swazey, Xe, Cunil, and Eb), but is not related to any of them in particular.

15. Chapter 11 is rather transversal, insofar as the author, Michael Callaghan, studies the production and dissemination of a particular type of fine pastes, the Mars Orange pastes, obtained through exchange and which reflect a certain form of social complexity. Mars Orange pastes were defined above all by their characteristic technology: a fine, well-kneaded, well-fired, orange-colored pottery containing volcanic ash as a deglazing agent. These pastes are present in Belize, in Petén, as well as in northern Yucatán. An analysis of the distribution of this material establishes that it was produced in central Belize at the end of the pre-Mamom period, and not in northern Belize where it is absent. The author associates this production with the Cunil tradition of central Belize, since this tradition also uses volcanic ash as a degreaser. This ceramic is associated with ritual, public, funerary, and banquet contexts, and is present in small quantities in Petén, where it is imitated locally by substituting calcite for the volcanic ash degreaser. This material is primarily a container for liquids and food in the context of community-scale ritual ceremonies, since these are the most finely decorated of all the tableware.

16. Chapter 12 introduces the last major section of the volume, which alludes to the earliest occupations in southern Campeche and the northern tip of Yucatán. This chapter, by Debra Walker, describes the material from the site of Yaxnocah, a large settlement (40 km²) in the far south of Yucatán that reached its peak in

the Late Preclassic. It is located in a region where very little pre-Mamom evidence has been identified to date. The author dates the earliest ceramic evidence between 1000 and 800 BC, but without a 14C date actually associated with the early Macal complex. For the late Macal, dates between 800 and 650 BC are available, but for contexts without associated ceramics. Therefore, the identifications take into account stratigraphy as well as typological comparisons with the other collections. The pre-Mamom early Macal complex belongs to sphere Xe at Altar, but is poorly defined. It consists only of serving ware, which limits the number of sherds available for study. It does not contain any firing or storage vessels. The late Macal complex, which contains the majority of the pre-Mamom ceramic material collected at the site, is similar to Real 3 at Ceibal. In fact, it is quite different from the Ox complex at Nakbe, the pre-Mamom site closest to the date of Yaxnohcah. It is in the late Macal that utilitarian ceramics appear, along with the red monochrome ceramics, which now dominate, with their semi-polished appearance, the white monochrome. In general, the ceramics have simple forms, although the presence of tecomates for cocoabased drinks is noted, provided with incised decorations that recall those of older containers made of perishable material.

17. Chapter 13 examines early ceramics in northern Yucatán, and in particular redefines the pre-Mamom Ek complex, first identified at Komchen and later at Kiuic in the Puuc region. According to authors E. Wyllys Andrews V and George Bey III, this complex appears to have developed between 900 and 800/700 BC, that is, before the early Nabanche complex at Komchen. Ek is a complex that shows similarities with the Cunil tradition of Belize and whose material was located at the base of the monumental platforms that delimit the central plaza at Komchen. However, the number of well-dated contexts is limited. Recently, this complex has been identified at several sites in northwestern Yucatán, as well as around Kiuic. The Ek complexes at Komchen and Kiuic are similar, but show regional differences, such as a greater diversity of slips at Kiuic. Similarities and connections also exist with the Royal 1 and 2 ceramics from Ceibal, while early Nabanche has characteristics in common with Royal 3. The authors specify that the buildings at Komchen are largely public and ritual, but not residential, thus suggesting the existence of a population that was not yet

sedentary, according to the service ceramics collected, intended for collective use. Komchen was thus, between 900 and 700 BC, a site of public, ritual, and ceremonial activities for a dispersed and small population.

18. Chapter 14 follows the previous one and focuses on Yotolin ceramics, an unslipped ceramic from the Ecab sphere, which has been found in the lower levels of several cenotes in northern Yucatán and consists mainly of single-pod jugs. This pottery was first found in the Mani cenote and, according to authors Betsy Kohut, George Bey III, Tomas Gallareta Negrón, and E. Wyllys Andrews V, appears to be the oldest pottery in Yucatán. Since then, this pottery has been identified in sealed contexts at Xocnaceh, a Puuc site, where it presents a greater diversity of forms. Thanks to the very deep stratigraphy at the site, it has been possible to establish that Yotolin pottery was from the Early Middle Preclassic, and that it preceded Ek pottery. Yotolin pottery gradually incorporated characteristics of Ek pottery, diversifying forms and decorations, and maintaining a certain continuity until the emergence of the Nabanche tradition of Komchen. In the transitional phase identified at Xocnaceh, Yotolin and Ek pottery are correlated and follow one another in time.

19. Chapter 15, by Travis Stanton, Sara Dzul Góngora, Ryan Collins, and Donald Slater, details the Laapal complex at Yaxuna, an important site located south of Chichen Itza, where substantial Late Preclassic occupation had been detected by the Carnegie Institution era. During recent excavations within the E-type group, where 11 floors were counted, pre-Mamom ceramic sherds were identified and then divided into two facets: early and late Laapal, delimited by over 26 14C dates. Phase I, dated to the pre-Mamom period, is located between 900 and 700 BC and corresponds to the earliest occupation of the E-type group, while Phase II, just above it, is related to the early Nabanche, dated between 700 and 400 BC. The early Laapal facet corresponds to a pure pre-Mamom material, while the late facet appears mixed. The former is defined by four unslipped types, while the late facet includes slips and dichromes. The authors also adopt the idea that a local, low-density population lived in residential mobility and was beginning to adopt maize as their primary resource. The adoption of ceramics was linked to the adoption of fixed meeting places in

the landscape, the type E groups, and to profound changes in the subsistence economy. Chapter 16 summarizes the early occupations in the coastal area of southern Campeche State and on the banks of the Champotón River, where recent research by Gerald Ek has revealed a significant boom in this sector during the Middle and Late Preclassic, with a pre-Mamom occupation in particular. The pre-Mamom Ch'ok complex appears sufficiently distinct to be part of its own sphere. It reflects a dynamic development, with populations that sustained themselves largely thanks to marine and aquatic resources. All of this illustrates the regional heterogeneity of this period both in terms of subsistence and ceramics. Although no context has been correctly dated by 14C, the location of this material in the deepest levels, together with comparisons with other collections, in particular the Royal 1-2 ceramics from Ceibal, allow us to place this complex in pre-Mamom, between 1000 and 800 BC and connect it with the Gulf Coast and the western part of the Mayan zone.

20. Chapter 16 summarizes the earliest occupations in the coastal zone of southern Campeche State and on the banks of the Champotón River, where recent research by Gerald Ek has uncovered a significant boom in this sector during the Middle and Late Preclassic, with a pre-Mamom occupation in particular. The pre-Mamom Ch'ok complex appears distinct enough to be part of its own sphere. It reflects a dynamic development, with populations largely supported by marine and aquatic resources. All of this illustrates the regional heterogeneity of this period in terms of both subsistence and ceramics. Although no context has been correctly dated by 14C, the location of this material in the deepest levels, along with comparisons with other collections, particularly the Royal 1-2 ceramics from Ceibal, allow us to place this complex in the pre-Mamom period, between 1000 and 800 BC, and connect it with the Gulf Coast and the western Maya area. Similarities were also observed with the Ek ceramics of northern Yucatán. Finally, the author observes a sharp break in their material at the end of the pre-Mamom period, with the replacement of one tradition by another, while, at the same time, there is continuity in the occupation sites between the two periods.

- 21. The last two chapters, 17 and 18, constitute the comparative-synthetic part of the volume. Chapter 17 presents the ceramics of the Early Middle Preclassic period on the Pacific coast, a dynamic period in terms of the exchange of ideas, with numerous shared characteristics on a Mesoamerican scale, according to author Michael Love. He considers the Maya Lowlands to be distinguished from this large cultural complex by their very limited use of white slips, which form almost a Mesoamerican horizon during this Early Middle Preclassic period. He compares the ceramics of the Maya Lowlands with those of La Blanca, one of the largest Preclassic sites on the Pacific coast, where he studied material from the Las Conchas complex, dated between 1000 and 600 BC, which is found throughout southwestern Guatemala. This is an ancient ceramic that evolved from the Early Preclassic period, incorporating new forms, pastes, and decorations. The complex fits perfectly into the traditions of the Isthmus and the Pacific coast, where black and white slips and tecomates predominate, unlike the Maya Lowlands, where burnished red is predominant. Another notable difference is that the utilitarian pottery of the Maya Lowlands does not use slips, while on the Pacific coast, their use is systematic. With the exception of a few incised motifs, the author observes very few relationships or common elements between its material and the ceramic tradition of the Maya Lowlands.
- 22. Finally, Chapter 18, by Kathryn Reese-Taylor, summarizes the advances made during the Early Middle Preclassic period in the Maya Lowlands, where we witness the adoption of small village life and maize agriculture as the main component of the Maya diet. However, the concomitance of these two phenomena throughout a gradual process is now questioned or rejected by recent research, which instead perceives a rapid sedentarization around 1000 BC, followed by the coexistence of mobile and non-mobile groups for centuries, and in a single landscape. Networks of interaction also appear very early on, allowing for the diffusion of innovations in ceramics, architecture, urban planning, ritual life, subsistence, and exchange.
- 23. In conclusion, this work is a very useful synthesis for anyone interested in ceramics and the early developments of Maya civilization. It examines important issues such as sedentarization, the ceramic-ceramic transition, the

exploitation of natural resources, and the establishment of some of the Mayan cultural traits (public rituals, urban planning, etc.) that would later characterize this society. The selection of sites studied is quite broad and includes the entire Mayan Lowlands, which ultimately allows for a fairly comprehensive view of the phenomena and processes underway during this key period in Mayan history. In particular, the role played by Group E-type complexes, both in the south and north of the area, in the establishment and sedentarization of communities around these early meeting and convergence sites is notable, thus contributing to forging a common origin and identity for populations that were still partly mobile.