

# Conclusions

## General remarks

The 1999 Mastos project had the explicit aim of testing a new survey sampling strategy in conjunction with the establishment of an ambitious geographical information system. The sampling strategy was, in a sense, intermediate in scope between excavation and a more traditional extensive survey in its documentation and sampling of data. The hill had previously been excluded from the extensive 1988–1990 survey in the surrounding Berbati Valley.<sup>1</sup> While surface remains were documented in the area and published, the piecemeal history of the small hill has hitherto remained accessible only through old excavation reports. Different research designs and data sets often made difficult the comparison of observations made during the large survey and those from excavations. The results presented here go a long way to rectifying this situation. The 1999 survey facilitates comparisons between the hill and the valley, and illuminates their respective histories in new ways. For the first time, it is possible to discuss aspects such as periods of settlement and abandonment, expansion and contraction, and degree of participation or isolation in contacts with other areas, both on a local and on a regional scale.

The publication introduces many previously poorly or completely unknown aspects of the habitation of the Mastos. Several periods of occupation and/or activities are presented here for the first time, such as the Middle and Final Neolithic, and all of the historical periods. The Middle Helladic occupation, previously only given brief mention in preliminary reports, is included here as well. Unlike previously published excavation results, the survey data also permit tentative discussions of the extent of the settlement over time. Perhaps especially telling is the distribution of Late Helladic III finds over large areas, suggesting that the production of Mycenaean decorated vessels in the Potter's Quarter<sup>2</sup> can only be properly

understood if situated within a considerably larger context of contemporary activities on the hill. In other respects, the survey results confirm or even amplify our previous understanding of the Mastos during certain periods. The extent and makeup of finds from the Early Helladic II period, including several fragments of decorated hearths and an animal figurine, tally well with the large and diversified settlement partly uncovered and published by Säflund.<sup>3</sup>

Like other archaeological surveys, our data have interpretive limitations. The sampling strategy was very ambitious, in that all surface material, mainly pottery, in the units was collected and sorted by period in the field. This was carried out by the same individuals who, as a group, possessed good knowledge of ceramics from all relevant periods. Apart from this coarse but consistent chronological division, no additional sorting was carried out (e.g. according to fabric, form, surface treatment or decoration). Large numbers of sherds were collected for further study in the museum, while the remainder were distributed back within their units of origin. Since it would have required an unrealistic amount of work, we cannot state that the selection of sherds for more detailed study was proportional in every respect to the makeup of the sherds collected in the field. Nevertheless, our aim was always to select representative samples.

The distribution maps of ceramics are based on raw data, without any consideration of possible depositional processes. Also, although we use and discuss various types of land use and vegetation, no attempts have been made to compensate for the masking effects of vegetation on the collected material. This is for the reason that compensating parameters grounded only in subjective estimates are prone to be misleading. The Mastos survey data are stored in such a fashion that they allow results from other studies which address these questions to be applied in the future.

In retrospect, we conclude that the topographical and archaeological documentation of the Mastos was urgently

<sup>1</sup> Wells 1996a.

<sup>2</sup> Åkerström 1940, 296–298; Åkerström 1952, 32–46; Åkerström 1968, 49.

<sup>3</sup> Säflund 1965, 91–162.

needed. The terraces and surrounding fields are changing rapidly today as a result of the use of the area. The archaeological remains are located on privately-owned land and there are different interests to consider in its management. It is our hope that the remains of the successive settlements on the Mastos can be preserved for the future.

## Results by period

The earliest pottery on the Mastos Hill dates to the Middle Neolithic. For reasons argued above, Johnson leans towards a later date for the settlement here than that at FS 400 on the lower slopes of the Psili Rachi in the centre of the Berbati Valley, which also lies in close proximity to a spring. However, the latter habitation is of decidedly greater size and probably displays continuity through Late Neolithic and into Final Neolithic.<sup>4</sup> At the Mastos there seems to be a hiatus in occupation in Late Neolithic, but this is arguing *ex silentio* and may not be relevant. In any case, the Mastos Final Neolithic village grew into a substantial habitation covering approximately 2 ha. Johnson suggests that it is perhaps the largest FN village in the Berbati-Limnes area, or at least one of the largest. He interprets it as a farming community with excellent access to water close to the Panaghia spring and to the Asterion. No architectural remains have been dated this early.

The situation changes in the Early Helladic period, even though architecture appears only in the EH II phase, as shown by Säflund's excavations in 1935.<sup>5</sup> Lindblom estimates that the settlement was at its largest during the Early Bronze Age, and points to the fact that nowhere else in the valley, nor in the Limnes area for that matter, do we have any traces of occupation from the succeeding EH III period. Because of the relative scarcity of contemporary pottery at the Mastos he concludes that fewer people lived there, and over a smaller area.

During the 1988–1990 survey not a single Middle Helladic sherd was found either in the valley or in the Limnes area.<sup>6</sup> At that point, of course, we knew from the old excavations that the Mastos Hill was inhabited during the period in question. In 1994, during our investigations of deposits surrounding the tholos tomb, we discovered some MH pottery in two pits dug into the soft marl, probably remains of disturbed graves.<sup>7</sup>

Lindblom points out that several of the MH wares commonly found on the Argive Plain are not present at the Mas-

tos, but that most of the material is of local manufacture, a fact which is underscored by a substantial number of wasters found in the old excavations in the area of the Potter's Quarter. The impression is that in the Middle Bronze Age, the Mastos settlement was fairly isolated and did not communicate with neighbouring regions to any great degree. Judging from the number of sites, there seems to be a decrease in population in the preceding EH III phase, and this depopulation apparently continues through the Middle Helladic only to rise again as we move into the Late Helladic period. The same routes of communication which had been in use from the Neolithic through the Early Helladic were used again in this period, but to these were also added some new routes, as we have seen above.

With moderate beginnings in the early Late Helladic, mainly at the hill itself, we see substantial expansion over the whole valley, and also onto the Limnes plateau, beginning in the fourteenth century BC.<sup>8</sup> Klintberg shows that specialized pottery production can be documented through LH IIA–B but also points out that the production is fairly limited and perhaps only takes off at the end of the period with the kiln in the Potter's Quarter.<sup>9</sup> The survey results underpin previous impressions that the number of cups of various types that were produced at the Mastos would have constituted a surplus intended for exchange.

In his book on the pictorial pottery from Berbati, Åkerström relates that the well-known kiln was in use into LH IIIA, and that the rest of the architecture on the eastern slope must be dated to IIIB, but production did not cease at the Mastos and he therefore speculates that it must have been moved elsewhere in the area, to a location "not yet identified".<sup>10</sup> In her presentation of our survey results, Klintberg argues for such an area on the lower slopes of the hill in the west and southwest. Pottery densities here are even greater than in the east, and the fact that we found not only specialized shapes, but also wasters and figurines, indicates production. It can be no coincidence that what Klintberg terms organizational changes happened at a time when, in the 1988–1990 survey, we observed a general expansion as well as the construction of the Mycenaean highway on the Kondovouni in the northwest. The Mycenaean rulers realized the advantages of the fertile land, ample water and clay resources and technical know-how that Berbati offered.<sup>11</sup> Åkerström himself suggested that the Berbati potters produced spec-

<sup>4</sup> Johnson 1996a, 44–57.

<sup>5</sup> Säflund 1965, 91–162.

<sup>6</sup> Wells 1996c, 121.

<sup>7</sup> Wells, Ekroth & Holmberg 1996, 194 (by G. Ekroth).

<sup>8</sup> Schallin 1996, 170; Wells & Runnels 1996, 456–457.

<sup>9</sup> Åkerström 1987, 24.

<sup>10</sup> Åkerström 1987, 23–24.

<sup>11</sup> Whitbread, Ponting & Wells 2007.

tacular pictorial vases for an external market in LH IIIA to LH IIIB, a view supported by chemical provenance studies.<sup>12</sup>

In LH IIIB, activity slows down at the Mastos and Klintberg points out that no pottery ascribable to IIIC was found in the 1999 survey. This observation tallies largely with the results of the 1988–1990 survey, where, however, Schallin identified some presence in the valley in the early part of the phase.<sup>13</sup>

A long hiatus then follows at the Mastos as well as in the valley at large.<sup>14</sup> Either the valley was totally abandoned or it was only intermittently used for activities, such as grazing, which leave no evidence, or only slight traces such as perhaps the Klisoura Protogeometric sherds. A few graves with Early and Middle Geometric pottery attest to people entering the valley again after 900 BC, but resettlement comes only a hundred and fifty years later, from the northeast, as we have seen above.<sup>15</sup>

A sparse scatter of ceramic fragments ranging in date from the Archaic to the Hellenistic period was picked up on the Mastos Hill, and these were distributed over most of the hill. In a few units on the southern slopes the pieces are slightly more numerous, which induces Penttinen to consider the possibility of a small farmstead in that area. He also discusses the possibility of them being the result of manuring. On the top of the hill, on the other hand, fragments of cups may point to cult during the Archaic period.

Hjohlman suggests that the limited number of potsherds assignable to Late Antiquity indicates no more than short-lived habitation on the southwest and on the north of the Mastos Hill. The distribution pattern is unambiguous in two respects: not one Late Antique fragment was picked up in either the south or the east; and the presence in the period falls completely within the sixth and the mid seventh century AD. This is noteworthy in view of the fact that there were several farmsteads on the valley bottom at the time, among them the one at Pyrgouthi.<sup>16</sup>

In Medieval times the whole surveyed area on the Mastos was utilized. Fragments of pottery were found in every single unit but one. Part of the fortification on the northern side of the top terrace is still extant; on the southern side the rock is steep and no wall was needed. On the top of the hill we find the greatest pottery density. Hjohlman associates the small castle on the hill with the so-called Old Village just northeast of the Mastos (FS 418).<sup>17</sup> This is probably so, but it is interesting that it is only the very top of the hill which is fortified, while densities are quite high on the terraces below the castle as well. Unless people just threw their broken pottery over the walls, these terraces should have been part of the settlement on the hill. It is not unusual to find settlements hugging the walls of a fortification for protection, and it is obvious that the settlers almost totally avoided the lower slopes. Activity was at its highest in this period in the area around the hill, which seems to have been inhabited before the arrival of the Franks as well as after their takeover in 1204. The thirteenth century was a turbulent period, and this is attested by the two coin hoards found on the eastern side of the Mastos and a little east of the hill respectively.<sup>18</sup> By the end of the century habitation had ceased on the hill.

As a result of our long commitment in the Berbati Valley, we initiated collaboration in the mid 1990s with Ian Whitbread of the British School at Athens' Fitch Laboratory, aiming to explore temporal patterns in ceramic technology in the valley. In addition to the petrographic analyses we invited Matthew Ponting to investigate some of the material chemically.<sup>19</sup> Whitbread presents a detailed discussion of the clay resources of the valley, the ceramics from Neolithic to Medieval and Modern times, and the material associated with the four kilns so far identified.<sup>20</sup> Although no material could be included from the Mastos survey, his exhaustive study of the resources and fabrics employed in the valley is undoubtedly relevant for this project also. Of added value are the references to the sampled ceramic fragments published from the 1988–1990 survey and from the Pyrgouthi excavations.

<sup>12</sup> Åkerström 1987, esp. 117–122; Mommsen & Maran 2000–2001 with further bibliography.

<sup>13</sup> Schallin 1996, 170–171.

<sup>14</sup> Wells 1996d, 177. One, or possibly two, early Early Iron Age pot sherds were found in the Klisoura.

<sup>15</sup> Ekroth 1996, 219. Cf. Penttinen 2005, 101–106.

<sup>16</sup> Hahn 1996, 438–439; Hjohlman 2005, 255–258.

<sup>17</sup> Hahn 1996, 368, 444.

<sup>18</sup> Metcalf 1974; Hahn 1996, 445–449.

<sup>19</sup> Whitbread, Ponting & Wells 2007.

<sup>20</sup> The four kilns are the Late Helladic IIB/IIIA kiln in the Potter's quarter (Åkerström 1968), a modern kiln (FS22) identified during the 1988–1990 survey (Hahn 1996, 352), those excavated at Pyrgouthi (Penttinen 2005, 21–23), and a Late Antique kiln investigated west of the Roman Bath (Sarri 2004).

