

INTRODUCTION

The Blakhiya cemetery is about one kilometre north of the Shateh (Beach) Camp, north of Gaza City, at about 250m from the seashore and just beyond the main highway to the North. The grave yard is probably related to the old port town of Anthedon (Humbert 2000, Morhange et al. 2005). The cemetery extends several hundreds of meters in both northern and eastern directions, though the exact size and limits are difficult to determine. Geologically, the area consists of a top soft sand layer of variable thickness (1-2m). A relatively thin mud layer of about 20-50cm below that rests on soft sandstone bedrock (Fig. 1).

The cemetery was discovered as major constructions started with the removal of the top sand layer in this area. An immediate survey, 1995, was carried by a team from the Palestinian Department of Antiquities and the *École biblique et archéologique française de Jérusalem*, followed this. It was then possible to date the cemetery to the Byzantine Era. Two intact tombs were excavated. These had stone-built burial chambers. The inner walls of the cists were covered with painted plas-

EXCAVATION AT THE BLAKHIYA
BYZANTINE CEMETERY IN GAZA, 1996

BY

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SUMMARY

A Byzantine cemetery in the vicinity of the Blakhiyah site (the Anthedon of Palestine, Gaza) was excavated in emergency during 1996. The cemetery was assigned to the IIIrd and the Vth cent. The burial customs and the typology of the tombs are described. Seventy-four burials were excavated despite the bad state of preservation of the human remains. They provide information about mortality and the state of health of the Byzantine society in the area.

SOMMAIRE

Un cimetière byzantin dans la périphérie du site de Blakhiya (l'Anthèdon de Palestine, Gaza) a fait l'objet d'une fouille de sauvetage en 1996. Il a été daté entre le III^e et le V^e s. Le mode d'inhumation et la construction des tombes sont décrits. Soixante-quatorze sépultures ont été inventoriées en dépit du mauvais état des restes humains. Elles donnent des indications sur la mortalité et l'état sanitaire de la population byzantine de la région.

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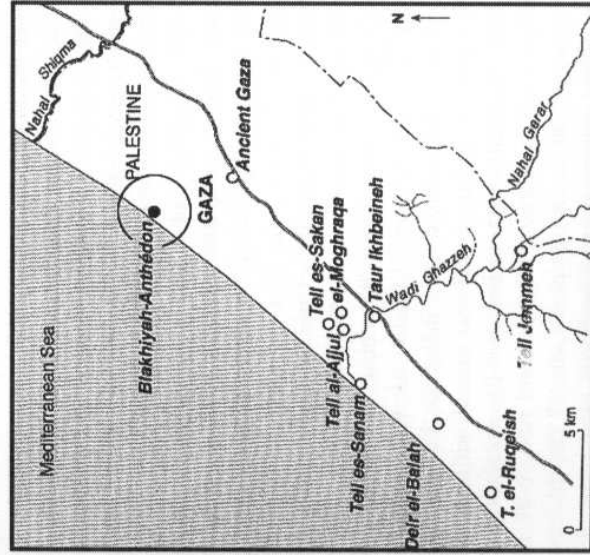


Fig. 1: Map of archaeological sites, Northern Gaza Strip (Morhange et al. 2005)

ter, decorated with red plant motives and crosses. It was then decided to launch an excavation attempting to uncover and preserve further such "painted" tombs.

Archaeological excavations at the Blakhiya cemetery were carried during the month of July 1996. Retrieving more of the above-mentioned plastered tombs was one of the project's objectives. Primarily, the intention was to obtain archaeological and anthropological information on the local population of that time within the framework of the larger archaeological project in Gaza. This is a short presentation of observations and results made in this cemetery excavation.

THE EXCAVATION

The site chosen for excavation was on the Northwestern corner of the cemetery. An area of 45x30m was divided by means of a 5x5m grid: columns 1 to 9 in North-South and rows A to F in East-West direction respectively. An artificial tongued cliff of several meters in the western part reduced the excavated area size. Originally, all tombs were simple vertical shafts leading to the burial chamber (cist). The removal of the top sand layer facilitated the localization and excavation of the burial chambers. These were often found exposed or at 20-50cm depth of the current surface layer (Pl. 1). As illustrated in Fig. 2, the excavated cemetery part reveals variable tomb distribution with more or less connected distinct tomb concentrations I to V (Pl. 2). The burials were placed in a general NW-SE direction and a general organization in columns and rows was maintained, e.g. the tombs 70, 46, 47 61 are in line with tombs 67 and 69. Tombs 56 and probably 57 were built upon a preceding burial cists. The absence of tombs in the area including the squares A1-B3 and A3 indicates the limit of the distinct part or possibly the cemetery as a whole. No tombstones were found in the site.

Three main types of shaft-tombs were observed in the excavated area. Simple pit-graves with uncovered burials were represented in tombs 12 and 32. The tombs 68 and 71 were infant jar burials; using Gazean badly burned earth-ware (amphora) and placed within a semi-squared stone structure, apparently without any specific orientation. The remaining 67 tombs were cist tombs, i.e. with closed stone-built burial chamber. Single rows of cut sandstone plates, ca. 12 cm thick, were placed vertically in a rectangular form. The burial cists were closed by flat covering stones, sealed with mud or plaster. Few chambers had built walls of multiple rows. Some polished limestone blocks were also

utilized in the burial cists, e.g. a flat column drums and other building stones in the tombs 45, 46 and 47 (Pl. 3b). Adult burial chambers were about 2m long, 60cm broad and 50cm high. Child-burial chambers were less than 120x40x45cm in size. Supportive flat stones were often placed along the outer chamber walls, probably intended as separators between neighbouring tombs. This, apparently, had resulted in complex tomb structures as in the tombs 44, 45 and 46. Changes in the tombs' length (tomb 45 and 46) or angle (Tombs 26-29, 57 and 61) were also applied to build distinct burial chambers. Polished stones were used to build a semi-squared structure, ca 220x250cm that was divided in the middle by a line of stones into two burial chambers of tombs 3 and 4 (Fig. 2), each of which was closed by two fitting stone slabs, rectangular and polished.

When excavated in 1996, most of the tombs were in bad condition. The constructed burial cists were often deteriorated to a degree that only few stones were left to mark a pre-existing tomb. Of the 76 excavated loci, 71 were identifiable as distinct tombs or burial chambers. The remnants found in the loci 73, 74 and 75 did not allow such distinction and it was not possible to infer on the presence or number of tombs, if any (Fig. 2). Only 18 burial chambers were structurally intact, i.e. with covering-slabs closed cists, alongside the two jar burials. The disintegrated state of tombs found in the excavated site can be partly blamed on the latest disturbances. It is probable that the soft nature of the sandstone used in constructions as well as natural factors (temperature and geology) had a greater effect. The stones used contained relatively large sand granules and were very rich in diverse small shell. Occasionally, small pottery fragments of the Hellenistic period were found in these stones, indicating their low degree of calcification and relative young formation age.

Remains of white or painted plaster were found on the inner walls of the tombs 6, 14, 23 and 34. These were simpler and of minor quality than of those found in the preceding survey. Other burial chambers yielded few fragments in the filling. Sheep or goat teeth were found, most probably intentionally placed, upon the covering slabs of tombs 46, 57, 61 and 64.

The tombs' condition gives an indication of the state of preservation of the burials (Pl. 4). The human skeletal remains, engrossed in the hard clay layer, were largely fragile, deteriorated and fragmentary, therefore difficult to salvage. Locus 73 represents a group of undefinable tombs and burials with fragile scattered bone fragments. Because of their bad condition and being un-assignable to specific individuals, the bones were

left in their place. Overall, human remains were not found in 10 tombs while 13 others had articulated *in situ* burials. Only scanty bone fragments were found in the remaining 48 tombs.

The deceased were buried in a stretched position; the head to the NW and the hands folded in their lap. Often, a coin and/or a ceramic or glass vessel is left with in the burial chamber. Most tombs were single burials. Tombs 16 and 22 included three consecutive burials. In each, the first burial was moved to the chamber's lower end and the third was stretched with his head on the chest of the second burial. Tomb 20 included an adult and a child, possibly simultaneously buried.

Locus 13 was a sand-filled, ca 1m large pit. It was more than 60cm deeper than any burial in the site and contained the disarticulated and mixed remains of three adults. These bones were the best preserved of the graveyard. It was the only locus that provided intact bone parts. It is thus possible to suggest that the acidity of the mud layer facilitated the deterioration of human burials while sand preserved the bones. In contrast, the intact chambers of the tombs 3, 4 as well as 23 were found filled with sand. Only few small bone fragments and teeth were found. Also, the box-shaped locus 72 yielded only splinters of bone. It is possible that the tombs 3, 4 and 23 were emptied in antiquity. Their contents were placed in the separate pits, as locus 13 (Fig. 2), or elsewhere, as in tomb 72. This was probably undertaken as preparations for other burials, i.e. re-usage of the burial chambers, or to dispose of not wanted burials.

OBJECTS AND TOMB OFFERINGS

A small amount of local and imported pottery fragments were collected from the site and excavated tombs. The material was from amphorae, local and imported, small jars and lamps. Most fragments were datable to the IVth century AD. These were represented in all parts of the excavated site. Few ceramic lamp fragments were datable to the late IIIrd to IVth century AD. In the tombs themselves, few objects (offerings) were found. Among the 20 bronze coins found, two were datable with certainty to Constantine I (324-337 AD) and two to Constantius II (337-361 AD). Three coins found in tomb 61 were dated between the IVth and Vth century AD, covering a time span of ca 150 years. A displaced early Islamic coin of the VIIIth century AD was found at the damaged tomb 63. The remaining bronze coins were datable with less certainty to the IVth century AD.

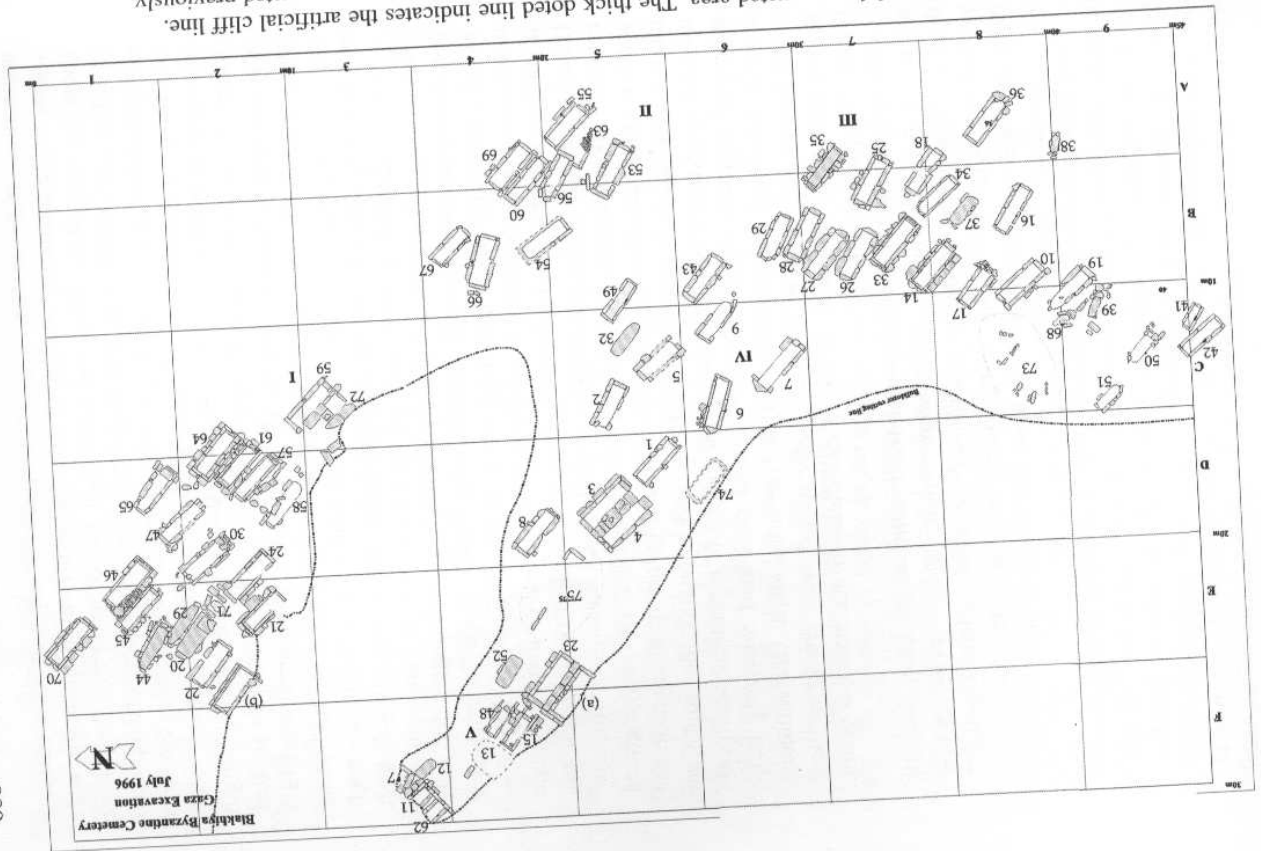


Fig. 2: Map of the excavated area. The thick dotted line indicates the artificial cliff line.

indicative on their religion. One can also deduce that they used shroud to wrap their dead and sacrificed goats or sheep for the dead. The site represents part of an ancient population with high child mortality and low life expectancy (< 45 years).

REFERENCES

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 MORHANGE, C., TAHA, M. H., HUMBERT, J.-B., and MARRINER, M., 2005. "Human settlement and costal change in Gaza since the Bronze Age". *Méditerranée*, 1(2): 75-78.

Age group	Female	Male	n.s. ¹	Totals
0-10 years				15
10-17 y.	-	1	12	13
Total non adult	-	1	27	28
17-35 y.	7	4	3	14
35-45 y.	2	3	-	5
> 45 y.	-	-	-	-
Adult ²	-	2	19	21
Total adult	9	9	22	40
Total individuals	9	10	62	68

Table 1: Summary of the demographic data from the Blakhiya cemetery site, 1996.

¹: sex not determinable

²: no age estimation possible.

The rest of the scarce tomb offerings found included two intact glass vases as well as glass fragments. Tomb 40 yielded a bronze bead and bell as well as three ebony hairpins. A bronze fishing hook was found in tomb 47. Other objects include a broken iron cross, three unidentifiable iron fragments and some mosaic tessellae. A salvaged piece of cloth, attached to one of the coins, may indicate the use of cloth coffins.

HUMAN SKELETAL REMAINS

Anthropologic studies were restricted to macroscopic analysis. These were often carried *in situ* since it was not possible to retrieve the intact bones. Using standard methods, age estimation was almost restricted to dental features and the sex was determined by means of cranial and pelvic features. These results are preliminary and not conclusive.

The excavated human remains from the Blakhiya cemetery site were allocated to 68 individuals, 28 sub-adults and 40 adults including nine from each sex (Table 1). Material retained from three other tombs was insufficient for any analysis. None of the adults was beyond the age of 45 years. The demographic picture, limited to these observations, is simple: a young population with high child mortality and low life expectancy. As a whole, taking with empty and damaged tombs into consideration, the site included more than 90 burials.

The few metric measurements, taken *in situ*, indicated mesocephalic features, i.e. medium rounded skull, and an estimated stature of 160±5 cm. Yet, these values cannot be considered representative. Dental analysis indicated high rate of caries and general bad teeth conditions in adult individuals. Other pathologic features were not examined.

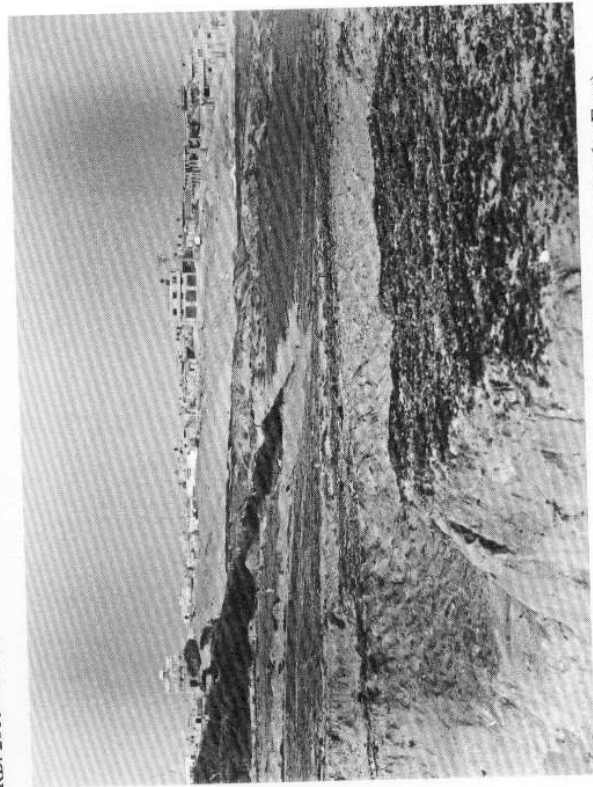
DISCUSSION AND CONCLUSION

The excavated burial in the site at the Blakhiya cemetery belong to a period ranging from late IIIrd to Vth century AD. This was indicated by the homogeneous pottery and coins found. The VIIIth century Islamic coin is probably a pit-fall (error), precipitating from the top through the soft sand layer or as a result of the latest construction works.

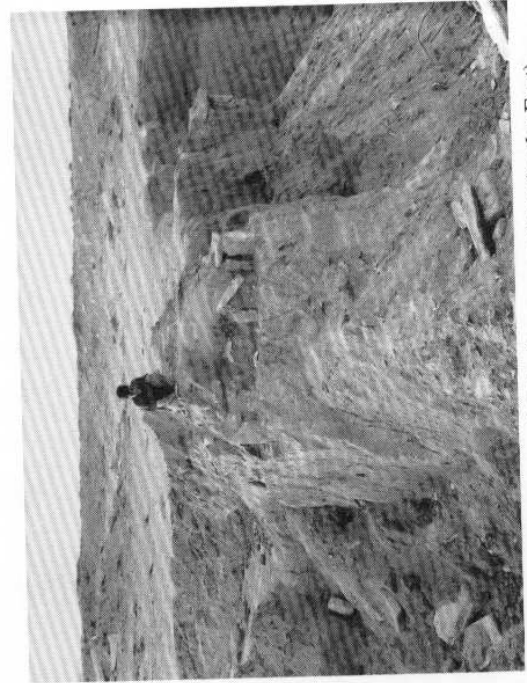
The site revealed tomb organization that might reflect a type of social organization of that time. The different tomb concentrations, substantiated by multiple burials, can reflect the social organization in familial or other "interest" groups. The first is more probable. The cross-decorated burial cists from a previous survey and the metal cross fragment can be

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PLANCHE 1

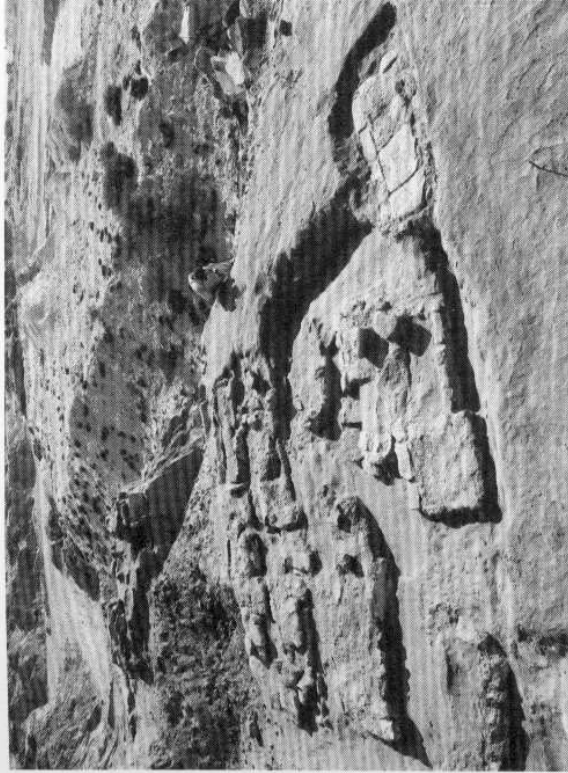


a) General view of the cemetery before excavations (to the East).

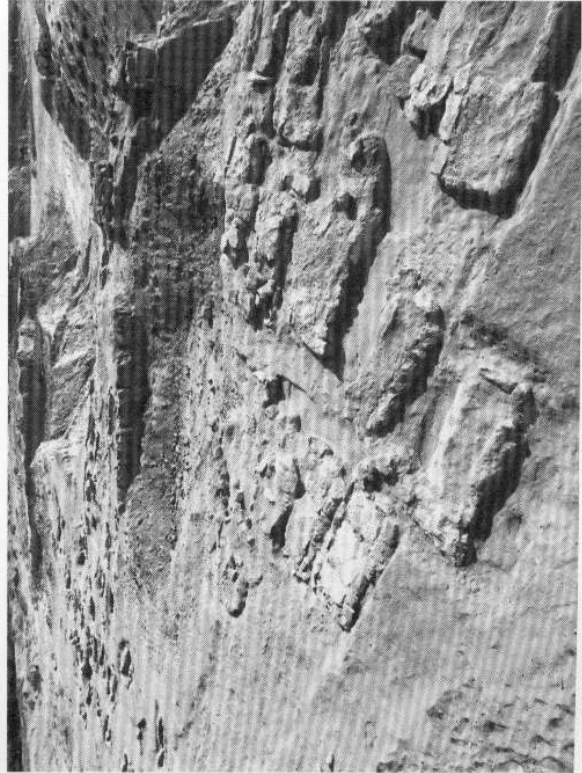


b) Tombs 62, 11 and 17 before excavations (to the East).

PLANCHE 2

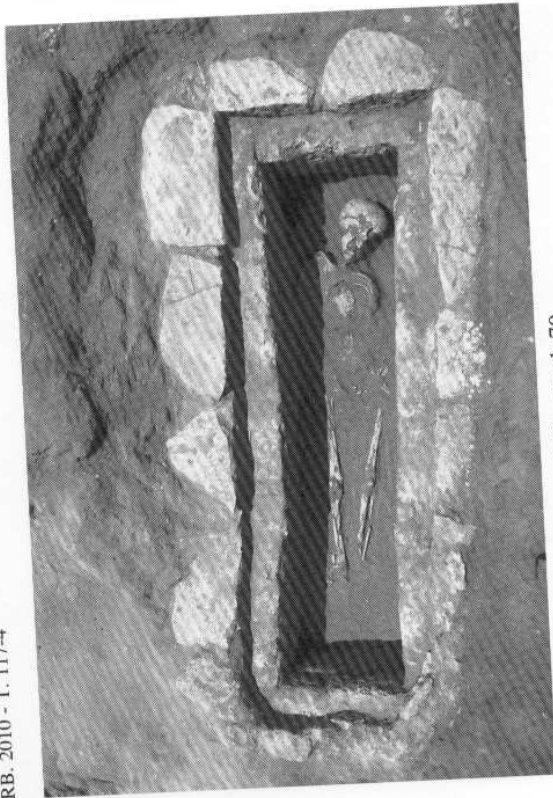


a)



b)

a) and b) The excavation site in 1996 to the South. The Area I (6 squares C2 - E1) in the foreground. The Area V in the background deeply cut by bulldozer.



a) The tomb 70.



b) The tomb 45.



a)



a) and b) The tomb 5.