

INSTITUTE OF ARCHAEOLOGY, WARSAW UNIVERSITY



Excavations in Tolmeita – Ptolemais (Libya)
Conducted by the Mission of the Institute of Archaeology, Warsaw University

Preliminary Report

I. Preface II. Archaeological works: exploration of trench Bc99, Ex9, Baulk 1 1) Room R9 (Bc99, Baulk 1, Ex9) 2) extra muros area W of wall W1 (Baulk 1) exploration of trench EX 10 (room R8) III. Pottery Report IV. Numismatic Report V. Conservation works I. works on the Achilles Mosaic (M2) II. works on the paintings Painting 2 (Room 9) 1) 2) Painting 9 (Room 1) III. works on stuccos VI. Survey report VII. Program for future seasons VIII. Registers IX. List of stratification units X. Daily fieldwork register (original version)

CD-rom with the complete text, inventories, plans and photos

Photos and Plans

XI.

XII.

Excavations in Tolmeita – Ptolemais (Libya)

Conducted by the Mission of the Institute of Archaeology, Warsaw University

Preliminary Report

I. Preface

According to the License for Archaeological Excavations, issued on the 22.07.2001 and prolonged on the 18.08.2003, the team of archaeologists, conservators and students of the Warsaw University opened the 28-day mission on October the 2^{nd} 2003 (ending on October the 29^{th}).

list of participants:

الإ سم والل قب	التخصص	الأسم واللقب	
بالبولندية			
Mikołaj Baliszewski	طالب	میکواي	1
	آثار	باليشفسكي	
Krzysztof Chmielewski	مرمم	كشيشتوف	2
		خمیلیفشکی	
Marcin Chmielewski	مرمم	مارت ين	3
		خمیلیفشکی	
Angelika Dłuska	رسام	أنجيليكا دووسكا	4
Dorota Dziedzic	طالب	دوروتا جيجيتس	5
	آثار		
Wojciech Dzierzbicki	طالب	فويتشـ يخ	6
	آثار	دجيجيتسـكي	

Piotr Jaworski	ا حث	با	بيوتر يافورسـكي	7
	آثار			
Maria Jaxa-Chamiec	طالب		مار یا یاکس ا	8
	آثار		خامیتس	
Wiesław Małkowski	مساًح		فييس واف	9
			ماوكوفسـكي	
Tomasz Mikocki	ا حث	ب	توماش	10
	آثار		میکوتسکي	
Monika Muszyńska	ا حث	ب	مونی کا	11
	آثار		موشینسکا	
Maciej Tarkowski	طالب		ماتش ي	12
	آثار–		تاركوفسـكي	
	علوما ت	٥		
	ي			
George Yacoub	ا حث	ً با	جورج ياكوب	13
	آثار			

First of all, we wish to thank Mr. Ali al-Chadouri, General Director of the Department of Antiquities of Libya, for the kind permission to conduct archeological excavations in Ptolemais – Tolmeita. We would also like to thank Mr. Djuma Garsa for his help in organizing our stay in Libya. We are grateful to the Staff of the Antiquities Department in Benghasi, Mr. Jusuff Abdussalam –Ben Naser and especially to Mr. Ibrahim at-Tawahni for their considerate supervision and help.

We would like to express our gratitude to His Excellency the Polish Ambassador in Tripoli, Jakub Wolski and the Authorities of the Libyan Ambassy in Warsaw. Thanks are also due to Mr. Igor Kaczmarczyk, Counselor of the Polish Ambassy in Tripoli and to Mr. Jerzy Chumek, Counselor of the Polish Consulate in Benghasi.

The Polish team was accompanied by Mr. Faraj abd al-Karim and provided with all needed facilities by Mr. Abd as-Salam Bazma – without their help and dedication our excavations in Ptolemais would not have been possible. We would also like to thank the Libyan

archeologists from the Department of Archaeology of the University of Garyunis in Benghasi for their kind help and hospitality during our stay in Libya.

This year's mission was a continuation of excavations conducted in December 2001 and April-May 2002.

Works were carried out in three different spheres: archaeological excavations, conservation works and geodetic measurements of the city.

The 2003 season was mainly concentrated on documentation and conservation of monuments discovered in 2002. Our field activity was limited to the area uncovered during our campaign in 2002, and particularly to the area surrounding the fragmentary mosaic M2, which had fallen from the first floor of the villa on mosaic M3 (room R9, trenches Bc99, Bc100, Ex9, Ex10). Exploration works concerned the baulk separating trench Bc99 and trench Ex9 (Baulk 1, see plan) and room R8 in trench Ex10.

The topographical survey concentrated on the public area SW of the Collonaded Palace.

II. Archaeological works

a) exploration of trench Bc99, Baulk 1, trench Ex9 (room R9 and extra muros area)

During the previous campaign room R9 was partially explored. The baulk between trenches Bc99 and Ex9 was left unexplored and divided the room in two unequal parts. In part of room S of baulk 1 the level of ground mosaic M3 was reached. In part of room N of baulk 1 the level of the fragmentary mosaic M2 was reached and initially subject to conservation. This year's efforts concentrated on the exploration of the baulk and on the removal of mosaic M2.

Exploration was conducted according to the stratification.

1) Room R9 (Bc99, Baulk 1, Ex9)

Six layers (five phases of accumulation) were differentiated:

- 1. surface layer (stratification unit nr 4: layer destroyed by agriculture)
- 2. destruction layer (strat. unit nr 5 and 6: layer with numerous fragments of fresco and stucco cornices, as well as architectural blocks from collapsed wall W2, probably from ground floor of building
- 3. destruction layer (strat. unit nr 23, 26, 27: rubble and mixed material [prevailing type of find: fresco fragments and fragments of mosaic M2], collapsed architectural blocks and mud brick remnants, mainly from first floor of building [units 23,26,27,28 were distinguished according to clay content]
- 4. destruction layer (strat. unit nr 21 and 28: layer with numerous fragments of mosaic M2)
- 5. accumulation layer (strat. unit nr 14: layer between mosaic M2 and M3; layer accumulated before phase of destruction).
- 6. mosaic M3 (strat. unit 32: Dionysiac scene depicting the thiasos of Dionysos encountering sleeping Ariadne. Five of the seven mythological figures of the mosaic are standing in the upper part of the panel. This is a typical scene of presentation in which Dionysos, standing in the middle of the group, is accompanied by Chiron (or Sylenos, not identified as only the upper part of his body is shown) and Pan, and surrounded by dancing Satyre and Menade. In the lower left side corner of the panel Eros is depicted restraining a panther; in the lower right side corner, resting on her elbow, the awakening of Ariadne is shown. The figural panel is surrounded by a complex border. The arrangement of the mosaic paving may suggest the function of the room tablinum with triclinium.

As in other rooms of the villa, the mosaic M3 was protected from damage caused by an earthquake (precise dating of earthquake is not at present possible) by an accumulation layer (being probably the result of abandoning of the villa).

A small cistern was discovered in central part of room R9 (see plan). Although the cistern itself was probably constructed before the mosaic, the stone slab covering the

mouth of the cistern was built into mosaic M3 and points to an inhabitation phase later than the one in which the mosaic had been laid.

Several, richly decorated architectural blocks were found in the destruction layers of Baulk 1.

2) extra muros area W of wall W1 (Baulk 1)

Four layers were distinguished:

- 1. surface layer (stratification unit nr 4: layer destroyed by agriculture);
- 2. accumulation layer (strat. unit nr 10: loose soil and stones, small amounts of rubble);
- 3. accumulation layer (strat. unit nr 16 and 31: hard beaten soil [possibly surface of road]);
- 4. layer of loose soil: canal (strat. unit nr 29: loose soil with a clearly visible burnt layer [strat. unit nr 30], rich in pottery fragments).

Exploration of the extra muros area needs to be continued in order to obtain definitive results.

b) exploration of room R8 (trench EX 10)

During the previous campaign 4 rooms were explored in trench Ex10 (R1, R2, R3, R4). This year's excavations were limited to room R8, possibly adhering to room R9 in trench Bc99 (preliminary works were also began in room R18, but were not terminated and need to be continued next year).

In room R8 four levels (three layers of accumulation) were distinguished:

- 1. surface layer (stratification unit nr 4: layer destroyed by agriculture)
- 2. destruction layer (strat. unit nr 1: mixed material [mainly fresco and pottery fragments], collapsed architectural blocks and mud brick remnants)
- 3. accumulation layer (strat. unit nr 8: directly above mosaic M9; layer accumulated before phase of destruction).
- 4. mosaic M9

The pavement in room R8 was decorated with a well preserved black and white mosaic. In SE corner of the room, directly above the mosaic, a late roman jug and two stones – serving probably as a stool - were found. Four chronologically differentiated coins were also discovered. A doorway between room R8 and R4 (threshold decorated with marble slabs: strat. unit nr 22) divided wall W18 in two parts. Both walls of room R8 (W3 and W18) were covered with frescos, but are in poor state of preservation.

III. Pottery report

During the season 2003 230 fragments of bases and rims were found. These finds belong to the same types as those obtained in the previous season. A great majority of categories of fine and coarse pottery is present and represents periods from Hellenistic through Roman up to Byzantine. All have follow types identified among finds published by the British mission at Sidi Khrebish. The following types were identified (based on the report from the excavations at Sidi Khrebish)¹:

P.M. Kenrick, The Fine Pottery, in: Excavations at Sidi Khrebish, Benghazi (Berenice), [Libya Antiqua, suppl. V], vol. 3, Tripoli 1985; J.A. Riley, Coarse Pottery, in: ibidem, vol. 2, Tripoli 1978.

I Fine pottery:

- Black Glazed A Wares 5 and 6
- Local Hellenistic Fine Wares 123.13 to 123.17, 138.1.
- "Ionian" Megarian Bowls 162

II Coarse pottery:

- Hellenistic Amphoras 15, 47 to 49, 100
- Early Roman Amphoras 151, 152, 154, 192
- Mid Roman Amphoras 254, 281, 288, 296, 300, 313, 316, 319, 320
- Late Roman Amphoras 348
- Hellenistic Cooking Wares 415, 417 to 420, 426, 433, 436, 438
- Early Roman Cooking Wares 446 to 448, 450, 458, 462 to 464, 471, 498
- Mid Roman Cooking Wares 501 to 522
- Late Roman Cooking Wares 541, 550, 576
- Hellenistic Plain Wares 606, 607, 611, 613, 644
- Mortaria 658, 669, 671, 681
- Lids -759,798
- Early Roman Plain Wares 801, 803, 805, 806, 835 to 840, 844 to 846
- Mid Roman Plain Wares 876, 882, 890 to 895, 917, 944 to 947, 983, 988, 1010, 1011
- Late Roman Plain Wares 1021, 1044, 1046
- -Hellenistic Jugs 1100, 1106 to 1108, 1119
- Early Roman Jugs 1135
- Mid Roman Jugs 1144, 1145, 1148 to 1150

The Mid Roman Coarse Pottery definitely forms the most numerous group of vessels. This season, as in the previous campaign, a complete vessel of of this group was found in archaeological context, in situ. It was a Mid Roman Jug (Benghazi 1148), excavated in the SE corner of room R8 in trench Ex10, situated next to a seat constructed out of two stone blocks. It is a vessel contemporary to those found in the 2002 season in situ in room R12, trench Bc90, as well as the jug uncovered in the fill of the latrine in room R10, trench Ex9. It is notable that both jugs are similar not only in form but are also contemporary and are dated to the end of II to mid III century AD.

IV. Numismatic report

The season 2003 brought 19 coin finds, much less than the previous campaign, during which nearly 80 were uncovered. It is a result of limiting the field works to the exploration of Baulk 1, as well as time-consuming works conducted in trench BC99, such as the removal of mosaic M2 and uncovering the mosaic M3, being the pavement in room R9. The exploration of room R8 in trench Ex10 and documentation of the pavement in that room also caused the slow pace of exploration.

All coin finds this year are bronzes. Out of 15 coins that had been cleaned and were possible to identify, 9 are Ptolemaic coins struck during the Hellenistic period, 5 date to the Roman period and 1 is modern (Victor Emmanuel III, 1920, cn/013/03).

Out of the Hellenistic coins, 3 types occur:

- 1) Bronze coin (AE 18) struck in Kyrene during the governorship of Magas (300 277 BC). The obverse depicts the head of Zeus-Ammon, facing right and a palm-tree with fruit is visible on the reverse. (BMC 29.61, 298²).
- 2) 2 bronze coins (AE 23) representing a type struck in the years 204 180 BC during the reign of Ptolemy V Epiphanes, with a depiction of a diademed head of Ptolemy I, right on the obverse and a head of Libya, right, on the reverse (BMC 6.77,95; Svoronos 1268³).
- 3) 5 bronze coins (AE 14), representing a type struck in the years 116 106 BC during the reign of Ptolemy IX Soter, depicting a head of Zeus-Ammon, right, on the obverse and a headdress of Isis on the reverse (BMC 6.107, 49 50; Svoronos 1722).

The off-center striking of the last of the 9 Ptolemaic coins made it impossible to precisely identify it.

The Roman coins, generally in a poorer state of preservation than the Ptolemaic ones, are dated to different periods of the Empire. The finds are as follows:

- 1) Caligula (37 41 AD), a half of sestertius depicting Vesta on the reverse
- 2) Traianus (98 117 AD), difficult to identify, probably struck in Kyrene mint
- 3) Gordianus Pius (238 244 AD), sestertius with a depiction of Felicitas on the reverse
- 4) Arcadius (383 408 AD), small bronze coin with a depiction of Victoria on the reverse
- 5) Small bronze coin of an unidentified emperor of late IVth Vth century.

All but three coins (cn/006/03; cn/009/03; cn/015/03) were found in a defined archaeological context, as shown in table below:

Inv. no.	Greek	Roman	trench	baulk	room	Archaeological context
cn/001/03	?	?	Ex9	-	-	Near W1, outside of R9, street level

² British Museum Catalogue of Greek Coins, vol. 29, Cyrenaica, London 1927.

³ J. Svoronos, Ta nomismata tou kratous ton Ptolemaion, Athens 1904 – 1908.

cn/002/03	X	-	Ex10	-	R8	Unit 8; E corner near amphora, 5 cm above mosaic
cn/003/03	X	-	Ex10	-	R8	Unit 8; 5 cm above mosaic
cn/004/03	?	?	Ex10	-	R8	Unit 8; 8 cm above mosaic
cn/005/03	-	X	Ex10	-	R8	Unit 8; 10 cm above mosaic
cn/006/03	-	X	-	-	-	Found in SE corner of Bc79, on surface outside of trench
cn/007/03	X	-	-	1	-	Unit 15; above W1
cn/008/03	-	X	-	1	-	Unit 5; on fresco layer
cn/009/03	?	?	-	-	-	Found outside of trench, 2 m. from SE corner of Ex9
cn/010/03	X	-	-	1	-	Unit 23
cn/011/03	-	X	-	1	-	Unit 5; between 2 fragments of stuccos in W profile of baulk 2
cn/012/03	-	X	Bc99	-	R9	Unit 21; between M2 and M3, 5 cm above pavement
cn/013/03	-	-	Bc99	-	R9	Unit 14; found in animal den
cn/014/03	X	-	-	1	-	Unit 28
cn/015/03	X	-	-	1	-	Unit 28; found after sieving
cn/016/03	X	-	-	1	-	Unit 28; found in a fragment of mortar
cn/017/03	X	-	-	1	-	Unit 28; no coordinates, found in soil covering mortar under fragment of mosaic, which fell from first floor
cn/018/03	X	-	-	1	-	Unit 28; found at base of block no. 86, near S edge
cn/019/03	?	?	Bc99	-	R9	Unit 32; on mosaic M3

Out of the coins included in the above table, two are the most important, as they give valuable dating information:

- 1) cn/016/03 Ptolemaic coin found in a large piece of mortar
- 2) cn/011/03 coin of Gordianus Pius found in a layer of debris, between two fragments of plaster

The first of these coins may point to the second, maybe the first century BC as the period when the first fase of villa (hellenistic villa) was built. Furthermore nearly a half of the coins found within the villa in seasons 2002 and 2003 are Hellenistic and represent 3 types of Ptolemaic coins, as mentioned above, which supports this hypothesis. The second of these coins may point to the date of the decorating works conducted in room R9.

Naturally, the above comments cannot be confirmed until a holistic report on the archaeological finds is written and a synthesis is attempted.

V. Conservation works

a) works on the Achilles mosaic (M2)

The main conservation works concerned the mosaic M3, which had fallen from the first floor of the building and shattered to pieces. The mosaic depicts episodes from the myth of Achilles; the figural scenes were constructed in opus tesselatum with small tesserae, and the borders with large ones. The tesserae, the majority of which was made of stone (some were of glass), were set in a thin layer of sand and lime mortar. No large, unbroken fragments occurred. The fragments were found on different levels (strat. unit 23, 26, 27, 28). However, the majority of figural fragments formed a discernable layer (strat. unit 21 and 28). The area in which the mosaic fragments were uncovered was divided into sectors, according to figural scenes (see plan of sectors). Fragments concentrated in one area and forming a composition

were numbered, photographed and removed as a whole, together with the mortar. Before lifting, gauze (or cotton fabric) was attached to cleaned pieces using water dispersion of polyacetate vinyl Mowilith DMC 2 as adhesive. After drying, the adhering fragments were detached from the soil and placed on boards.

After having been removed, larger fragments were cleaned on the backside from soil and rocks in order to reach the original thickness of the mortar, which was then strengthened by impregnation with synthetic resin (Primal WS24). Cavities in the mortar and empty spaces between fragments were filled with new mortar (sand and slaked lime 1:1). Synthetic net textile was adhered to the backside of the mosaic fragments for support, using Primal AC33 and filling (white cement). Afterwards, the fragments were turned face up and the protective gauze and cotton textile were removed using water. The surface of the mosaic was then cleaned with a wet sponge. Loose tesserae were inserted using Primal AC33. The edges of the fragments were reinforced and the empty spaces were filled with protective mortar (Primal WS24 and sand). This type of protection is only temporary, hence the mortar must be weak; in case of further conservation, the removal of the protective mortar will be necessary. As the glass tesserae were heavily damaged, they were reinforced and secured using synthetic resin (Paraloid B72).

All the preserved fragments were placed on boards and should not be transported nor stored in a humid environment.

The smaller pieces of the mosaic were placed in plastic boxes.

b) works on the paintings

1) Painting 2 (Room 9)

In room R9 (trench Ex9), on wall W2 a large fragment of wall painting P2 was uncovered. The wall painting was executed on two layers of sand and lime mortar. It was painted immediately on the second layer, probably al fresco, using a wide range of pigments. Since leaving the painting in situ was hazardous due to its detachment from the wall, the painting was removed. After cleaning, the painting was disinfected using 3 % Preventol R80 solution. The surface of painting was preserved with 3 % solution of Paraloid B72 in acetone and cotton textile was attached to it using polyalcohol vinyl 20 % solution.

The painting was removed in one piece (stacco technique – with mortar) and placed face down on a board.

It is recommended that the painting be stored in dry conditions. Preserved in such a way, it awaits further conservation.

2) Painting 9 (Room 1)

In room 1 (trench Cxci91), on wall W14 a fragment of wall painting P9 was exposed due to erosion. Although it was treated in a similar manner, it was not removed and remains in situ.

works on stuccos

Large stucco fragments were found, lying face down, on baulk 1 (strat. unit nr 6). Imprints of the wall (W2) from which they fell were visible on their backsides. They were removed after adhering cotton textile to them.

VI. Survey report

Equipment

During archaeological excavations in October 2003 Total Station Leica TC 1105 with prism GPR 111 was used for measuring. For data preparation the following software was used:

- Leica Survey Office (data transfer)
- Winkalk (calculation of data)
- Autocad 2000 (final map drawing)

Method

In order to continue the mapping, 20 field stations, starting from the are grid (also used for laying out trenches), were created. For height measurements, a reper grid (starting from a point 30m. a.s.l.) was established.

Field works

In October 2003 a decision was made to continue mapping the area SW of the Collonade Palace (the range of field works is shown on the printout).

The main structures, which were measured are the following:

- the Hellenistic-Roman odeon
- the Monumental Street (decumanus) with the Arch of Constantine
- the public buildings along the Monumental Street

The height points in the range were measured.

Plans for the future

Field works employing the Total Station set require continuing in the following seasons. We expect to gather a great deal of information about localization of the Hellenistic agora and the Roman forum. It is highly recommended to make measurements of the structures, which are situated S of the odeon and S of the Arch of Constantine.

VII. Program for future seasons

Program for future seasons

Program for archaeological works

In the next campaigns we would like to remove the remaining baulks and enlarge our excavations in order to uncover the entire villa and prepare it for reconstruction: theoretical, by means of modern computer possibilities, and practical (anastylosis of the preserved architectural and decorative elements in the field). We suppose that such a reconstruction, giving the possibility to visit the villa of Lucius Actius – so richly decorated with mosaics and paintings – would be very interesting for tourists as well as archaeologists.

In the forthcoming year we hope to conduct two campaigns: in spring (April – May) and autumn (August – October) 2004.

The first will mainly concentrate on the conservation of the Achilles mosaic M2 (see below). In order to confirm that none of the pieces of the fragmentary mosaic are still to be found, we need to explore the baulks in the adjoining trenches (baulk between trench Bc99 and Bc100; baulk between Bc100 and Ex10; baulk between Ex10 and Ex9).

The second will be an archeological mission, during which rooms surrounding the central courtyard (R6: atrium?) are to be explored. We plan to begin with room R1 decorated with the Tyche mosaic (M7).

Program for conservation works

The most important field of our activity during our next campaign would be the conservation of the destroyed Achilles mosaic, which fell from the first floor and broke in thousands of pieces (see above, p. 5).

This mosaic can only be saved in a highly qualified laboratory. This requires a very large budget for conservation. We are taking measures in order to obtain an appropriate sum of money from a private sponsor. The decision concerning possible sponsorship will be reached in February – March 2004, and, if positive, the following steps will be undertaken:

- o request for permission to conduct conservation works on Libyan Achilles mosaic from Ptolemais by Polish conservators in a Polish laboratory for mosaic conservation will be issued to Mr. Ali al-Chadouri, General Director of the Department of Antiquities in Libya, and to Mr. Ibrahim at-Tawahni, Director of Department of Antiquities in Benghasi
- o if the request obtains a positive opinion and all necessary official requirements are met, the following steps are expected to be undertaken:
- supplementary excavations will be carried out (see above);
- preliminary documentation and conservation in order to prepare the mosaic for transport will be carried out;
- the mosaic will be packed in special containers and sent to Warsaw, Poland;
- conservation of the mosaic in laboratory will be undertaken (expected period: 1 year; a visit of a specialist / a group of specialists / from Libya during this time seems necessary);

- after restoration, the mosaic could be exhibited, as a deposit of the Libyan Jamahiriya for a limited period of time (1 - 2 years or more) in a Polish museum (an accompanying exhibition of Libyan antiquities could be organized);

- when set period for exhibition is terminated, the mosaic will be transported back to museum in Tolmeita.

Program for topographical works

The topographical program needs be continued until all major and minor buildings are measured. In the first place, we would like to concentrate on survey allowing for the localization of the Hellenistic agora.

The results of measurements should be supplemented by a number of sondages, aerial and satellite photography. On the basis of these investigations a dissertation on the urban development of Hellenistic, Roman, Byzantine and Islamic Ptolemais – Tolmeita will be prepared.

Appendix

VIII. Registers

IX. List of stratification units

X. Daily fieldwork register (original version)

XI. Photos and plans

Abbreviations:

W-wall

R-room

p – pottery

dr – drawing

mt - metal

cn – coin

oth - other

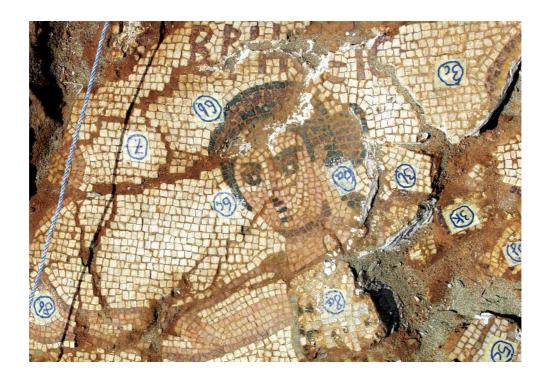
l-lamp

g – glass

s – stone and sculpture

b – bone





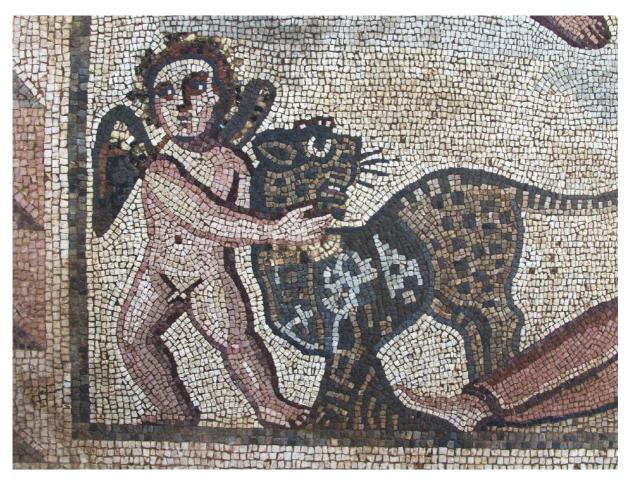


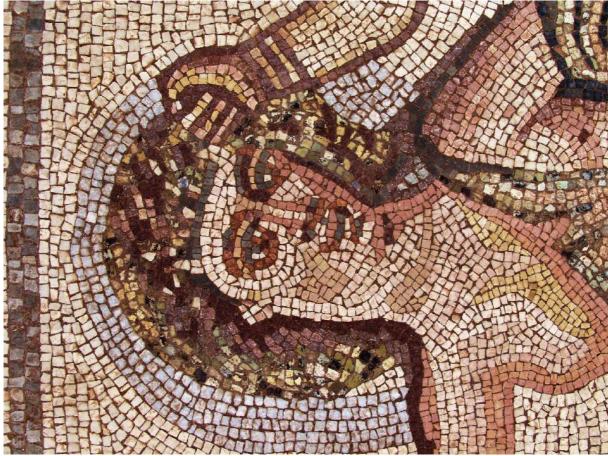














cn/016/03



