

## NOTIZIARIO

### **Report on the 2001 study season of the Bronze Age levels at Iasos (SW Turkey).**

The 2001 study season of the BACI (Bronze Age Carian Iasos) Project took place from 5 August to 12 September. The participants were as follows: Dr. Nicoletta Momigliano (University of Bristol – Middle to Late Bronze I pottery); Dr. Paolo Belli (Istituto per gli Studi Micenei ed Egeo-Anatolici – architecture and history of the excavations); Prof. Giampaolo Graziadio (University of Pisa – Mycenaean pottery); Dott.ssa Isabella Morabito (University of Pisa – Mycenaean pottery); Mr. Mario Epifani (University of Pisa – draughtsman); Mrs. Susan Grice (University of Bristol – draughtswoman and photographer). In addition, three graduate students acted as assistants in various tasks: Ms Emma Mutter (University of Bristol); Ms Anna Lena (University of Sheffield); and Ms Kate Grice (University of Reading).

This year we continued our study of the pottery from the Bronze Age levels discovered by D. Levi and C. Laviosa in the area beneath the Roman Agora and Geometric cemetery (Fig. 1). In particular we continued the study of the pottery from Saggio γ and Building B, where in the summer of 2000 we discovered a substantial layer of volcanic ash preserved in the standing sections (see *SMEA XLII/2*, 2000, 340-5; *Anatolian Archaeology* 6, 2000, 12). Colleagues at the Universities of Bristol (S. Couch under the supervision of S. Sparks) and Freiburg (J. Keller) have now analysed samples taken from this layer, and their results confirmed our suspicion that this was volcanic ash from the Late Bronze Age explosion of the Santorini volcano (see Appendix A). Moreover, this summer Dr Max Bichler (University of Vienna) inspected this layer, and has kindly undertaken the task to carry out further analyses to clarify the nature of the deposit during our next study season in 2002.

N. Momigliano continued the study of the pottery found above and beneath the tephra layer in Saggio γ and Building B, which is now kept in the Iasos storerooms and in the Milas and Izmir Museums.

G. Graziadio and I. Morabito continued their study of the Mycenaean pottery found in the area of the Agora, focussing on the materials associated with the so-called 'Muretto Miceneo' (Mycenaean wall), also known as 'Wall D', located to the south of Building B, between Building A and Building F. According to the excavation records, these architectural remains were associated with material pertaining to the 'Mycenaean' period of the site, and this was confirmed by our re-examination of the relevant pottery. Wall D, therefore, appears to represent one of the few structures in the area of the Agora securely datable to the late phases of the Late Bronze Age.

This year, however, much of our joint efforts were devoted to the study of the stratigraphy, architecture and finds of the most noteworthy Bronze Age building at Iasos, Building F. This is a structure reminiscent of Minoan Neopalatial architecture, which has yielded a vast amount of material (thousands of sherds, and almost one hundred complete or restorable vases), including dozens of Minoan type conical cups, several loom-weights,

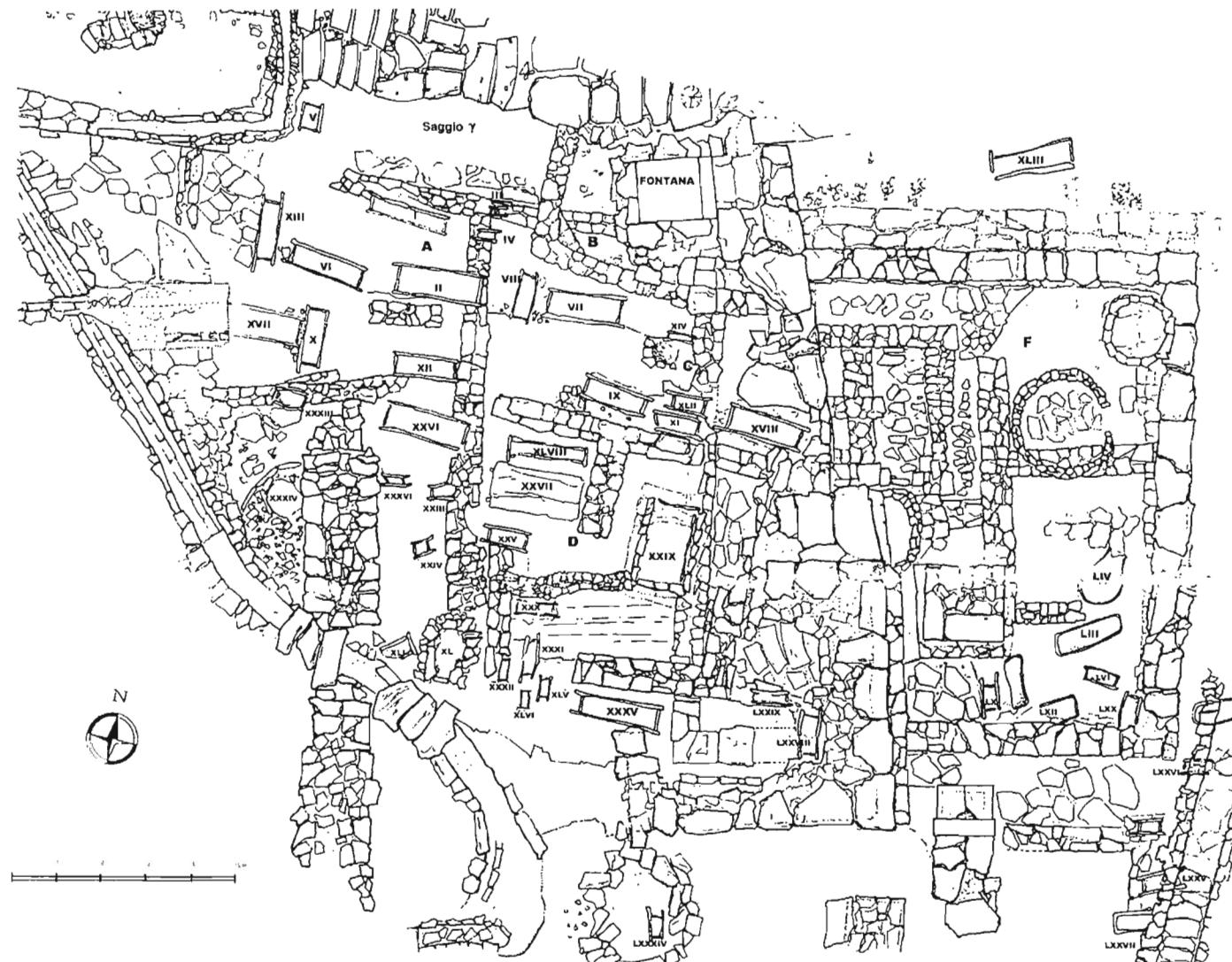


Fig. 1 – Iasos: plan of the Area of Roman Agora (after E. Pagello & F. Tomasello). Courtesy: S.A.I.A., inv. I 16.



Fig. 2 – Iasos: Saggio γ; SE Aegean Light-on-Dark ware from level beneath Santorini 'tephra'.

spindle whorls, and also a few Minoan imports. One vessel, which is a local imitation of LM I pottery, also seems to come from this building.

Perhaps the most detailed report that has appeared on this structure so far is that presented by Laviosa at the III International Cretological Congress held in Rethymnon in 1971 (published in 1973). In this paper the excavator briefly described the architectural remains of Building F discussing, in particular, the presence of three distinct pavings associated with pottery of the Protopalatial, Neopalatial and Mycenaean periods respectively.

On the basis of our re-examination of the pottery associated with these levels, however, we are inclined to present a slightly revised chronology of Building F, as follows.

- 1) Lowest paving: the boxes containing the pottery found above this paving contain much material assignable to the Chalcolithic and Early Bronze Age phases as well as material assignable (in Aegean terms) to the early Neopalatial period (MM III or possibly early LM IA). There are two possible explanations for this. First, and perhaps most likely, this material comes from two different levels excavated together as a 'spit', the Chalcolithic material having been found at a lower depth, and being associated with the paving, while the later material was part of the levelling and make-up for the middle paving. Second, both Chalcolithic and later materials belonged to a single archaeological context of levelling and make-up for

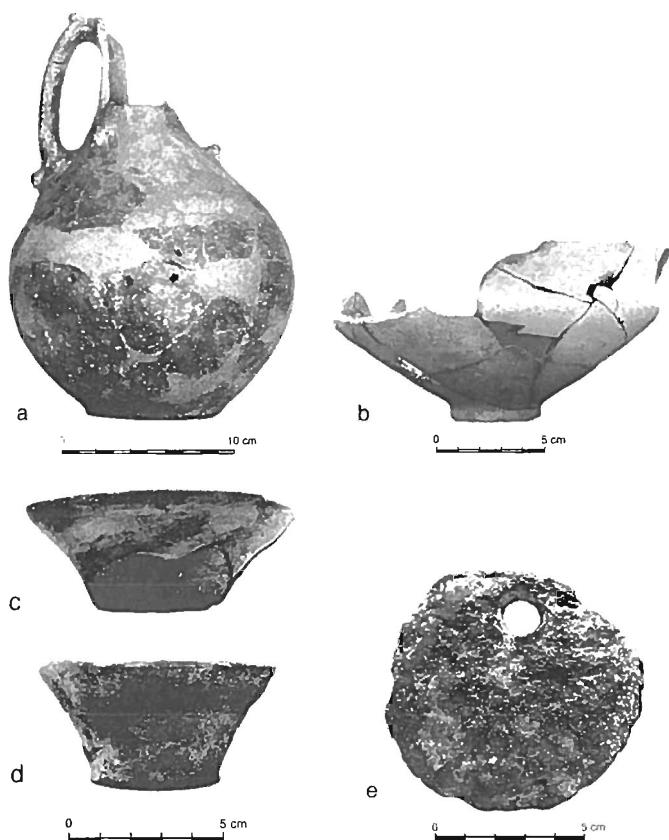


Fig. 3 – Iasos: Building B; pottery from burnt destruction level above ‘tephra’ – a) Anatolian jug (Iasos inv. 2041); b) carinated bowl (Iasos inv. 4417); c-d) Minoanizing conical cups (Iasos inv. 2027 and 2030); e) Minoanizing loom-weight (Iasos inv. 1931).

the middle paving. In any case, the later pottery offers a terminus post-quem for the middle paving of Building F.

- 2) Middle paving: the pottery found above this is very abundant but also very fragmentary. This material also seems to date from the Neopalatial period in Aegean terms (probably LM IA), as shown by the presence of much SE Aegean Light on Dark and Dark on Light ware, and of some Minoanizing conical cups. Most of the pottery, however, seems to be of Anatolian type.
- 3) Uppermost paving: the pottery found above this paving comes from an artificial ‘spit’ about 40 cm deep, and consists of much material assignable, once again, to the LB I period, and of a good number of Mycenaean and Geometric sherds. To judge from the nature of this assemblage, it seems likely that this ‘spit’ comprised artifacts from the floor-deposit of Building F as well as later levels. Indeed, while it has not been possible to identify a proper Mycenaean level associated with Building F, some vases

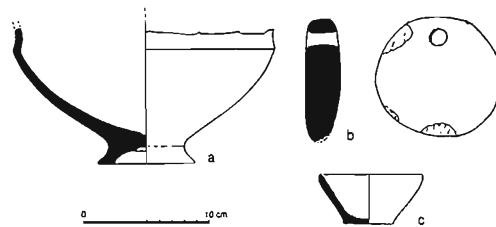


Fig. 4 – Iasos: Building F: pottery from the latest floor level: a) Carinated bowl coated with red pigment (Iasos inv. 4418); b) Minoanizing loom-weight (Iasos inv. 2790b); c) Minoanizing conical cup (Iasos inv. 2740).

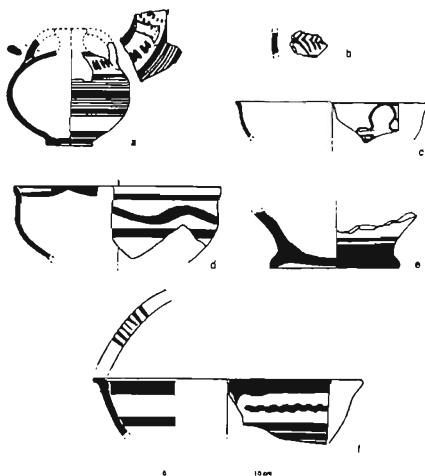


Fig. 5 – Local and imported Mycenaean pottery from the area of the Agora at Iasos.

assignable to LB I were found still *in situ* on its latest paving. In addition, it appears that the west wall of Building F is stratified beneath the south wall of Building B, which itself has yielded material assignable to a late phase of LB I (it is difficult to establish whether equivalent to a post Theran eruption LM IA or LM IB phase). As mentioned above, the concentration of Minoan type loom-weights, spindle-whorls, and conical cups is noteworthy, even though much of the pottery is of Anatolian type. Some of the Minoan pottery appears to be imported from Miletus, to judge from its characteristic fabric. The SE Aegean Light on Dark and Dark on Light ware also continues to be present in good numbers. The Mycenaean pottery from the area of Building F is rather fragmentary but has considerably enlarged the repertoire of fabrics, shapes, and decorative motifs found so far at Iasos.

As mentioned above, N. Momigliano also studied ceramic finds kept in the Milas and Izmir Museums. She completed the study and recording of all the Bronze Age pottery from

Iasos kept in Milas, and was able to make good progress on the study of the relevant material in Izmir. It is hoped that she will be able to complete the study of the relevant material in Izmir (to be completed in 2002).

I. Morabito and G. Graziadio have also completed the study and recording of selected Mycenaean sherds from other areas of the Agora.

We are very much indebted to Dott.ssa Fede Berti (Head of the Italian Archaeological Mission), to our Turkish government representative, Mrs. Belgin Ateşogulları, and to the Directors and members of the staff of the Milas and Izmir museums. Special thanks are due to Tenzile Uyjal (Milas), Mehmet Güven Güler (Izmir), and Müge Özsaygi (Izmir).

We should also like to express our gratitude to the Institute for Aegean Prehistory, the British Institute of Archaeology at Ankara, and the Istituto per gli Studi Micenei ed Egeo-Anatolici for their generous financial support.

N. MOMIGLIANO, I. MORABITO, G. GRAZIADIO, P. BELLI and M. BENZI

#### APPENDIX A:

*Report on the analyses of volcanic ash samples from Iasos, by S. Couch  
(University of Bristol).*

The ash samples were mounted in epoxy, polished and carbon-coated. These were analysed on a JEOL JXA8600 electron microprobe at 15 kV accelerating voltage. To minimise alkali mobility the glass fragments were analysed with a 2nA rastered beam. Calibration used known standards and then was checked by analysis of secondary standards.

The table below shows the average analyses for the two Iasian samples, and also a representative composition of the glass from the Santorini Late Bronze Age eruption. There are slight differences between the samples and the Minoan analysis, but these are within analytical error. Potassium is slightly higher in our samples, compared to the Minoan analysis, but this can be explained by different analytical procedures followed.

	Sample#3	SD	Sample#4	SD	Santorini Glass <sup>1</sup>	SD
SiO <sub>2</sub>	n=11 73.51	0.32	n=9 73.50	0.58	73.44	0.50
TiO <sub>2</sub>	0.25	0.06	0.38	0.29	0.31	0.54
Al <sub>2</sub> O <sub>3</sub>	14.23	0.26	14.27	0.37	14.46	0.08
FeO	2.04	0.13	1.88	0.16	2.05	0.10
MgO	0.31	0.06	0.28	0.06	0.25	-
CaO	1.44	0.09	1.47	0.12	1.56	0.17
NaO <sub>2</sub>	4.86	0.31	4.71	0.15	4.81	0.26
K <sub>2</sub> O	3.36	0.15	3.51	0.13	3.16	0.09
Unnormalised Total	97.03	0.52	96.18	0.88	-	-

<sup>1</sup> From Druitt et al. (1999).

Electron-probe microanalysis results of samples 3 and 4. Shown as the average of several analyses (n = number of analyses), and normalised to 100%, the total shown is unnormalised. Also shown is the standard deviation. For comparison a representative glass composition of the Minoan deposit is shown; see T. H. Druitt, L. Edwards, R. M. Mellors, D. M. Pyle, R. S. J Sparks, M. Lanphere, M. Davies and B. Barriero, *Santorini Volcano*, Geological Society Memoir n. 19, 1999.

**PROGETTO URARTU***The Excavation of Ayanis Fortress in 2001 Season (Figs. 1-6)*

The excavations at Ayanis fortress were concentrated mainly in the south section of the Temple area (Area VI) where three storage rooms were excavated beneath the level of courtyard. Due to the great number of artefacts we had no time to excavate in other trenches. Apart from at the fortress itself, excavations were also carried out in the Outer Town. We found houses in Güneytepe settlement, and another official building complex in the Pınarbaşı area. The 2001 excavations took place in the trenches of F26-28 and E27-28 in the fortress. Three rooms in the south of the courtyard were constructed between four andesite pillars running parallel to the south wall of the courtyard. Since the natural outline of the bed-rock is much lower than the level of the courtyard the Urartian architect could not build the pillars directly on the rock but, in order to have strong foundations, had to construct very thick mud-brick platforms to carry the andesite pillars. The storage rooms are bordered by platforms and walls in the south. The floor level of the rooms is -9.85 m., at least 5.0 meter below the level of courtyard (-4.25 m.). The ceiling of the rooms is the continuation of the floor of the courtyard which drops sharply following the natural form of the bedrock. An almost 7.0 m. wide section of the courtyard along the southern edge of the Temple area was extended with a wooden floor (at the same time also the ceiling of the rooms). Huge wooden beams and poles are still *in situ* in the excavated area. There are doors in the walls running

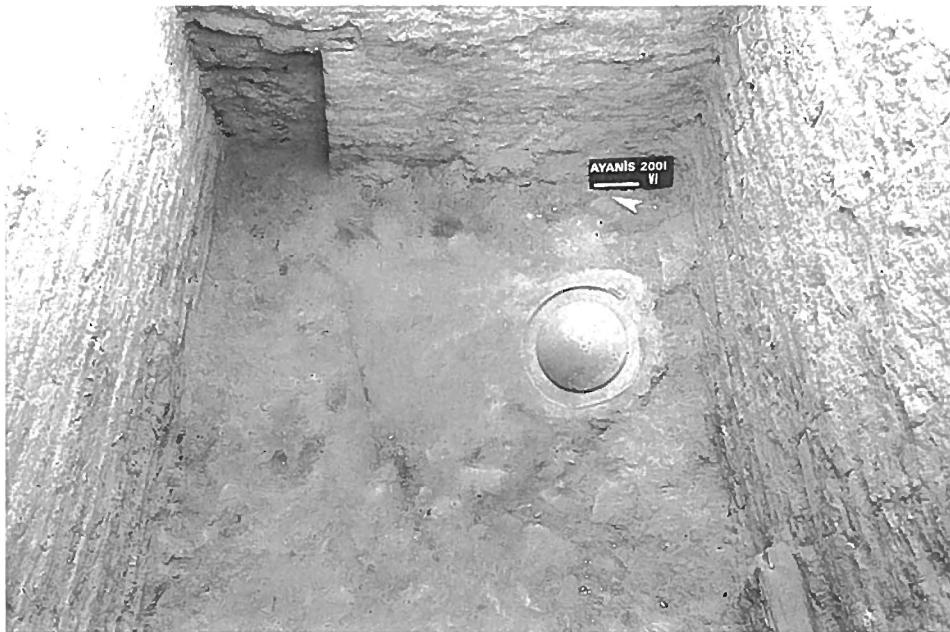


Fig. 1 – A bronze shield in storeroom No. 4 of the courtyard of the temple.

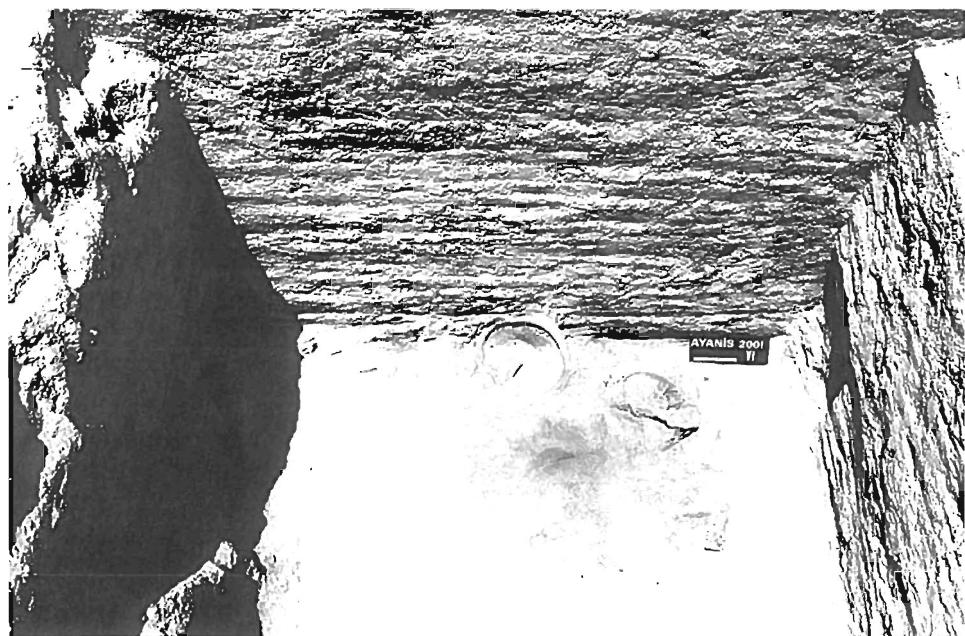


Fig. 2 – Two bronze shields in storeroom No. 4.



Fig. 3 – A bronze quiver with arrow heads including their wooden Barbs.

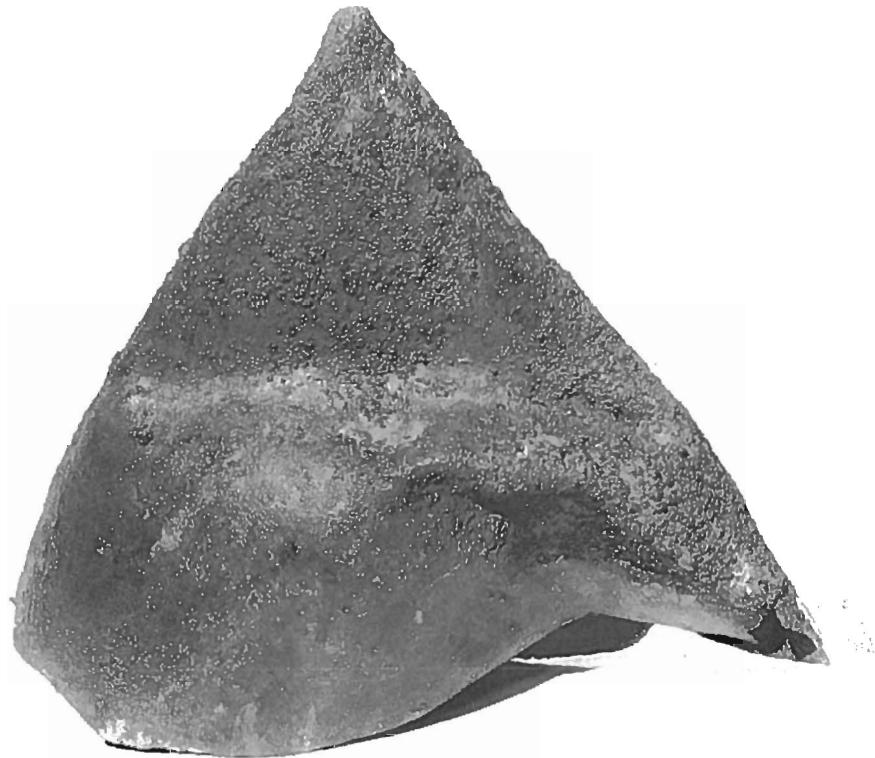


Fig. 4 – Tin-plated bronze helmet of Argishti II.



Fig. 5 – Tin-plated bronze shield from the temple.



Fig. 6 – The shield Ay.39.01 (Drawing by Dilek Öztürk).

north-south providing access to each room. The floors of the rooms are of beaten clay. In Room No. 4 ( $3.75 \times 3.15$  m.) a stone built channel, 0.51 m. wide, would have been used to conduct rain and snow water out of the fortress.

A number of metal artefacts were found in the rooms, some of them on the floor usually next to the side walls. Some artefacts were excavated in the deposit, 3 or 4 m.

higher than the floors of the rooms, demonstrating that they were originally placed on the floor or hung on the south wall of the Temple courtyard. Bronze shields, quivers, helmets, arrows and iron spearheads are among the finds. Judging from the folded edges of the shields, it is clear that some artefacts were hung on the walls of the rooms. Some were placed on the wooden shelves. Five bronze shields, out of eleven, are in good condition. They usually have an inscription and a band decoration of lions and bulls. Some bronze shields were tin-plated, reminding us of the brilliantly shining gold shields on the Musasir temple. This is a new metallurgical method in the Urartian art. A bronze helmet, also tin-plated, is of interest from the point of view of an inscription belonging to Argishti II, father of Rusa II. This is the only inscribed material in the fortress not belonging to Rusa II, founder of Rusahinili Eiduru-kai, modern Ayanis.

A. ÇILINGİROĞLU

#### **Inscribed documents of the campaign 2001 in Ayanis (Tav. Ia-b, IIa)**

*Bronze helmet*, Temple Area, Sector VI, GSK, AY.48.01

Height 26 cm.

]x "ar-giš-<sup>t</sup>i-i?¹-še "ru-sa-a-hi-ni-še [

This is the only part which it has been possible to render visible<sup>1</sup>. The inscription may be integrated by analogy with the shield, AyBr 10<sup>2</sup>, which presents two lines of text: (line 1) "hal-di-e EN-ŠÚ "ru-sa-a-še "ar-giš-te-hi-ni-še uš-tú-ni, "To Ḫaldi, (his) lord, Rusa, the son of Argišti, dedicated". The novelty of this inscription lies in the fact that it is dedicated by Argišti II (713 – ca 685 B.C.), the father of Rusa II. It is the first written document preceding the reign of the founder of Ayanis. Clearly, this does not influence the dating of the site. The most likely hypothesis is that this was a precious, family possession, belonging to the reigning king which Rusa II wanted to dedicate in the city temple of Rusahinili Eidurukai. Moreover, we may cite the case of Karmir-blur, again founded by Rusa II, where many bronze objects were found belonging to kings of the VIII century, and which has been defined as "a richly stocked museum of Urartian military equipment of the 8th century B.C."<sup>3</sup>.

*Bronze shield*, Temple Area, Sector VI, GZE, AY.121.01; diam. 78 cm. One line text:

"hal-di-e e-ú-ri-e i-ni a-še "ru-sa-a-še "ar-giš-te-hi-ni-še uš-tú-ni ul-gu-ši-ia-ni e-di-ni "hal-di-ni-ni al-su-i-ši-ni "ru-sa-a-ni "ar-giš-te-e-hi LUGÁL DAN-NU a-lu-si URUtu-uš-pa-e URU.

"To Ḫaldi, (his) lord, Rusa, the son of Argišti, dedicated this shield for his life. Through the Greatness of Ḫaldi (I am) Rusa, the son of Argišti, the lord of the city of Tušpa".

The text appears to be in an abbreviated form compared to the writing of AyBr 2<sup>4</sup>; za-

<sup>1</sup> The cleaning of the patina and encrustations was carried out by Ms. Ingrid Reindell, whose report on the decorated shield AY.39.01 follows here.

<sup>2</sup> A. Çilingiroğlu-M. Salvini (Eds), *Ayanis I. Ten Years' Excavations at Rusahinili Eiduru-kai, 1989-1998*, Roma 2001, p. 275.

<sup>3</sup> Boris Piotrovsky, *The Ancient Civilization of Urartu*, Nagel-Geneva 1969, p. 159.

<sup>4</sup> *Ayanis I*, p. 272.

du-ni "he made" and the sentence te-ru-ni "ru-sa-ḥi-na-a KUR-e-i-du-ru-ka "he put it in Rusahinili Eidurukai" are lacking. Also lacking, in the lists of titles, are LUGÁL al-su-i-ni LUGÁL KURšú-ra-a-u-e LUGÁL KURbi-a-i-na-u-e "the great king, the king of the lands, the king of Biainili (Urartu)". This is understandable given the difference in size of the two shields, AyBr 2 having a diameter of roughly 120 cm and this one of 2001 being only 78 cm in diameter. We may thus see how the formulaic style of the Urartian dedicatory inscriptions provided for the dismantling of the individual elements and their composition according to the size of the area to be filled. The cuneiform writing, therefore, once again reveals its secondary function as decoration.

Another bronze shield was found on 10th of August. I could only read || o[... large lacuna ...]-ti-ni LUGÁL DAN-NU a-lu-si URUṣu-uš-pa-a URU. In the lacuna we must restore "ar gi iš] ti ni, the casus absolutus of the king name Argišti (II). Compare for the formula the bronze shield from Karmir-blur UKN 147b = HchI 99D = KUKN 218 = \*UCT B 8-6 with following text:

Dhal-di-e e-ú-ri-e i-ni a-še "ar-gi-iš-ti-še "mì-nu-a-ḥi-ni-še URUir-e-pu-ni-e-di uš-tú-ni "ar-gi-iš-ti-ni LUGÁL DAN-NU LUGÁL al-su-i-ni LUGÁL KURbi-a-i-na-ú-e a-lu-si URUṣu-uš-pa-a URU (see also UKN 145, 147 and 147a).

We probably have a second document of Rusa II's father Argišti II, like the helmet.

For further documentation, I also include colour photographs (Tav. IIb, IIIa-b, IVa-b) of some bullae with seal impressions already published in the volume *Ayanis I* at p. 318, fig. 8, a-d, f, and p. 353 Pl. II, 2.

M. SALVINI

### **Observations on the bronze shield GPM 1628, inv. Ay.39.01, found during the 2001 archaeological campaign at Ayanis (Tavv. V-VIII)**

Measurements: Diam. 73 cm; width of border 8,5 cm; max. height 14,5/15 cm.

#### *Techniques applied:*

The shield consists of a sheet, first hammered and then polished, so as to eliminate signs of this initial rough working, by means of abrasive substances which have left clearly visible signs (close, parallel lines). The rim of the shield was left thicker than the rest of the bronze sheet so as to make the object more stable. The same applies to the shape of the border which, as well as having aesthetic importance, is similar to the rim of a felt hat (Tav. Va).

The decoration consists of two bands with ranks of animals (bulls on the inner and lions on the outer band), divided by simple decorated bands. The work was carried out by engraving with a pointed instrument and by punching with different kinds of burins.

From the visible traces we may identify the different phases of the work. First of all, the decorative surface of the shield was divided into four parts by means of two incised lines in the form of a cross which cuts the two decorated bands perpendicularly (Tav. Vb).

The organisation of the design and the composition of the animal figures indicates that the vertical positioning of the shield had been established *a priori*, the shield being destined for hanging on a wall, as suggested moreover by the archaeological context in which it was found. The inner band contains eight figures of bulls whilst the outer band

has twelve lions. These two bands are subdivided into two groups of animals, each consisting of two bulls (inner band) or three lions (outer band). These groups face left and right of the vertical dividing line (Tav. Vb), or in opposing directions above and below the horizontal dividing line (see drawing above p. 278, Çilingiroğlu Fig. 6). In the first case, the animals are head to head, whilst in the second they are paw to tail. In this way, if we consider the position foreseen for the shield, no animal would have appeared upside down to the observer.

This is a typical composition on Urartian shields. See, in particular, the drawing of the shield recently published together with the material from the excavations at Ayanis<sup>1</sup>. This shows three circles of animals (bulls in the central band, lions in the other two). We may see that the heads of the rivets which are fixing the handles were applied with much greater care so as not to interfere with the pattern.

To return to the shield Ay.39.01, the outlines of the animals are not formed of uninterrupted lines but were created by a continuous series of punch marks in the shape of dots and elongated ovals. Some animals figures are surrounded by a few dots which marked in advance the limits of the field (Tav. VIa). Such preparation served not only to provide the size of the design, but also the orientation of the figure. This may be seen in the upper, or central band of the shield. An initial tracing of the figure was carried out with a very fine cutting point, the finished work then being done through incision and punching. In fact, it is possible to note some second thoughts in this final stage. The decoration as a whole falls within the canons of Urartian art in terms of composition and the well-known heraldic motifs. However, if we concentrate on the manner in which it was produced, we may note a certain skill that one would associate with a craftsman-artist. The animals' paws, for example, often extend onto the "ground" represented by the decorated bands (Tav. VIa). Also the ends of the tails with clumps of fur are sometimes furled, sometimes extended. The punch marks delineating the bodies do not form continuous lines, thus giving the idea of the animal's fur or hide.

The four bands which, in pairs, enclose the strips showing the animals are decorated with extremely simple motifs consisting of a series of short, herring-bone lines (Tav. Vb). The center of the shield is decorated with a somewhat irregular rosette-star inside two roughly delineated circles. Long petals engraved with double lines radiate out from these circles and these again appear to have been somewhat hurriedly executed (Tav. VIb).

The shield consists of an alloy of bronze with external tin-plating<sup>2</sup>, mainly lost, although best preserved along some sections of the border (Tav. Va). On the inner side along the rim a small bronze sheet was nailed to repair a crack (Tav. VIIa). There are bridge-like three handles or grips on the inner side of the shield (Tav. VIIb), attached to the edge by beaten pins, the hemispherical heads on the outer side. The two outer grips are attached by two pins, whilst the central one has six (three at each end). The two groups of three pins attaching the central grip lie precisely along the line dividing the two lines of animals that decorate the outer surface. The way in which the outer handles are attached indicates that they were added after the decoration had been completed, as the heads of the pins partially cover the engraving (Tav. Vb).

<sup>1</sup> A. Çilingiroğlu and M. Salvini (Eds), *Ayanis I. Ten Years' Excavations at Rusahinili Eidurukai (1989-1998)* (Documenta Asiana VI), Roma 2001, p. 179, Fig. 11.

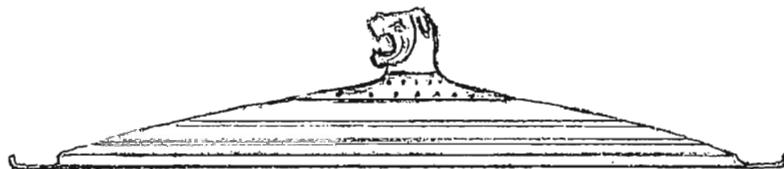
<sup>2</sup> Many thanks are owed to Pino Guida, Domenico Artioli and Luigi Arceri from the Istituto Centrale del Restauro in Rome, who did the analyses of the samples of the shield by x-ray diffraction, ED x-ray fluorescence and cross section.

*State of conservation.*

The shield presents slight deformations, especially along the rim, undoubtedly due to its having fallen from its original position (Tav. Va). There are a few cracks, and gaps, and some parts of the inner face are greatly corroded (Tav. VIIb). There are still areas of nearly undeteriorated metal and, on the outer surface, even where the tin-plating has not been preserved, large sectors covered only by a thin patina of cuprite (Tav. VIa). Much of the shield has, however, been greatly corroded (Tav. Va), creating bubbles (Tav. Vb), craters and the release of copper salts, indicative of corrosion. In these areas the decoration is illegible and it will not be possible to recover them, even when the restoration is complete (Tav. Va). The heads of the pins have been opened as a result of such corrosion (Tav. Vb). The rim of the shield shows cracks and openings, again produced by corrosion. The inner surface of the shield is in a far worse condition than the outer, from the conservation point of view. The entire surface has been eaten away by corrosive activity below an encrusted layer of earth and ash (Tav. VIIb).

*Sample cleaning.*

Given the limited time available, a partial, mechanical cleaning of the external surface was carried out, concentrating on the decorated, central parts. The border was freed of one fifth of the heavy incrustations so as to bring to light the tin-plating which is far better



preserved here that on the central section of the shield. This sample cleaning indicates how important it is for the restoration to be aimed at certain conservation, so as to be able to read, study and understand the vast and refined abilities and knowledge in the field of bronze-working of the Urartian craftsmen.

In this occasion, I would like to recall the most important shield found at Ayanis<sup>3</sup>. This, from the technological point of view of the metalworking, displays even more surprising elements, in the mechanical attachment of a heavy part (the lion's head, weighing 5 kg) to the extremely thin sheeting of the shield (Tav. VIII). As the Urartians did not have the skill of soldering, they had to resort to mechanical assemblies, inventing means of guaranteeing a firm fixture. Thus we may observe that, along the edge of the lion's neck (see *Ayanis I*, p. 180 fig. 12 and 186, fig. 22) series of holes were made so as to be able to attach a circular sheet by means of beaten nails. This, in turn, was attached in the same way to the central part of the shield. So as to meld this "collar" harmoniously with both the lion's head and the decoration of the shield, the mane continues in engraving over the entire surface and the rim repeats the same decoration, like the dividing lines between the three bands decorated with animals (see *Ayanis I*, p. 179 fig. 11). The position of the lion's head in relation to the shield, reproduced here in the sketch, shows us that the shield was hung on the wall in such a way that the snarling muzzle looked down upon the observer. This position is, therefore, different to that of the shields with lions' heads represented in the famous relief of the sack of Musasir (cf. A. Çilingiroğlu, *Ayanis I*, p. 163), where the lion's snarling muzzle extends forwards, perpendicular to the surface of the shield.

I. REINDELL

#### Ricerche a Van e dintorni (estate 2001)

##### *Yeşilalıç* (Tav. IXa)

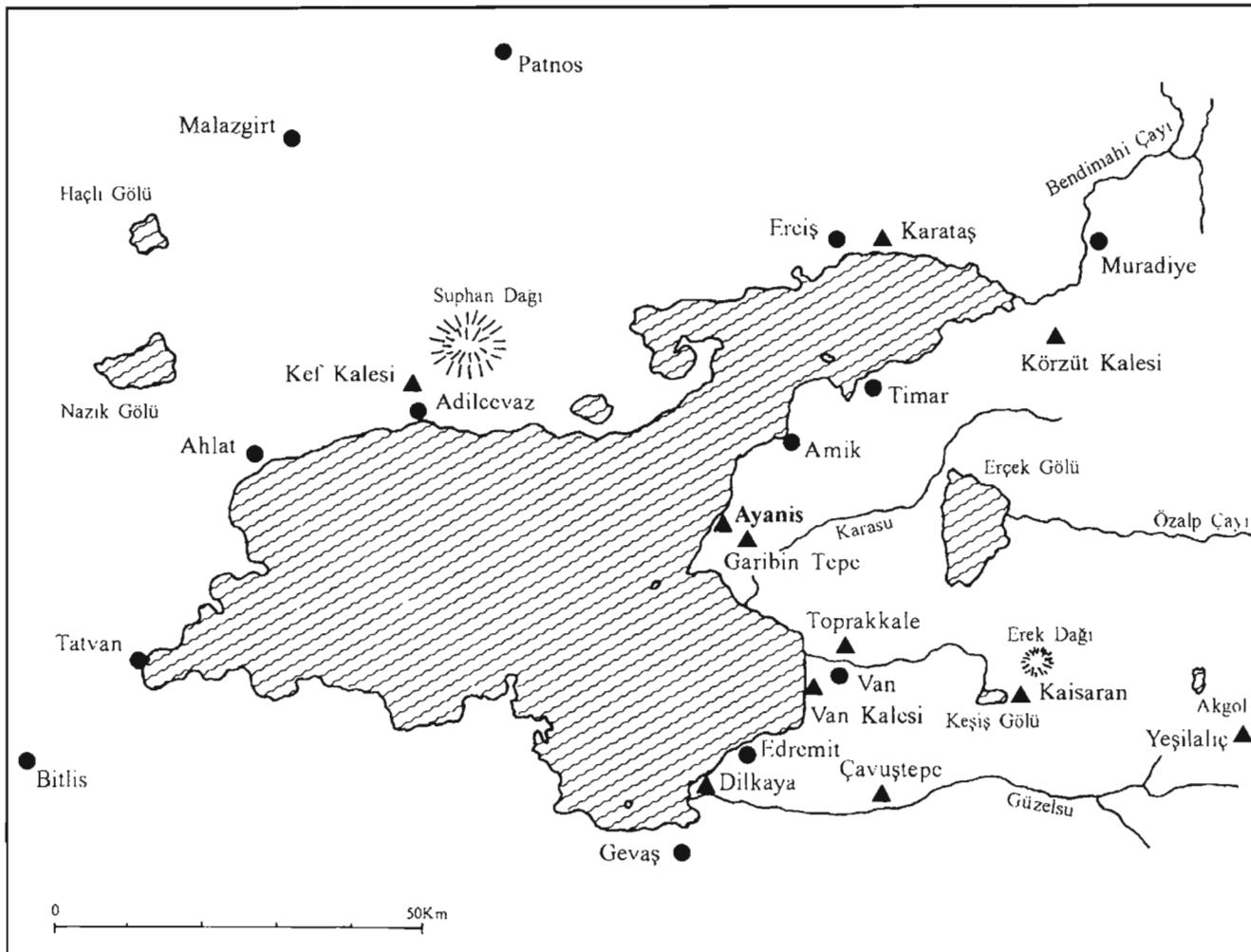
La nicchia e la sua base sono sconciate da nuove scritte, che non c'erano nel 1990, quando visitai il sito durante il simposio sull'età del ferro a Van. La scala rupestre è ben visibile, ed è conservata meglio che a Meher Kapısı.

Nella parete rupestre del cañon scavato dal ruscello a ca 500 m dalla nicchia, è stata ricavata una scaletta coperta a tunnel che sale con pochi gradini fino all'imboccatura di una grossa cisterna scavata nella roccia. Questa è larga ca 3-4 metri ed è profonda ca 5, ma non se ne scorge il fondo che è pieno di pietre. Non si tratta però di una cisterna segreta o nascosta, per l'approvvigionamento idrico di una fortezza. Secondo un vecchio del luogo doveva essere adibita alla conservazione della neve, dato che non ci batte mai il sole, insomma una ghiacciaja.

##### *Körzüt Kalesi* (Tav. IXb)

In cima alla fortezza si nota una recrudescenza del lavoro dei clandestini, con nuovi buchi e nuovi sconquassi. Le fondamenta del tempio, dal quale provengono le epigrafi

<sup>3</sup> Z. Derin-A. Çilingiroğlu, in: A. Çilingiroğlu and M. Salvini (Eds), *Ayanis I*, p. 162 cat. 58, and p. 179 Fig. 11, p. 185 Fig. 21-23; for the inscription along the rim see M. Salvini, *ibid.*, p. 271.



Il lago di Van e la posizione dei siti urartei visitati nel 2001.

pubblicate a suo tempo da Ali M. Dinçol, "Die neuen urartäischen Inschriften aus Körzüt", *IstMitt* 26, 1976, 19-30, sono ormai a mala pena riconoscibili. In un angolo del possente muro esterno della fortezza si nota uno strano rigonfiamento sulla superficie di un pietrone, di cui è arduo comprendere la funzione. Un analogo rigonfiamento si nota alla base del muro esterno di Karmir-blur. È cosa diversa dal "bugnato" delle pietre di Ayanis, di cui si è detto in altro luogo.

### *Karataş*

Chi, seguendo la costa nord del lago Van, si diriga verso ovest, circa 2 km prima dell'abitato di Erçis scorge sulla destra della strada delle rotondeggianti rocce nere vulcaniche, appunto Karataş, con le sue nicchie iscritte da Sarduri II, che furono scoperte primamente da F.-E. Schulz nel 1827. Si veda il mio articolo "Le iscrizioni di Sarduri II a Karataş", «Orientalia» 62 (1993), 71-79 (Tab. I-II). Nel 2001 la strada è stata allargata e le costruzioni, che sono proliferate nella zona nell'ultimo decennio, si avvicinano pericolosamente alle nicchie e le raggiungono quasi. Sotto quella di sinistra (ovest) è stata scavata una voragine. Temo che fra qualche tempo tutto sarà distrutto, e con quelle nicchie iscritte il più antico documento storico della zona.

### *Adilcevaz*

Cortile della scuola. La recinzione del "museo lapidario" sotto tettoja è stata restaurata quest'ultimo anno ed è stato anche operato un tentativo di restauro dei blocchi figurati da Kefkalesi, riappicciando i pezzi staccati di quel basalto friabile. Ho effettuato una ennesima collazione delle pietre che ho potuto raccordare insieme e stabilirne la relazione di duplice rispetto alla nuova iscrizione templare di Ayanis (v. *Ayanis I*, p. 256).

Il testo dell'iscrizione più importante di Adilcevaz viene pertanto ad essere ricomposto così:

UKN II 451 = KUKN 415 = \*UCT A 12-5 // Ayanis *susi* III 11-IV 10

(+)

UKN II 452(=KUKN 416)+UKN 278(=KUKN 414) = \*UCT A 12-6 // Ayanis *susi* VI-VII

(+)

UKN 300(=KUKN 489=\*UCT A 12-7) // Ayanis *susi* VII 11-VIII 9.

Il testo di Adilcevaz è dunque \*UCT A 12-5(+6(+7) // Ayanis *susi* III-IV, VI-VIII, e questa è la trascrizione:

\*UCT A 12-5 // Ayanis *susi* III 11-IV 10

1 [(..... zu-ma-gi a-šú-li)]

2 ku-ul-mu-li-ni a-li-e BE-LI ga-zu-li-e te-er-du-li-ni š[(i-si-ni bi-di-a-še ši-i-si-e šú-ú-li-e)]

3 a-še e-si ma-nu-li i-šá-hi-ni te-er-du-li-ni a-li-e i-ni ú-[(i BE-LI te-er-du-li-ni É a-du-nu-si-ni)]

4 "ru-sa-a-še a-li a-lu-še KÙ ku-me-mu-še BE-LI SIKIL ḫal-di-[(i-na-ni KÁ-ni ḫá-ú-li-e)]

5 NA<sub>4</sub> ³a-ḥu-li-i-ni a-li-e a-še su-nu-e i-ru-i-du-[(i TUKUL<sup>MES</sup> GIŠ<sup>MES</sup> SIMES ši-e-du-li-ni)]

6 a-mu-li-ni KI<sup>MM</sup>-a qu-ul-di-ni-ni a-li-e KÙ iš-ti-ni ma-nu-l[(i te-er-du-li-ni É a-du-nu-si-ni)]

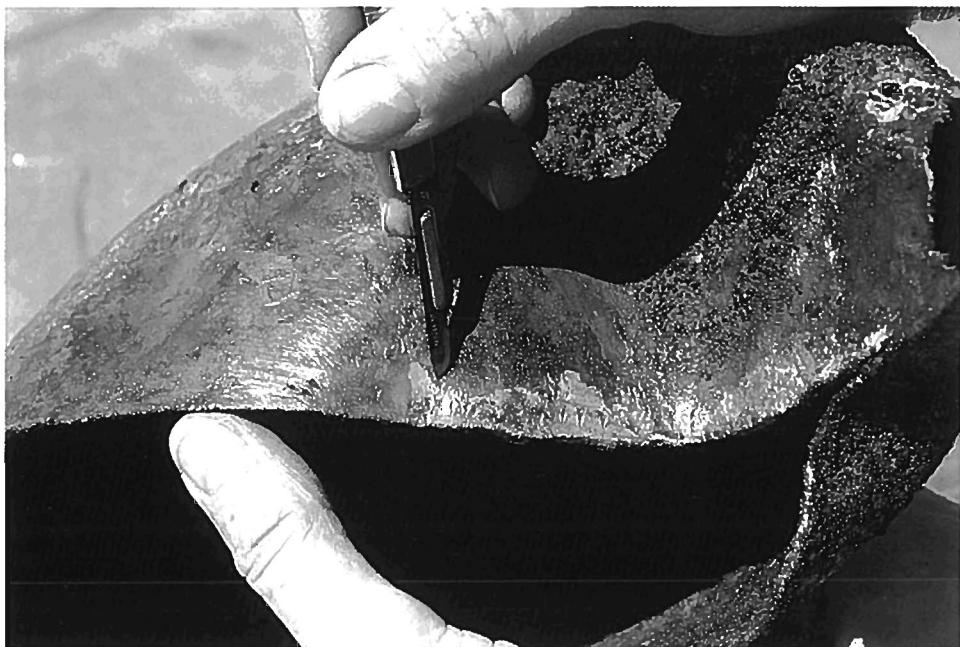
- 7   <sup>m</sup>ru-sa-a-še a-li a-li-e <sup>D</sup>ḥal-di-ni-e É áš-du-li-e <sup>ḥ</sup>[(a-ap-ti-ni-e KIN ma-nu-ni e-me tar-ni)]  
 8   GÍR.BAR áš-ka-ti<sub>s</sub>-ni ši-e-du-li-ni mì-i e-ši-me-ši el-mu-še ma-[ (nu-ni i-ni ú-li KÚR GÀR a-še)]  
 9   a-li-e ú-i uš-ta-ku-ni áš-du-li-ni ši-e-du-li-ni mì-i 'e-[ (ši-me-ši el-mu-še ma-nu-ni)]  
 10   <sup>D</sup>ḥal-di-ni-i a-ma-ni i-gi-di ip-ḥi-e <sup>D</sup>ḥal-di-ni-[ (i ba-du-si-ni i-ú ur-zí-e)]  
 11   <sup>D</sup>a-ḥu-li-ni KI<sup>TM</sup>-a quł-di-ni-ni mì-i e-ši-me-ši el-mu-še [(ma-nu-ni <sup>m</sup>ru-sa-a-še a-li)]

\*UCT A 12-6 // Ayanis susi, A 12-1 VI 5 – VII 10

- 1   [....]x[...]x[...]  
 2   [m]a-nu-bi ú-i [(gi-e-i iš-ti-ni ši-da-ú-ri-e <sup>D</sup>ḥal-di-ni-ni ba-ú-ši-ni)]  
 3   i-e-še-e i-[ (ni É.BÁRA ši-di-iš-tú-bi e-<sup>D</sup>a É.GAL ba-du-si-e)]  
 4   ši-di-iš-tú-bi [(<sup>GÍS</sup>GEŠTIN <sup>GÍS</sup>za-ri-e šú-ḥi te-ru-ú-bi GÁN <sup>GÍS</sup>É iš-ti-ni)]  
 5   šá-tú-ú-bi tar[-g]i-ni-li ar-<sup>D</sup>ni-ú-<sup>D</sup>ši-ni-[ (li iš-ti-ni za-du-bi te-ru-ú-bi)]  
 6   ti-i-ni <sup>D</sup>[ḥal]-di-e-i URU <sup>KUR</sup>zi-ú-qu-ni-i (<sup>m</sup>ru-sa-a-še)  
 7   <sup>m</sup>ar-giš-te-ḥi-<sup>D</sup>ni-<sup>D</sup>še a-li pa-ru-bi LÚ <sup>MUNUSLU</sup>tú-ni <sup>KUR</sup>lu-lu-i-na-ni [<sup>KUR</sup>x-x]-i-?i-<sup>D</sup>ni  
 8   <sup>KUR</sup>tab-la-a-ni [<sup>(KUR)</sup>qa-i-na-ru-ú <sup>KUR</sup>mu-uš-ki-ni <sup>KUR</sup>ḥa-te-e <sup>KUR</sup>ḥa-li-ṭu]  
 9   [(<sup>(KUR</sup>ši-lu-qu-ni-ni?)] za-du-ú-bi LÚ-i-[ (a)]ni i-nu-ki-e É.GAL e-<sup>D</sup>a URU<sup>MES</sup> a-li-li  
 10   *i*-nu-ki-e'  
 10   [(É.GAL-a za-d)]u-ú-bi al-zi-na-i [(i-)]nu-ki-e <sup>D</sup>.GAL-a' a-bi-li-du-ú-bi-e mì-i a-  
 11   *i*-<sup>D</sup>še-e-'  
 11   [(e-di-ni s)]u-ti<sub>s</sub>-a-ni mì-i-<sup>D</sup>e' i-bi-<sup>D</sup>ri-ia'-a-ni mì-i gi-e-i i-na-a-ni ba-ú-ši-<sup>D</sup>na-ni'  
 12   [(še-pu-ia-ar-)]di-a'-[ (ni)] <sup>m</sup>ru-sa-a[(-še)] <sup>m</sup>ar-giš-te-ḥi-ni-<sup>D</sup>še' a-li <sup>D</sup>ḥal-di-iš-  
 13   *i*-me'  
 13   *i*-uš-ḥa-a-<sup>D</sup>nu-ni'  
 13   [(ḥu-ṭu-tú-ḥi gu-nu-še)] <sup>D</sup>e'-<sup>D</sup>a i[(p-šú)]-še <sup>D</sup>ḥal-di-a iš-ti-ni-e i-na-ni-li ar-ni-ú-ši-[  
 14   (ni-li)]  
 14   [(za-du-li <sup>D</sup>ḥal-di-ni-ni a)]l-su-i-ši-ni <sup>m</sup>ru-sa-a-ni <sup>m</sup>ar-giš-te-ḥi LUGÁL DAN-NU  
 15   *i*-LUGÁL  
 15   [(al-su-i-ni LUGÁL <sup>KUR</sup>šú-ú-ra-a-ú-e)] LU[(GÁL <sup>KUR</sup>b)]i-a[(-i)]-na-a-ú-e [(LUGÁL  
 15   LUGÁL)]<sup>MES</sup>-ú-e a-lu-si  
 16   [<sup>(URU</sup>ṭu-uš-pa-a-e URU)]

\*UCT A 12-7 // Ay susi VII 11-VIII 9

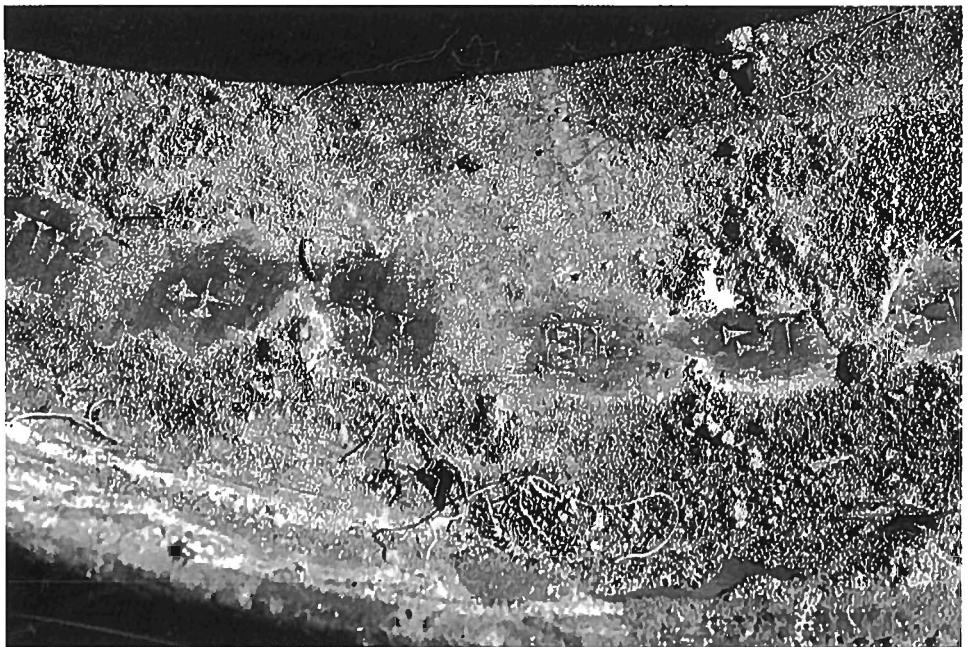
- 1   [(<sup>D</sup>ḥal-di-ni-ni ba-ú-ši-ni <sup>m</sup>ru-sa-a-še <sup>m</sup>ar-giš-te-ḥi-ni-še)]  
 2   [(a)]-li LUGÁL-ni [(a-li i-si i-ku-ka-ni e-di-ni ma-nu-li mì-i gi-i i-na-a-ni)]  
 3   [b]a-ú-ši-na-a-ni[(i KIN i-si-ia-ni mì-i gi-i še-pu-ia-ar-di-a-ni mì-i bu-ḥi-a-ni gu-  
 ni i-e-še)]  
 4   [t]i-ú-bi gu-ni [(za-du-ú-bi-e <sup>m</sup>ru-sa-a-še <sup>m</sup>ar-giš-te-ḥi-ni-še a-li a-lu-še i-ni DUB-  
 te)]  
 5   <sup>(D)</sup><sup>D</sup>ḥal-di-na-ni <sup>GÍS</sup>[(KÁ tú-li-i-e a-lu-še pi-tú-li-e a-lu-še še-er-du-li-e a-lu-še e-si-  
 ni)]  
 6   [s]u-ú-i-du-li[(-e a-lu-še ti-ú-li-e za-du-ú-bi a-i <sup>KUR</sup>bi-a-j-ni-še a-i)]  
 7   [<sup>(KUR</sup>lu-)]u-i-ni-[ (še a-lu-še šú-ú-si-e ti-ni-ni tú-li-i-e ma-a-si-e ti-i-ni te-li-i-e tú-  
 ri-ni-ni)]  
 8   [(<sup>D</sup>ḥal-d)]i-še <sup>D</sup>IM-[ (še <sup>D</sup>UTU-ni-še DINGIR<sup>MES</sup>-še ma-a-ni ti-i-ni)]  
 9   [(ar-m)]u-zí-i [(ar-mu-zí-gi ar-mu-zí <sup>D</sup>UTU-ni-pi-e-i mì-i ar-ḥi-e)]  
 10   [(ú-ru-li-a-ni mì-i i-na-i-ni-e mì-i <sup>LÚ</sup>na-ra-a a-ú-i-e ú-lu-ú-li-e)]



Tav. Ia – Bronze helmet from Ayanis 2001 (Ay GSK) with inscription by Argišti II, son of Rusa I.



Tav. Ib – Detail of the inscription on Argišti II's helmet.



Tav. IIa – Detail of the inscription on the bronze shield found in 2001 in the Temple Area of Ayanis (sector VI, GZE).



Tav. IIb – Bulla AY.24.94 with impression of Seal Ay-1.



Tav. IIIa – Bulla AY.136.90 with impression of Seal Ay-2.



Tav. IIIb – Bulla AY.51.96 with impression of Seal Ay-3 and Abay A1.



Tav. IVa – Bulla AY Seal Ay-4, cf. Abay A1, fig. 2.



Tav. IVb – Bulla AY.135.90 with impression of Seal Ay-6; cf. Abay A3.



Tav. Va – Ayanis. The bronze shield Inv. AY.39.01 (GPM 1628) after the partial cleaning process.



Tav. Vb – Detail of the bronze shield AY.39.01. The vertical dividing line which cuts the decorated surface into four sections, is clearly visible.



Tav. VIa – Shield AY.39.01. Detail of the figure of a bull on a field previously defined by punch marks. Note how the paws of the animal extend into the area of "ground". On the right, the red patina of cuprite, on the left, traces of the tin-plating may be seen.



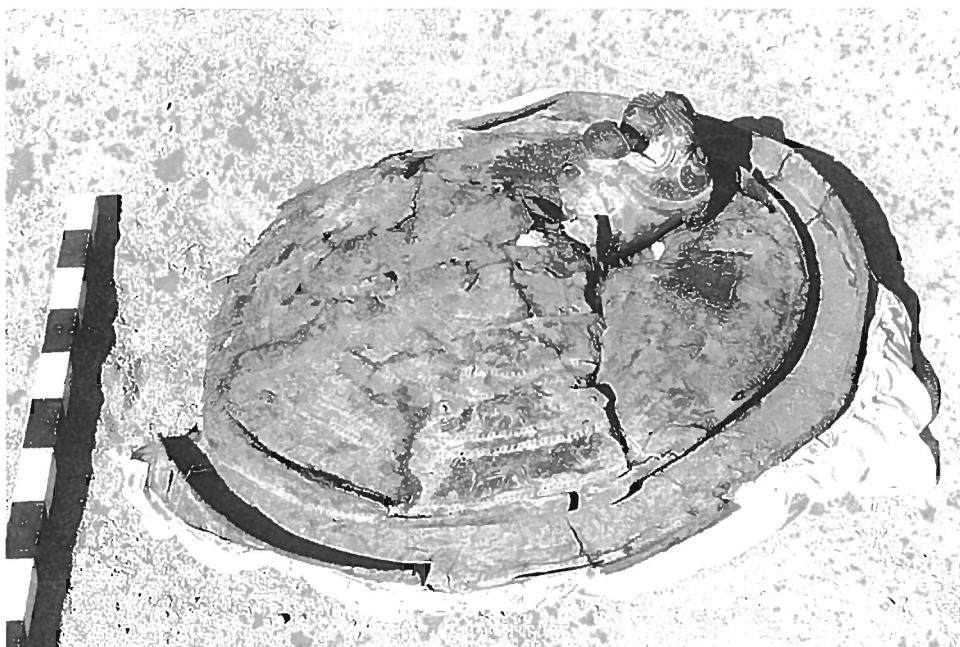
Tav. VIb – Shield AY.39.01. Detail of the central rosette.



Tav. VIIa – Repair bronze sheet nailed on the inner section of the rim of shield AY.39.01.



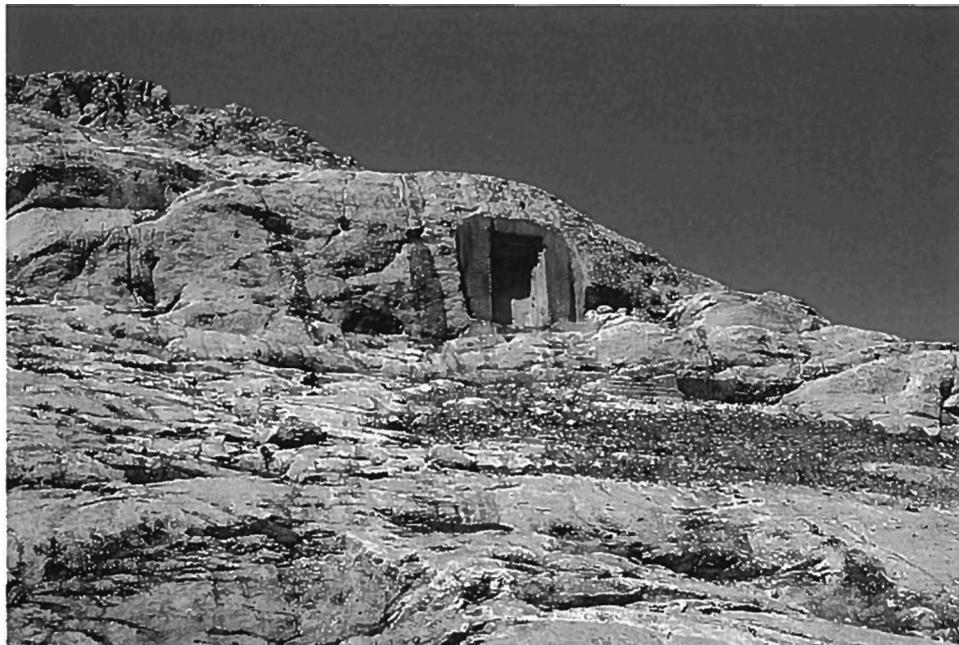
Tav. VIIb – Inner surface of shield AY.39.01 with the three bridge-like grips or handles.



Tav. VIIIa - The shield with lion's head at the moment of its discovery (1997 campaign).



Tav. VIIIb - Detail of the sheet used to attach the lion's head.



Tav. IXa – Yeşilalıç. Santuario rupestre con iscrizione sacrale di Išpuini e Minua, a 60 km a est di Van.



Tav. IXb – Körzüt Kalesi. Fortezza costruita da Minua. Un tempio *susi* dedicato a Ḥaldi celebrava con una lunga iscrizione la conquista della valle dell'Arasse.



Tav. Xa – Kefkalesi. Stato attuale delle rovine della residenza di Rusa II, scavata negli anni 1960.



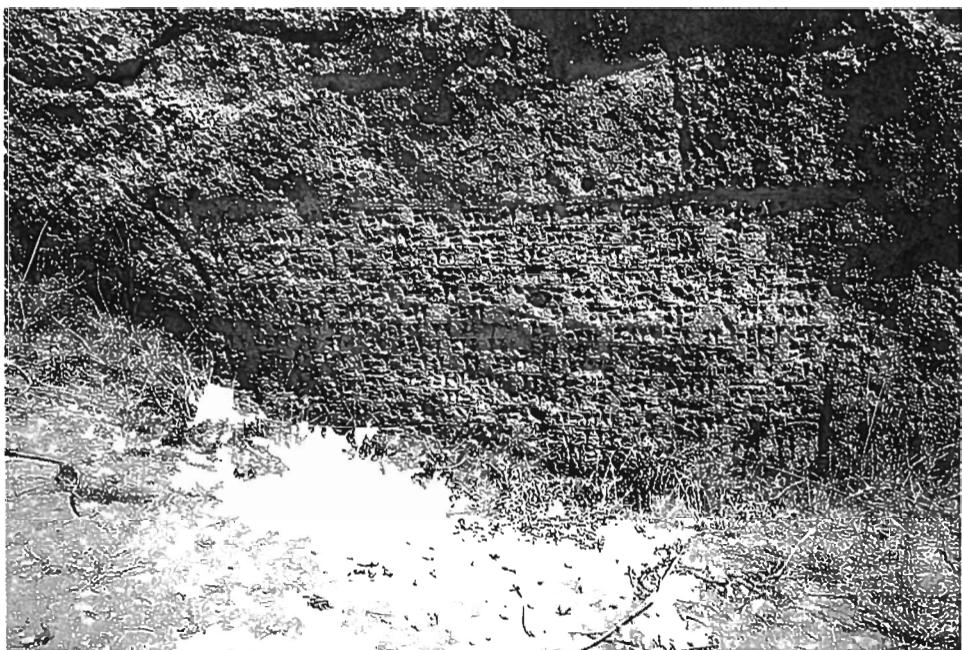
Tav. Xb – L'oasi di Adilcevaz sulla riva del lago Van, con il castello selgiuchide, visto dal pianoro di Kefkalesi.



Tav. XIa – La “Sardursburg”. Struttura ciclopica costruita da Sarduri I verso l’830 a.C. ai piedi della Rupe di Van.



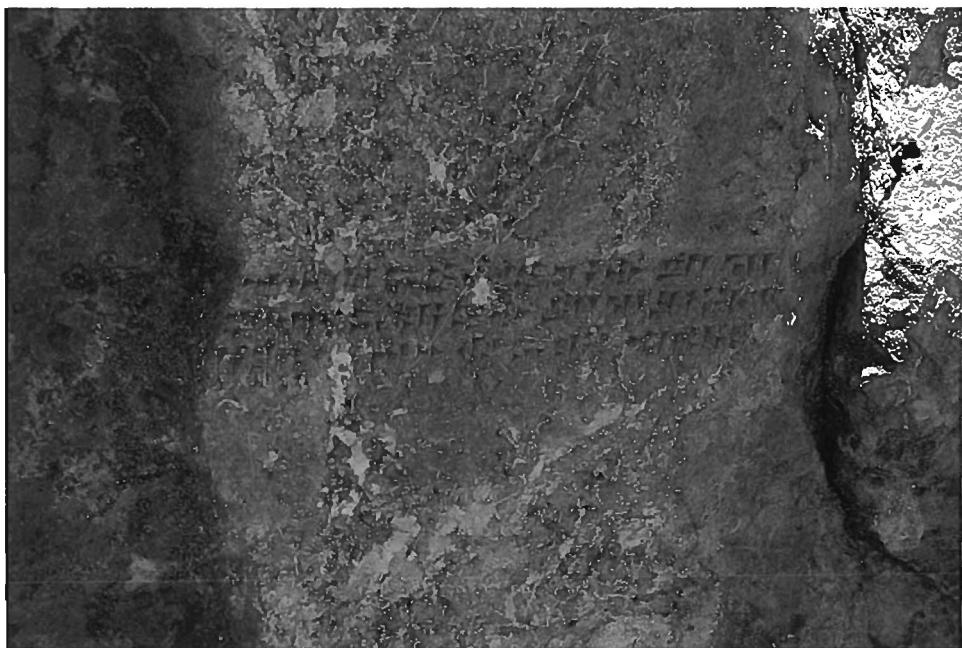
Tav. XIb · Edremit alta (oggi Taşkale, o Kıztaşı). Lastroni di calcare sul bordo del torrente Kotur Dere, probabile cava per la costruzione della “Sardursburg”.



Tav. XIIa – Iscrizione di 14 righe sul tracciato del Canale di Minua (CICh 34) nei pressi di Edremit (Van).



Tav. XIIb - Iscrizione di 9 righe sul tracciato del Canale di Minua (CICh 38) nei pressi di Edremit (Van).



Tav. XIIIa – Iscrizione di Kaisaran, sui monti a sud del Keşis Göl.



Tav. XIIIb – Vista sul Keşis Göl, invaso artificiale costruito da Rusa II, VII sec. a.C.

Bisogna notare che, pur appartenendo i tre testi di Adilcevaz alla stessa lunga iscrizione, dato che il nuovo testo templare di Ayanis mi ha facilitato un join e la disposizione relativa delle pietre in un duplicato, questo appare disposto in modo diverso dagli altri, soprattutto rispetto ad Ayanis e Karmir-blur. Se infatti la prima parte (UKN II 451, che è duplicato di Ayanis *susi* III 11 – IV 10) è su una pietra di undici righe, la seconda parte (UKN II 452+ UKN 278, dupl. di Ay *susi* VI 5 – VII 10, quindi verso la fine del testo) contava almeno 16 righe, e l'ultima (UKN 300 dupl. di Ay *susi* VII 11-VIII 9), che segue immediatamente e conclude il testo, è su una pietra con solo 10 righe. Questo dimostra che la disposizione del testo era diversa da quella dei duplicati principali dei templi di Ayanis e Karmir-blur. La disposizione più "irregolare" si nota sulla pietra pubblicata da Hulin<sup>1</sup>. Resta da ricostruirne la geometria, che non mi è ancora chiara, ma che era sicuramente diversa dagli altri duplicati.

#### *Kefkalesi*

Quattro km e mezzo sopra Adilcevaz. Le rovine del sito scavato negli anni sessanta<sup>2</sup> si trovano in uno stato abbastanza buono (Tav. Xa). Si tratta di un complesso di edifici longitudinali, paralleli al lato che guarda e domina il lago. Partendo da E sussiste ancora un lungo filare costituito da quattro pilastri rettangolari con aggetti angolari quadrati, simili a quelli trovati più tardi ad Ayanis. Il tutto è costruito su una piattaforma che poggia sulla roccia e su un terrapieno di riempimento. A S e soprattutto a N si conservano vistosi resti di un muro di sostegno del terrapieno, costituito di belle pietre squadrate a incastri vari con riempimento, simile al sito di Ayanis. Non è facile ricollegare in generale i resti attuali all'unica pianta pubblicata da Öğün in *IstMitt* 17, 1967, p. 486.

Non si vede invece traccia alcuna di una struttura difensiva, di un muro di cinta come li conosciamo in tutte le fortezze urartee. Verso O a un livello superiore si riconosce bene un ambiente quadrato con otto pilastri quadrati; si veda la semplice piantina riprodotta da Ruth Mayer-Opificius, in *IstMitt* 43, 1993, 268.

A S dell'edificio con i pilastri ("Pfeilerhalle" o "Pillar Hall") i magazzini dei pithoi sono attualmente solo un ricordo; tutta l'area è disseminata di frammenti di pithoi. Si scorgono tracce di un forno, come sembra di capire da un ammasso di materiale refrattario (mattoni molto dimagrati con paglia). La vicinanza col magazzino suggerisce che fosse destinato alla cottura dei pithoi.

I pilastri sono rettangolari, con aggetti angolari; il pilastro d'angolo ha una forma particolare. I pilastri meglio conservati sono costituiti da tre strati di pietre di basalto nero, lavico, poroso, insomma della lava della grande montagna vulcanica Süphan Dağ. I blocchi dell'ordine superiore sono ben levigati anche sulla faccia superiore e presentano una modanatura lungo il bordo. Evidentemente sostenevano un alzato in mattoni crudi, come si osserva nel portico templare di Ayanis. Ben visibili sono le varie tecniche di lavorazione della pietra. Sul retro delle singole pietre, arrotondate per l'incastro, si vedono tracce evidenti di martellatura grossolana. Invece la squadratura esterna è talmente perfetta da far pensare ad un taglio col filo.

<sup>1</sup> P. Hulin, New Urartian Inscriptions from Adilcevaz, *AnSt* IX, 1959, 189-195, No. 2, Pl. XXVI (b) (= UKN II 452).

<sup>2</sup> E. Bilgiç, B. Öğün, Excavations at Kef-Kalesi of Adilcevaz, 1964, «Anatolia» (Anadolu) 8, 1966, 93-124; iidem, Second season excavation at Kef-Kalesi of Adilcevaz (1965), «Anatolia» (Anadolu) 9, 1967, 11-28; B. Öğün, Die Ausgrabungen von Kef Kalesi bei Adilcevaz und einige Bemerkungen über die urartäische Kunst, *ArchAnz* (1967), 481-503.

Il problema della identificazione della struttura di Kefkalesi è legato, come si saprà, all'interpretazione di una parola, che designa un edificio, nell'unica iscrizione che proviene da quel sito. Si tratta di un testo di Rusa II, di una sola riga che si ripete sotto il bordo dei cubi di andesite scolpiti (il meglio conservato si trova ad Ankara, gli altri nel cortile della scuola di Adilcevaz, uno informe ancora *in situ*), e che definisce l'edificio come un É a-ši-hu-si<sup>3</sup>. Questo termine per ora resta intraducibile, e debbono pertanto essere considerate caduche tutte le deduzioni e speculazioni basate sulla traduzione di E. Bilgiç, "place of cult for drinking sacrifices"<sup>4</sup>. Su questa vecchia interpretazione, che risale a F. W. König – "Kultraum für die Trankopfer"<sup>5</sup> – si basa acriticamente anche Ruth Mayer-Opificius<sup>6</sup>, la quale si chiede se si tratti di un luogo di culto all'interno di un palazzo oppure di un tempio vero e proprio. Ella esprime l'ipotesi che anche i due ortostati, uno dei quali (col genio stante su toro e impegnato nella "Befruchtungsszene") è ricostruito nel cortile del Museo di Van, e che furono trovati in pezzi riutilizzati nel castello di Adilcevaz, provengano egualmente da Kefkalesi. Una soluzione possibile, che ho lasciato aperta in *Geschichte und Kultur der Urartäer*, Darmstadt 1995, 165 ss.

Non è però esatto quanto afferma Mayer-Opificius, che il rilievo sia stato eseguito in singoli blocchi e quindi fossero facilmente trasportabili da Kefkalesi ad Adilcevaz. Sono stati tagliati, ortostati e iscrizioni, per essere riutilizzati nelle strutture medievali; tutti i blocchi infatti mostrano le tracce dei buchi praticati orizzontalmente per ridurli a singoli blocchi. Bisogna però considerare le seguenti circostanze: l'ortostato, tagliato orizzontalmente in alcuni parallelepedi ed il frammento dell'altro ortostato<sup>7</sup>, nonché le tre pietre iscritte riconducibili ad un'unica iscrizione (v. sopra), tutte appartenenti allo stesso monumento, provengono da Adilcevaz, la cittadina sulla riva del lago, essendo state riutilizzate nel castello selgiuchide (Tav. Xb). I cubi di andesite quadrifronti scolpiti provengono invece tutti dallo scavo di Kefkalesi. Abbiamo dunque due gruppi di monumenti nettamente separati quanto alla loro provenienza. Nemmeno un pezzo o frammento del primo gruppo è stato rinvenuto negli scavi di Kefkalesi. Ambedue comunque appartengono a Rusa II, come mostrano le iscrizioni.

L'iscrizione del primo gruppo (v. sopra sub Adilcevaz) mostra che il tempio susi con gli ortostati venne costruito da Rusa II nella "Città di Haldi del paese di Ziuquni". È molto probabile che si tratti appunto dell'antico nome di Adilcevaz. Una difficoltà è costituita dal fatto che non è stata trovata finora, sembra, alcuna traccia architettonica urartea ad Adilcevaz. Si deve pensare che il castello selgiuchide abbia spazzato via tutto? A dire la verità non trovo documenti sull'esistenza di tracce architettoniche urartee nell'unico posto dove ci si aspetta, vale a dire sull'altura naturale coperta dalla rocca selgiuchide. Facendo il giro della fortificazione medievale, qualche anno fa, ho cercato inutilmente di riconoscere fondazioni o parti di muri di struttura e stile urarteo, o le caratteristiche semitorri delle fortezze urartee. Cito comunque la ferma opinione di Charles Burney, il pioniere delle ricerche urartee degli anni '50, confermatami oralmente al recente simposio di Van, secondo cui rilievi e iscrizioni templari provengono da Adilcevaz, non da Kef Kalesi. In

<sup>3</sup> M. Salvini, The Inscription of the Urartian King Rusa II at Kefkalesi (Adilcevaz), SMEA 40/1, 1998, 123-129.

<sup>4</sup> «Anatolia» (Anadolu) 9, 1967, p. 18.

<sup>5</sup> HchI p. 74 e 145.

<sup>6</sup> Gedanken zur Bedeutung des urartäischen Ortes Kefkalesi, IstMitt 43 (Fs. Neve), 1993 p. 274 e p. 276.

<sup>7</sup> Si vedano le ricostruzioni alternative di Ursula Seidl, Urartäische Bauskulpturen, Fs. N. Özgürç, Ankara 1993, 557-564 (Taf. 98-100), e di M. Salvini, *Geschichte und Kultur der Urartäer*, Darmstadt 1995, 166 sg.

favore della presenza di una città urartea sulla costa, ad Adicevaz, depone la considerazione teorica che il sito di Kefkalesi lassù sulla montagna non poteva essere isolato; senza il controllo dell'oasi di Adilcevaz (Tav. Xb) non avrebbe avuto senso, e questa certamente non era disabitata. Come non lo era l'oasi di Erçis, a cui fanno riferimento le iscrizioni rupestri di Karataş<sup>8</sup> di Sarduri II (v. sopra), nonché le stele di Çelebibaşı e Hağı di Argiştı II (risp. CICCh 149 = HchI 125 = \*UCT A11-1 e UKN 276 = HchI 124 = \*UCT A 11-2). L'obiezione che la città-fortezza di Rusa II ad Ayanis si trova in una posizione analoga rispetto al lago, senza che in basso sulla costa vi sia traccia di insediamento urarteo, non ha gran valore, perché Ayanis è collegata e accessibile dal retroterra (e lo mostra il castellotto di Garibin Tepe, da cui proviene il leone di pietra infranto del Museo di Van) mentre Kefkalesi ha alle spalle una montagna difficilmente accessibile.

Ripensando dunque al complesso monumentale di Kefkalesi, ed all'unica iscrizione incisa sui cubi di andesite istoriati, che si riferisce alla costruzione di un É ašiḥusi, mi sono convinto che questo termine designava l'intero complesso architettonico e non solo un edificio specifico, o una sua parte. Non si parla invece di un É.GAL "fortezza"; del resto manca la caratteristica fondamentale della fortificazione. Esprimo dunque l'ipotesi che É ašiḥusi – termine del quale non abbiamo al momento alcuna etimologia – significasse qualcosa come "villa, residenza (estiva)", della quale facevano parte sicuramente anche i grandi magazzini dei pithoi. È probabile allora che Kefkalesi fosse dipendente dalla città costruita da Rusa II ad Adilcevaz. Concludendo queste considerazioni, per poter risolvere definitivamente il problema qui esposto, mi sembra necessario che venga ripreso prima o poi lo scavo di Kefkalesi, o che vengano intrapresi lavori di restauro delle architetture visibili, e che nel contempo l'area di Adilcevaz sia sottoposta ad una indagine sistematica. Lo richiede soprattutto il progresso delle ricerche sull'ultimo periodo della storia urartea, rilanciate nell'ultimo decennio dal successo della ricerca archeologica ad Ayanis.

#### *Van Kalesi – Sardursburg*

In *Geschichte und Kultur der Urartäer*, Darmstadt 1995, 34 sg. e 138 sg. ho esposto la problematica relativa alla struttura più antica, la cosiddetta "Sardursburg", e al suo fondatore Sarduri I (Tav. XIa). Una osservazione, che non so se sia stata fatta, è la seguente. Il quadrato che secondo Naumann<sup>9</sup> doveva essere la base di un tempio torre, è in verità una unità architettonica isolata, una struttura indipendente. A questa si appoggia a S il corpo di fabbrica, costituito degli stessi grandi blocchi di calcare, che lo congiunge alla base rocciosa della Rupe di Van. Comunque le due parti strutturali sono assolutamente contemporanee, dato che recano tre duplicati della stessa iscrizione di Sarduri I, e incisi dalla stessa mano.

Uno dei problemi più interessanti e difficili da risolvere resta quello della provenienza degli immensi blocchi. Per dare un'idea della loro grandezza comunico le dimensioni dei singoli blocchi del lato nord, quello opposto alla Rupe, limitatamente ai tre ordini superiori (v. foto qui sotto) e poi rinvio al paragrafo seguente, dedicato al sito di Edremit:

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<sup>8</sup> M. Salvini, Le iscrizioni di Sarduri II a Karataş, «Orientalia» 62 (1993), 71-79 (Tab. I-II).

<sup>9</sup> R. Naumann, Bemerkungen zu urartäischen Tempeln, *IstMitt* 18, 1968, 54.



- 1: largh. 145 x h. max. 100 x prof. lato est 228 cm.
- 2: largh. 170 x h. max. 95
- 3: largh. 190 x h. max. 100
- 4: largh. 236 x h. max. 90
- 5: largh. 212 x h. max. 90 (lato sud non controllabile)
- 6: largh. 200 x h. max. 88 x prof. lato sud 236 cm.
- 7: largh. 90 x h. max. 90 x prof. lato sud 261 cm.
- 8: largh. 230 x h. max. 100
- 9: largh. 200 x h. max. 98
- 10: largh. 234 x h. max. 91
- 11: largh. 200 x h. max. 118
- 12: largh. 140 x h. max. 103 x prof. lato sud 164 cm.
- 13: largh. 140 x h. max. 78
- 14: largh. 140 x h. max. 90
- 15: largh. 140 x h. max. 90
- 16: largh. 227 x h. max. 90
- 17: largh. 281 x h. max. 122
- 18: largh. 185 x h. max. 103 x prof. lato sud (in tre pezzi) 522 cm.

#### *Edremit*

Circa venti anni fa Oktay Belli pubblicava un interessante articolo col quale annunciava di aver identificato la città di Alniunu, citata nel testo di Sarduri I, e la cava di pietra urartea da cui provengono i blocchi della Sardursburg<sup>10</sup>. Egli identificava nel villaggio di Edremit, che si trova a 17 km a sud di Tušpa, le rovine della città di Alniunu e lo "Steinatelier". I blocchi di calcare, ivi lavorati, proverrebbero dallo Harapköy Tepe (1900 m. s.l.m.), 1 km a SE di Edremit. È probabile che in parte la cava sia quella descritta e

<sup>10</sup> O. Belli, Alniunu kenti ve taş atölyesinin keşfi / Die Entdeckung der Stadt Alniunu und ihres Steinateliers, «Anadolu Araştırmaları» VIII, 1980 (İstanbul 1982), 115-130 (Taf. I-XIX).

raffigurata alle tavole VII/2 e VIII, definito "Alniunu kenti taş atölyesi", anche se nutro dubbi che le basi di stele raffigurate nelle tavole IX, XIII-XIX siano urartee. Non mi sembra di aver visto niente di simile associato a stele urartee, e d'altra parte il Belli non dice che tutta quell'area è occupata soprattutto dalle rovine del villaggio armeno di Edremit alta (Artemita delle vecchie carte). È infatti disseminata di stele tombali armene (*hačkar*) spezzate e semisepolte, e lì vicino sorgono le rovine della chiesetta armena trasformata in stalla. Il luogo si chiama oggi Taşkale, o Kıztaşı, mentre Edremit è l'insediamento moderno sulla costa del lago.

Pur non avendo visto lo Harapköy Tepe, che si trova a un'altitudine di 300 metri superiore al livello del lago, credo di potere indicare in un luogo assai più vicino l'origine dei blocchi di calcare della "Sardursburg". Proprio a nemmeno 100 metri dalla chiesetta vi è il letto di un torrente, il Kotur Dere, che ha tagliato strati di calcare spezzandoli in più punti in forma di lastroni piatti (Tav. XIb). L'altezza più o meno costante dello strato è di ca 90 cm, e corrisponde all'altezza più frequente riscontrata sui blocchi della "Sardursburg". Il tipo di calcare mi sembra lo stesso dei blocchi di Van e la circostanza che questi pietroni hanno una superficie liscia e abbastanza regolare ed uno spessore costante, può aver dato l'idea di continuare il digrossamento e trasformarli nei parallelepipedi ciclopici che vediamo a Van Kalesi. Si può immaginare che venissero fatti scivolare verso la vicina costa del lago lungo il torrente su rulli di legno e poi trasportati con zatteroni fino alla riva prospiciente la Rupe di Van, o fino sotto la Rupe, se è vero che all'epoca di Sarduri I le acque del lago erano più alte di qualche metro. Quanto sopra è comunque per ora solo un'ipotesi che andrà controllata meglio anche dal punto di vista mineralogico.

#### *Iscrizioni del canale di Semiramide*

Ho potuto visitare nuovamente alcune delle iscrizioni di Minua lungo il canale<sup>11</sup>, che scorre sopra Edremit. Quella di 14 righe (detta di Katepants, Schulz XIX = CICh 34 = UKN 43 = HchI 29b = KUKN 61 = \*UCT A 5-12A), incisa su un piccolo sperone roccioso a ca mezzo km a sud di Edremit, misura m 1,45 di larghezza e 75 cm di altezza ed è ancora in buone condizioni (Tav. XIIa). Visitata il 4 di agosto. Per averla in buona illuminazione bisogna attendere le 13,30 circa. La piccola roccia si trovava naturalmente sul bordo del canale antico, oggi parzialmente interrato, che è stato sostituito all'inizio degli anni 1950 da quello moderno in cemento, che scorre in quel punto a soli due metri di distanza. All'epoca di Schulz, che la scoperse e pubblicò, essa si trovava sulla strada da Artamit (= Edremit) a Vastan (= Gevaş)<sup>12</sup>, la quale strada seguiva il corso del canale. A nemmeno 100 m verso N, a causa della conformazione naturale delle rocce, il canale fa un gomito verso ovest superando un canalone. In quel punto esiste una struttura di sostegno del letto antico e anche moderno costituito di grosse pietre. Il pietrone più in basso reca l'iscrizione di 9 righe (CICh 38 = UKN 47 = HchI 29e = KUKN 64 = \*UCT A 5-13) larga m 1,78 e alta 52 cm (Tav. XIIb). La figura al tratto, pubblicata dal Lehmann-Haupt in CICh col. 93, Abb. 14, che mostra un muro regolare ad angolo e verticale, non corrisponde alla realtà. In verità i pietroni che costituiscono la muraglia di sostegno sono molto più sconnessi e disposti in pendio.

Sempre ad Edremit, nel Baydaşlar Sokak, e in particolare nei giardini del signor Levent Baydaş (Levent Baydaş bahçesi) si trovano altre due iscrizioni relative al Canale di

<sup>11</sup> M. Salvini, Il canale di Semiramide, «Geographia Antiqua» 1 (1992), 67-80.

<sup>12</sup> F. E. Schulz, Mémoire sur le lac de Van et ses environs, «Journal Asiatique», 3ème série, IX, 1840, 257-323, + VII planches (envoyé à Paris le 8 juin 1828) alla p. 314.

Minua, che scorre immediatamente sopra e dal quale tutti i giardini sottostanti e in definitiva l'oasi di Edremit derivano la loro fertilità. Si tratta di una di 14 righe (CICh 35 = UKN 44 = HchI 29b = KUKN 61 = \*UCT A 5-12B) e una di tre righe (CICh 43 = UKN 52 = HchI 30e = KUKN 69 = \*UCT A 5-15A), su roccia obliqua aggettante; l'iscrizione misura m 1,27 di larghezza e 14 cm di altezza.

### *Kes̄iṣ Göl e Kaisaran*

L'epigrafe rupestre detta di Kaisaran (Tav. XIIIa), dal nome del villaggio più vicino, è una delle iscrizioni urartee più alte in assoluto, dato che è incisa su una roccia a 2780 m s.l.m.: CICh, Projekt 168 = HchI 79 = UKN 301 = KUKN 482. Si tratta di tre righe (delimitate da quattro linee diritte) incise su uno sperone roccioso aggettante difficilmente raggiungibile (Lehmann-Haupt: "auf schwer zugänglicher Felsenspitze"). Occorre una ascesa di più di un'ora, partendo dal villaggio, che si trova al limite orientale della piana del Kes̄iṣ Göl, per raggiungere una cresta che domina il lago artificiale creato da Rusa II (Tav. XIIIb).

La sua posizione è coerente con il testo. Si tratta non già di una iscrizione commemorativa, isolata com'è e a quell'altezza, ma di un esercizio di lapicida. Il testo infatti non ha senso compiuto, anche se l'epigrafe in sé è completa (diversamente da quanto ritiene König), essendo stato riempito lo spazio fra due fessure naturali della roccia. Dimensioni: largh. 52 cm, alt. 10,5 cm. La roccia è esposta ad est, e alle 11,30 dell'8 agosto, data e ora della visita, era entrata in ombra da circa mezz'ora, come si vede sulla foto. A destra il bordo è sbocconcigliato. Rispetto alla foto del calco pubblicata dal Lehmann-Haupt in CICh 168, Taf. XLI, si nota inoltre, proprio al centro, il foro di una fucilata, che rende quasi illeggibile U[RU] alla r. 1 e danneggia i sottostanti segni -<sup>r</sup>i pu<sup>1</sup>-.

- 1   <sup>r</sup>hal-di-ni-i URU-i-e pu-lu-si
- 2   al-zi-ni-e-i pu-lu-si na-a-ma-ri
- 3   a-ú-di <sup>r</sup>hal-di-ni-e-i URU-e-i

Il termine a-ú-di, intraducibile, ricorre una sola volta ancora, e in un contesto analogo, sulla stele del Kes̄iṣ Göl (CICh 145 = UKN 268 = HchI 121 = KUKN 391 = \*UCT A 12-11) di Rusa II, alla r. 24': [ma]-nu-ni a-ú-di "ru-sa-<sup>r</sup>hi-na-<sup>r</sup>ú-[e]; esso regge la forma genitiva del nome di una città fondata da Rusa II stesso, e la forma <sup>r</sup>hal-di-ni-e-i URU-e-i è ugualmente un genitivo della "Città di Haldi". Questo nome può collegarsi alla città fondata da Rusa II ad Adilcevaz (v. sopra). Dunque si potrebbe forse scorgere in ciò un indizio che l'epigrafe di Kaisaran sia da attribuire ad un lapicida dell'epoca di Rusa II. Tuttavia non si tratta sicuramente dello stesso che ha inciso la stele del Kes̄iṣ Göl; lo vedo confrontando la mia foto di Kaisaran con l'ottima foto della stele del Museo di Berlino pubblicata in CICh Taf. XXXVIII. Basta confrontare il segno *lu* che ha due forme diverse nei due documenti, secondo le due varianti grafiche riprodotte nelle liste dei segni di UKN p. 37 e HchI Taf. 103: la stele ha la prima, Kaisaran la seconda. Del resto anche la diversità di esecuzione dello stesso segno (appunto *lu* in r. 1 e r. 2) mostra che si tratta di un esercizio.

Mentre Melikišvili mette questa epigrafe fra quelle di ignota attribuzione (UKN 301), il König la mette in fondo a quelle di Minua (HchI 79) notando che le forme dei segni *di*, *ú*, *ni*, *lu* fanno riferimento al periodo di Išpuini e Minua. Gli dò ragione almeno per quanto riguarda i segni *lu* ed *ú*. Ma è proprio il profilo dei singoli cunei, verticali e orizzontali, che accosta questo ductus più al periodo antico che non al VII secolo. I bordi dei cunei sono infatti piuttosto arrotondati, e li accosto alla forma dei segni nell'epigrafe di Meher Kapisi

(che presenta anche la variante antica di *lu*), mentre i cunei delle epigrafi di Rusa II sono tagliati diritti, triangolari, come si vede nell'epigrafe templare di Ayanis (v. *Ayanis I*, p. 265 sgg.). In sostanza mi sembra che l'argomento paleografico, che depone per il periodo intorno alla fine del IX sec., faccia aggio su quello contenutistico, che l'attribuirebbe a Rusa II.

MIRJO SALVINI

### **Archaeological researches in Armenia, 9th – 31rst July 2001**

The Italian-Armenian expedition in the Sevan lake basin began this year the survey of the former *rayon* of Kamo, now Gavar in the territory of Gegharkunik *marz*. The archaeologically relevant area, known in the Urartian inscriptions as "Land of Uelikuhi", lies between the Gegarkunik and Geghamasar ranges, the volcanic group of Yeratunber and the lake shore and is mainly composed by a wide plain, rolling in the north-western part, which seems to offer excellent condition for agriculture and stock-raising. Field activity went on from 13<sup>th</sup> to 27<sup>th</sup> July.

The area under examination was not known to the mission, therefore this year the aim was a first approach to the territory and a general overview. In the two weeks of fieldwork 23 sites have been visited, going from Early Bronze Age to mediaeval period. The sites, like those already known in the former Vardenik and Martuni *rayons* studied by the expedition in 1994-2000, generally are fortifications of various dimensions, ranging from approximately 10 ha to less than one; necropolises formed by stone and earth kurgans, with a diameter between 4 and 10 m and open settlements of large dimensions, generally late (Hellenistic, Roman and Mediaeval periods). The high anthropization of the territory, that often hid, damaged or destroyed archaeological evidence, makes the study particularly difficult.

Among the most important fortifications visited this year is the fortress of Berdi Glukh, well known under the Urartian name of <sup>URU</sup>Haldi on the basis of the famous inscription (inscription of Nor Bayazid) found on the site. However, in comparison with the fortresses with royal inscription studied in the other area (Tsovak, Tsovinar and Kra, this last one connected with the Atamkhan inscription), Berdi Glukh is smaller and with much less powerful structures. It lies in the middle of the city of Gavar, on a flat promontory approximately oriented north-south with cliffs all around except on the western side (fig. 1), with walls closing the approachable part and along the edges of the cliff. Unfortunately the fortress is not well-preserved, also because the graveyard of Gavar lies on its surface.

About a dozen of kilometres south-south-east of Gavar is located another very important fortress, Ilikavank, which goes back to the Late Bronze-Early Iron Age. It lies on a spur of the Gegharkunik range, connected to the main range by a low saddle, and commands the valley of the river Gavaraget (fig. 2). It is approximately 200 × 380 m, with a surface covering almost 8 ha. It is formed by three concentric lines of strong walls, a gate on the southern side defended by two towers and a citadel with buttressed walls (figs. 3, 10). The western side is less defended because the hillside is very steep, almost vertical. On this slope there is an opening in the ground that reveals a man-made narrow tunnel carefully built with worked stones (fig. 4). Ilikavank, which is doubtless the most important of the area, with its large dimensions and its complexity falls in the same category of the great Early Iron Age fortresses of the Araxes valley. A cursory examination of the surface pottery revealed also sherds of the Urartian, Hellenistic/Roman and Mediaeval periods.

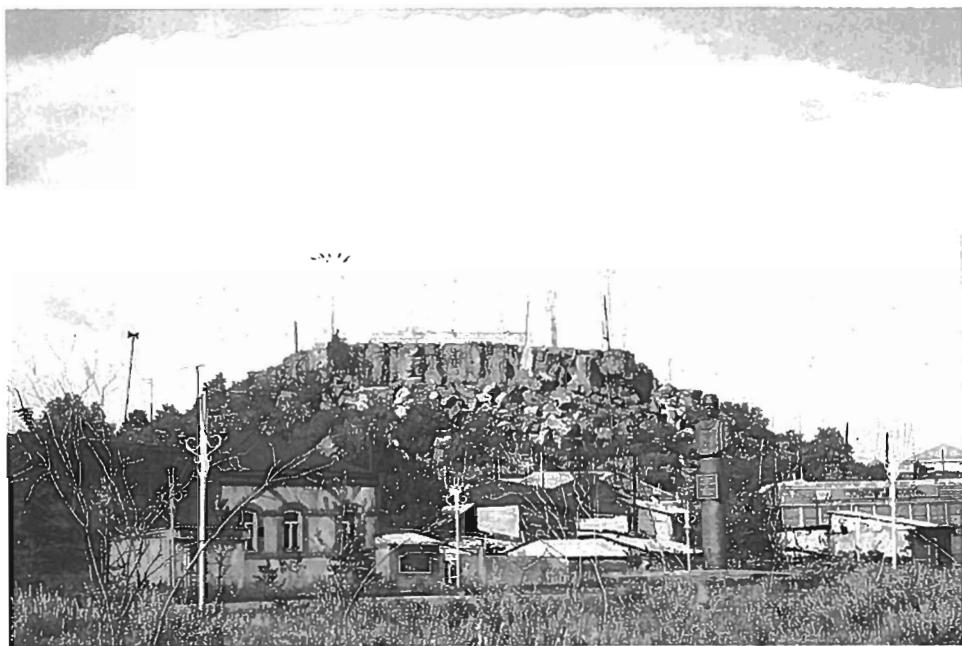


Fig. 1 – The western side of the fortress of Berdi Glukh/<sup>vr</sup> Haldi seen from the Gavar Town Hall.



Fig. 2 – Northeast view of the hill where Ilikavank is built, from the fort of Tsaghkavank. The arrow indicates the location of the frotress.



Fig. 3 – Southern view of Ilikavank. The traces of the concentric walls are visible on the slope and the citadel is located on the highest hump.



Fig. 4 – Ilikavank. The worked stones lining the inside of the tunnel on the western slope.

All the other fortifications of the same period have much smaller dimensions, and often they are built on flat stretches of land, with one side naturally defended by cliffs. One of these is for instance Zhami Dar, located about 3 km downstream of Gavar on the right bank of the Gavaraget canyon. On the site is well-visible a wall oriented north-south, about 3.80 m thick and 75 m long, formed by large, unworked or very little worked stones (fig. 5). On the site there are the remains of another similar fort, Jaghatsi Dar, so in this point the Gavaraget canyon is closed between the two.

The expedition visited another interesting site, the fort of Heri Berd. Its walls surround the edge of the crater of the small, very recent volcano of Noratuz (fig. 6). The volcano in fact, although extinct, is so recent that it is not possible to assess geologically its age, and a dating of the fort will give a good *terminus ante quem*.

Two other well-known sites, Ayrivank (where the famous monastery lies) and Kanagegh, were visited. In both cases pre-Urartian and possibly Urartian sites were heavily overbuilt by very large Hellenistic, Roman and Mediaeval settlements and structures. There is need of a careful study of the sites before being able to distinguish the chronological differences.

In the village of Sarukhan the expedition was given an Aramaic stele, found some years before by farmers not far from the village. The stele (fig. 7), which goes back to II century B.C., relates of a land distribution by king Artaxias I and is part of a complex of analogous stelae with inscriptions found in the Sevan basin. This particular one is intact and unique for its preservation (all the others, in fact, are fragmentary), was given to the Gavar Regional Museum and it is now part of the permanent exhibition. The findspot of the stele, known as Pali Tak, was shown to us and its examination revealed that on the spot, at the foot of a cliff, existed also a necropolis going at least from Late Bronze Age to the Roman period. On the top of the hill overlooking the findspot and the cliff lies the Tsaghkavank fort. It is delimited by the cliff and formed by two almost perpendicular walls built probably in the Late Bronze Age with very large, unworked stones of 1-2 cu. m (fig. 8), and it was inhabited until the Middle Ages. On the rocks inside the fort there are natural hollows, later worked and made regular, with a diameter of 20-30 cm and a depth of 15-25. One of them is located just on the cliff, above the place where the stele was found according to local people, its dimensions (diameter 23.8 cm, average depth 19 cm) match those of the bottom part of the stele plus some wedging and is located on a much-worked rock outcrop (fig. 9). It is possible to think that the stele was inserted in this hole, but this is a mere hypothesis that, by its nature, cannot be either proved or disproved.

A first look at the distribution of the fortifications and of the necropolises shows that they are located mainly on the south-eastern part of the plain, not far from the Gavaraget valley and on the lake shore. Modern settlements follow exactly the same pattern and this fact doubtless is not casual. The locational strategies down to the Hellenistic-Roman period and at our days evidently obey to the same constraints, even if at first sight these are not evident. In fact the north-western part of the Gavar plain, although more rolling than the south-eastern one, does not seem to have different ecological conditions.

One of the basic differences between the Gavar region and the areas previously studied is evident in the dimensional ratio of the settlements. In Uelikuhi exists only one large fortress, Ilikavank, and all the other fortifications are quite small, so locational data confirm the Urartian information that in the Uelikuhi land existed only one polity. The Vardenis and Martuni *rayons*, instead, have one large fortress, comparable to Ilikavank, four others with lesser dimensions but still substantial (size class not existing in Uelikuhi) and many small forts, analogous to the ones known in Uelikuhi. This can be explained by the Urartian inscriptions, which speak in the southern region of the "land of Tulihu" and of



Fig. 5 – Zhami Dar. Remains of the western wall that closes the easily approachable area.



Fig. 6 – Western view of the Noratuz volcano. The remains of the fortification walls, that ring the crater, are too dilapidated to be visible in the picture.

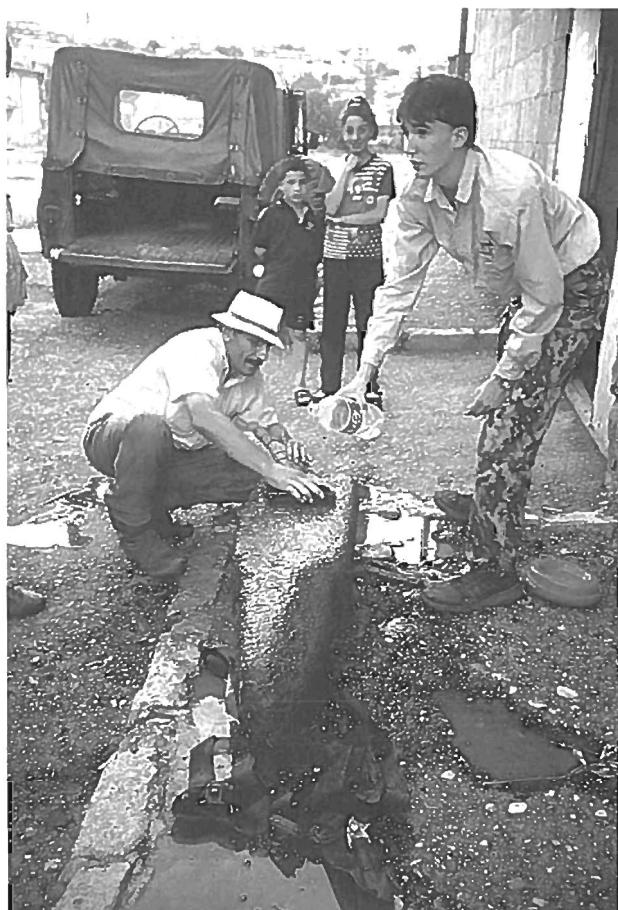


Fig. 7 – The stele with the Aramaic inscription of Artaxias I being transported to the Gavar Regional Museum.

the "four kings of Uduri-Etiuni". Therefore both epigraphical and archaeological information show the existence of a federation and of an independent 'land' in the southern areas and of a compact polity in the Gavar region.

Another peculiarity of the Uelikuhi area is the fact that there is only one surely Urartian fortress, Berdi Glukh, while in the southern areas they are much more common. Furthermore, although its status of important fortress is evidenced by the inscription, it is in fact much smaller than the other Urartian fortresses with inscriptions (Tsovak, Tsovinar and Kra in the areas previously studied), both in surface and in perimeter and amount of structures.

To study the survival of Urartian-type pottery in later periods the excavation of test trenches at Ayrk (former Vardenis *rayon*) continued. A  $3 \times 3$  m square was located north of the previous one, in a cowshed, reached the virgin soil and confirmed the data already

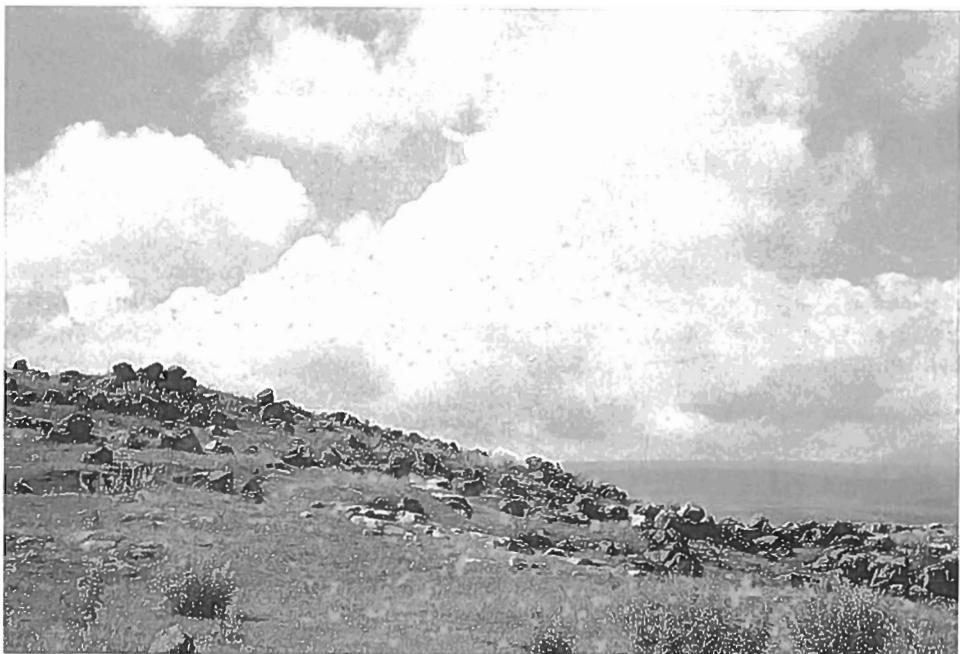


Fig. 8 – Tsaghkavank. General view of the fort.



Fig. 9 – Tsaghkavank. Natural hollow, worked and made regular, in a heavily worked rock outcrop. The hollow, located exactly above the findspot of the stele, can perhaps be related to it.

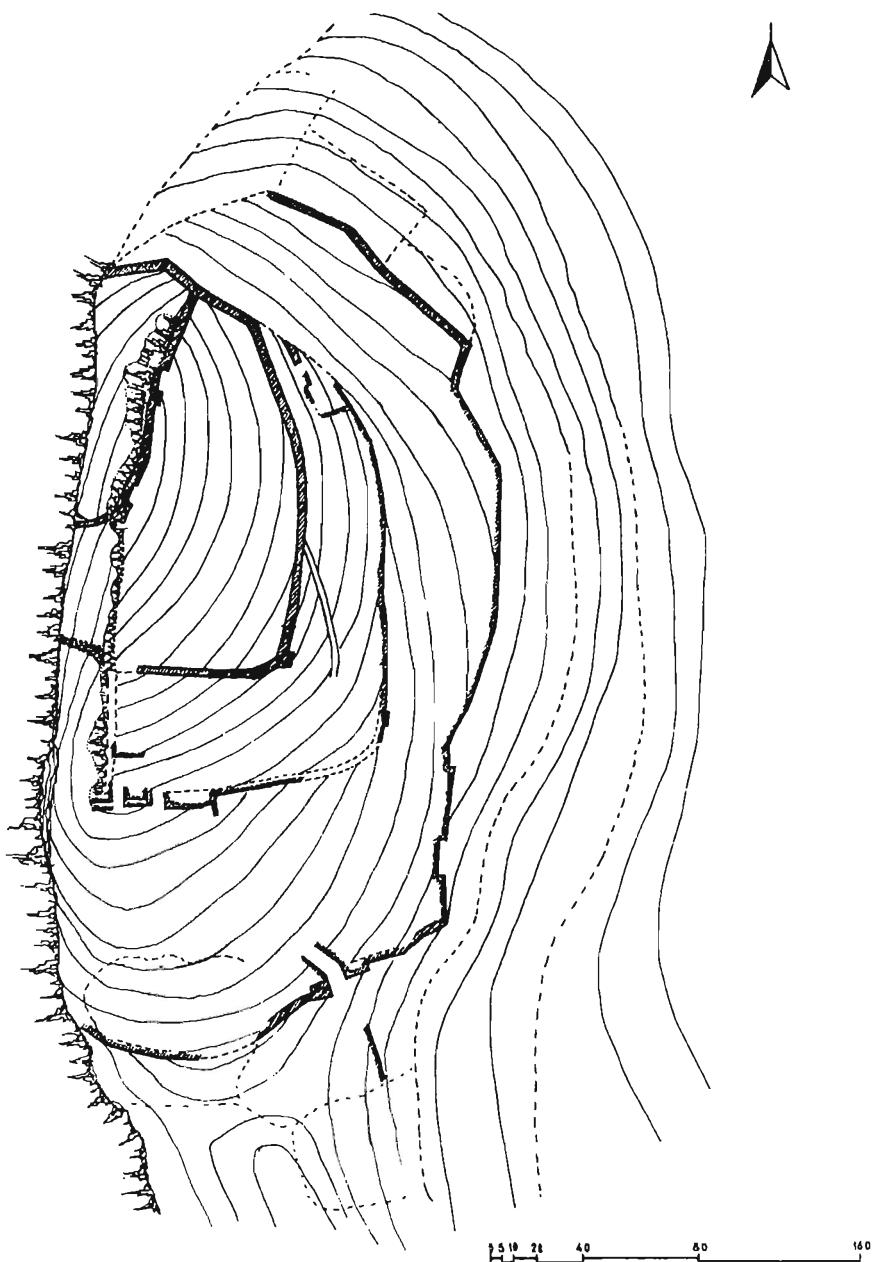


Fig. 10 – Ilikavank. Sketch-plan of the fortress.

gathered, all the materials found were post-Urartian. 6 m from the main fortress wall an inner wall was found, showing that the fortress extended northwards. Another 3 × 3 test trench was excavated in a cave southeast of the fortification, used as a chapel during the Middle Ages. Here was found also a small amount of pottery going back to VII-VI centuries B.C.

RAFFAELE BISCIONE  
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### Fifth Anatolian Iron Age Symposium

The "Fifth Anatolian Iron Ages Symposium" was held in Van 6-10 August 2001 in the Yüzüncü Yıl University auditorium. The symposium was organized by Ege University, Department of Protohistory and Near Eastern Archaeology with the help of sponsor institutions: Istanbul University, Yüzüncü Yıl University, the British Institute of Archaeology, Ankara and the Istituto per gli Studi Micenei ed Egeo-Anatolici of Rome. We sincerely thank those institutes for their kind help. 34 papers were delivered in the symposium by colleagues from different countries. The names of the participants and the titles of their papers are listed below:

- Charles A. Burney, "The Ethnic Context of Urartian Relations with the East"
- Michelle Marcus-Karen S. Robinson, "Bangles and Beads: Caucasian – Anatolian – Iranian Iron Age Distributions and their Implications"
- Ursula Calmeyer Seidl, "Frauen in Urartu"
- Lynn Swartz Dood, "The Late Bronze-Early Iron Age Transitions in Kahramanmaraş"
- Oktay Belli, "Research on Early Iron Age Fortresses and Necropolis in Eastern Anatolia"
- Gareth Derbyshire, "Gordion Iron and The Anatolian Iron Age"
- Maya Vassileva, "Phrygia, Troy and Thrace: The Evidence of the Early Iron Age Hand-Made Pottery"
- Karl Strobel, "Historische und archäologische Quellen für ein neues Bild der Geschichte Anatoliens in der ersten Hälfte des 1. Jt. v. Chr."
- Şevket Dönmez, "Demir Çağı'nda Amasya Yöresi"
- Kemalettin Körögöl, "The Northern Border of The Urartian Kingdom"
- Ünsal Yalçın, "Urartian Iron"
- Uwe Müller, "Norşuntepe and Lidar Höyük. Two examples for cultural change in Early Iron Age"
- Ursula Hellwag, "A.ZUM-*li* versus <sup>14</sup>A.NIN-*li*. Some thoughts about the owner of the so called 'Prinzensiegel' at Rusa II's court"
- Mirjo Salvini, "Some Considerations on Van Kalesi (Tušpa)"
- Paul Zimansky, "Rusa's Cities and the End of Urartu"
- Maryanne Newton-Peter Ian Kuniholm, "Dendrochronological Investigations at Ayanis"
- Norbert Karg, "The Late Second Millennium in the Upper Tigris Area (as seen from Gere Dimse)"
- Hermann Genz, "The Early Iron Age in Boğazköy"
- Antony Sagona-Claudia Sagona, "North East Anatolia in the Iron Age: Observations on Settlement Patterns and Historical Geography"
- Harmuth Kühne, "New Aspects on Assyria after 612 B.C."
- Mehmet Özdoğan, "Excavations at Mezraa-Telelat. The Neo-Assyrian Layers"