



Detail from the cleaning of block W.III of the Parthenon west frieze. Photo S. Mavrommatis, 2004

Ch. Bouras, The work of ESMA in 2003

M. Ioannidou, Works completed on the Acropolis, Spring 2004

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Preparation for placing the stainless steel grid in the bastion of Athena Nike. Inside the bastion are visible the relics of the classical poros naiskos. Photo K. Maloungas, 2004

available space between the north and north-east parts of the poros shrine and the corresponding sides of Balanos' basement constructions, two vertical columns of stainless steel (grade 316 L) were set as supports, one for the northeast corner of the temple, the other for the northeastern column of the temple and the northeastern block of the euthyteria.

Other special problems arose in the course of the structural restoration of the temple. Of significant importance was the degree of damage to the architectural members of the monument, the full extent of which could not be recognised as long as they were in place. Another problem was finding the marble fragments of the krepis that had been incorporated by Balanos in the non-reinforced concrete used to fill in the first and second steps of the krepis and the step of the euthyteria. Removal of these fragments was particularly difficult and time consuming. In the process of dismantling 319 architectural members of the temple it became evident that all the architectural members had

suffered heavy damage except for the columns. The damage resulted from the rusting of the clamps and dowels placed during the Balanos restoration, not only between members, but also to join fragments of the same stone. Likewise damaging was the extensive use of cement plaster. Because of the extent of damage to the ancient material, it became evident during the restoration of the architectural members that a great number of fragments that belonged together had to be joined and many new marble fillings had to be made for missing ancient fragments (a greater number than foreseen). To cope with these problems and to accelerate the work, the work-site was reinforced with an increase in personnel while two mechanical copying machines (pantographs) and a marble cutting machine were installed in special workshops in the area of the lifting crane below the SE corner of the Acropolis and on the rock E of the stoa of the Sanctuary of Artemis Brauronia respectively.

The temple of Athena Nike is the smallest monument of the Acropolis being restored,

simultaneously with the Parthenon and the Propylaea. The problems of the temple, both known and unforeseen, that arose during the process of dismantling, showed that the architectural members, small by comparison with the other monuments on the rock, require an equal amount of time for repair, structural restoration and conservation. Furthermore, the unique position of the temple yielded many surprises in planning the infrastructure for carrying out its restoration. While we tried not to burden the site with the size, shape and position of our constructions, most of the time the monument itself was the guide to the solutions chosen.

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Educational programmes of the YSMA in the framework of the Olympic Games

The Department of Information and Education of the Acropolis Restoration Service (YSMA) in collaboration with the 1st Ephorate of Prehistoric and Classical Antiquities, is participating in the parallel events in celebration of the Olympic Games in Athens. Its interest has been focussed on the Parthenon Frieze and the Festival of the Panathenaia.

Thus, during the school year of 2003-2004, our Service:

1. Issued the CD-ROM entitled "The Parthenon Frieze", in collaboration with the National Documentation Centre (EKT) of the National Research Foundation, in both Greek and English. In order to make the Frieze accessible to the general public, in June 2003 the CD-ROM about the Frieze was entered the Internet at the address [www.ekt.gr.parthenonfrieze](http://www.ekt.gr.parthenonfrieze).

2. As a necessary supplement to the CD-ROM, an educational game of assembling the Parthenon Frieze was produced. It consists of a photographic representation of the four sides of the Frieze at a scale of 1: 60. With the help of the game the student arranges the Panathenaic procession and tries to imagine it on the temple.

3. The book, "ΤΩΝ ΑΘΗΝΗΘΕΝ ΑΘΛΩΝ" (Prizes from Athens. The Panathenaic Games) was published in Greek and in English. The Panathenaic festival, the athletic and artistic contests and the great procession to the Acropolis are described through ancient vases and sculpture. The book is accompanied by a card game of making a Panathenaic amphora and a poster with a full-size amphora.

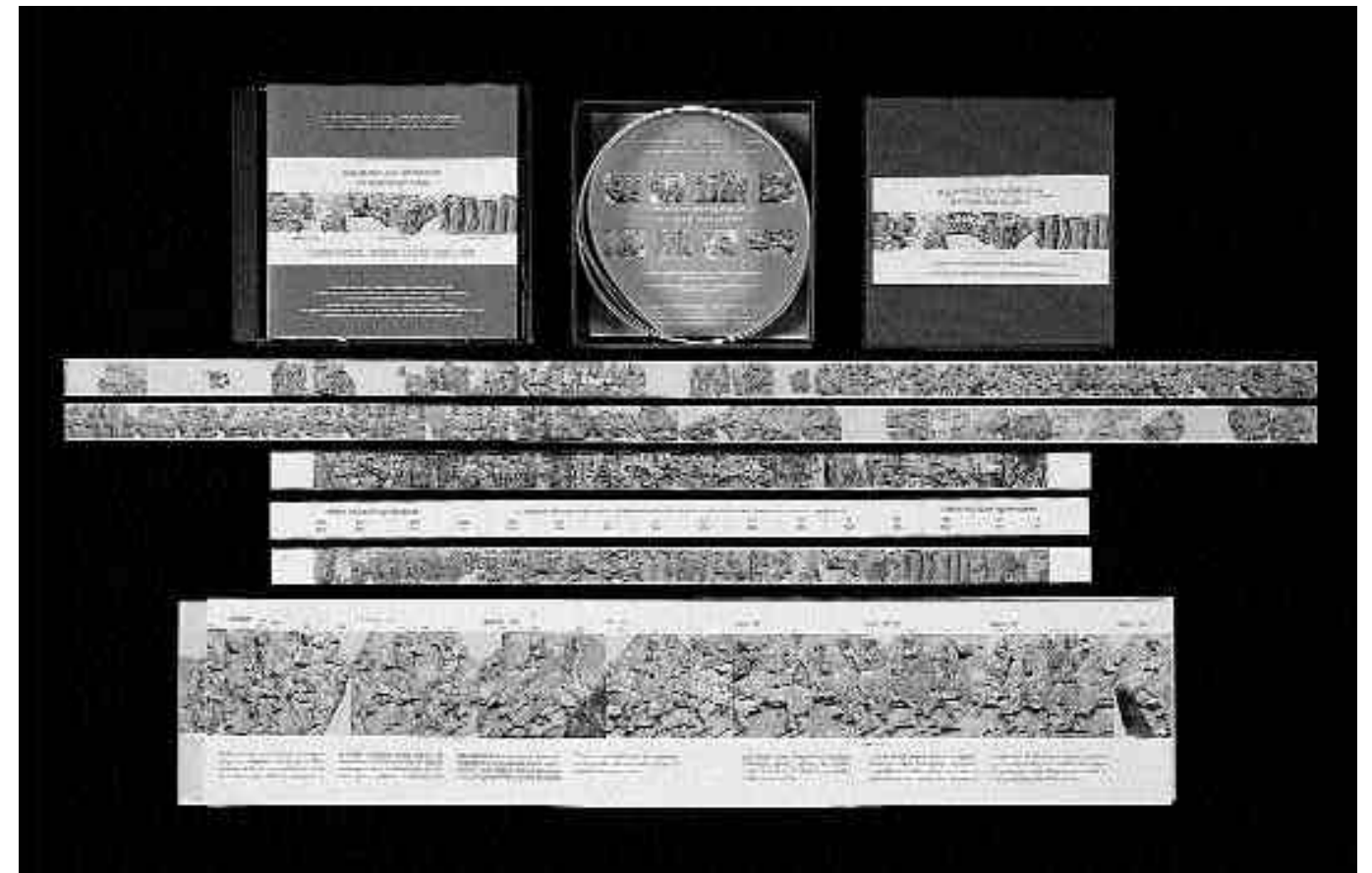
4. In collaboration with the EKT, the CD-ROM "The Parthenon Frieze" with the corresponding game of assembling it and the book "ΤΩΝ ΑΘΗΝΗΘΕΝ ΑΘΛΩΝ" were donated to 500 School Libraries, 150

Municipal Libraries and 92 Public Libraries throughout Greece.

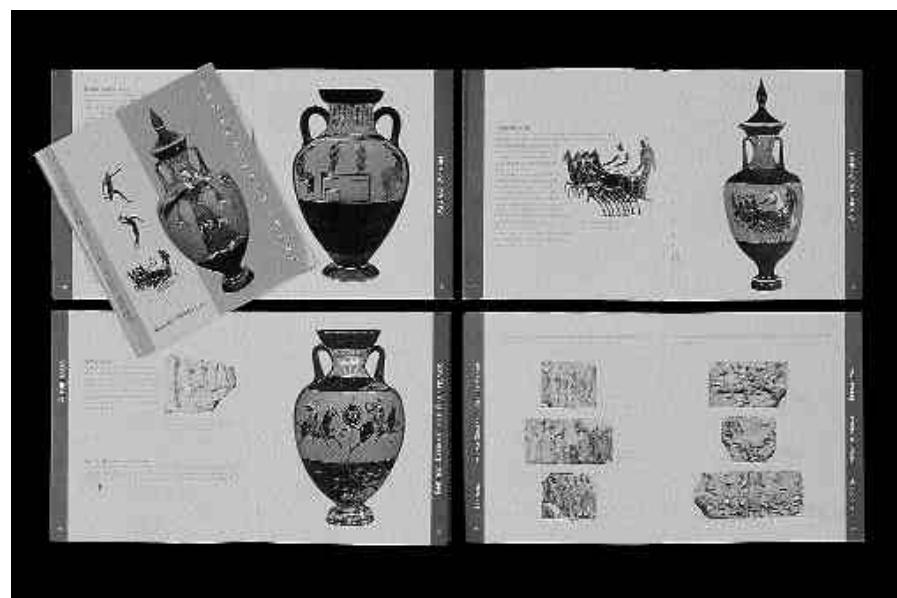
5. The educational museum kit, "The Parthenon Frieze" was given to 95 schools and libraries in Greece and to 50 institutions abroad, to large Museums and to Universities from America to Japan.

6. Given the opportunity of the Olympic Games, a special programme was organised on the subject "The Panathenaia seen through the Parthenon Frieze" It is based on the museum kit "The Parthenon Frieze" accompanied by the CD-ROM and the new booklets. The museum kit and the CD-ROM have been described in The Acropolis Restoration News, Issue 3, July 2003.

The programme was launched with a seminar held on Saturday, 1 November, 2003, at the Centre for the Acropolis Studies. Taking part were 152 educators from 93 institutions from 18 provinces of Greece. The seminar was in the form of an extensive educational



Educational game, photographic reconstruction and the CD-ROM "The Parthenon Frieze"



Educational book "Τὸν Ἀοηνηθὲν Ἀθλοῶν" (Prizes from Athens. The Panathenaic Games)

programme, through which the educators took part with their imagination in the festival of the ancient Panathenaia, in the artistic and athletic contests and in the great procession to the Acropolis.

First the educators were informed generally about the programme. Then they were divided into groups that took part in turn in eight workshops, using the museum kits of the Department. The educators had the opportunity to have a lesson in topography through the museum kit "Let's Go to the Acropolis", to understand the architecture of the temples using the museum kit "An Ancient Temple", to work with marble using the museum kit "The Art of Stone Sculpture", to observe the Parthenon Frieze, to study its composition on a model of the temple, to get information from the CD-ROM through the museum kit "The Parthenon Frieze", to observe the various types of ancient dress illustrated in the Panathenaic procession aided by the museum kit "Ancient Greek Dress", to recognise the musical instruments carried by the participants in the procession with the help of the museum kit "Ancient Greek Musical Instruments", to observe the divinities on the East Frieze aided by the museum kit "The Twelve Olympian Gods", to learn about the contests that took place in the Panathenaia through the book "Τὸν Ἀοηνηθὲν Ἀθλοῶν" and through literature, mythology and modern works of art. The purpose of the work-

shops was for all who participated to understand how, with specially designed educational material for alternative teaching, such as the museum kits, that schools can borrow, they can approach in a more interesting and original way subjects related to the monuments, especially the Acropolis and in particular the Parthenon Frieze.

All the schools that participated in the seminar received as a gift for their library the museum kit "The Parthenon Frieze". During the school year our Service worked continuously on this project, through the network of the schools, providing assistance and further educational material at all stages of the programme. Special emphasis was placed on the big programme of the YSMA for the West Frieze: its dismantling, conservation and cleaning and at the same time the preparation of the copies that have already replaced the originals on the monument.

The programme was brought to completion on May 15, 2004, with the 8th Symposium "Educators and Programmes on the Acropolis" (the previous symposiums ones were held in 1991, 1993, 1994, 1996, 1998, 2001, 2003). The special theme this year was "The Panathenaia through the Parthenon Frieze" at which the work of the schools and libraries that had participated in the programme was presented.

Eighteen presentations were made by 22

speakers, representing 15 Schools, the Educational District of the Evros in Northern Greece, the Tellogleion Museum of Thessalonike and the Ministry of Culture and Education of Cyprus. All the schools were State schools. Nine presentations were made by provincial schools, from Gastouni, Evros, Thessalonike, Karpenisi, Lamia, Larisa, Nafpaktos, Pyrgos and Chios. Five schools were primary schools and eleven were upper schools (gymnasium/lykeion).

The programme of presentations began with the work of the 5th Gymnasium of Palaio Phaleron where the students travelled to Italy, gave a theatrical presentation and also held an exhibition of painting and collage, many of which had been worked on the programme Photoshop. At the Peiramatikon Gymnasium of the Ionideion School, the students began with puzzle games and studied cult activities, seeking modern Greek parallels in today's festivals and the panegyria. Educational activities concerned with cultural heritage and the Museums, are well served by the programme "Versatile Zone" of the Hellenic Ministry of Education. The next presentation was by the School Councillor of Primary Education of the Province of Evros. She explained analytically how they had used the museum kit "The Parthenon Frieze" in in-school Training for the "Versatile Zone". Following this were reports from three schools that had used it in the specific programme. Two are Primary schools, the 29th Primary School of Athens and the First Primary School of Karpenisi. Here the students worked on the Panathenaia and wrote their own stories and poems. The students of the 5th Gymnasium of Lamia made their own CD-ROM with Panathenaic amphorae and a book about the Acropolis and its monuments. The valuable experience of the Tellogleion Foundation for the Arts where the exhibition "The New Acropolis Museum" was held, was the subject of the next presentation. Some 4,000 students of all ages from 70 schools of the Province of Thessalonike learned about the Parthenon and its sculpture by using the museum kit. From Thessalonike the museum kit travelled to Cyprus. Eight museum kits on the Frieze were donated to the Cypriote Ministry of Education and Culture. The use of the museum kit and its application in Cyprus with its festivals of Aphrodite was presented by the

Department of Museum Instruction in Primary Education of the Ministry. The next report was by the 2nd Lykeion of Nafpaktos. Three schools collaborated in presenting M. Korres' exhibition, "From Mt. Pentelicon to the Parthenon" and they organised a big symposium on the sculpture of the Parthenon. The next reports showed how the Frieze was approached by a full-day school, the 145th Primary School of Athens, with students from all the classes collaborating in a musical event in honour of Pallas Athena, how the Gymnasium of Acharnon, an intercultural school, used a questionnaire about the Frieze to involve the citizens of the area, how the Gymnasium-Lykeion of Volissos, in the island of Chios, in their mathematics lesson applied the Pythagorean theorem to the Frieze and made a table-game, how the students of the 2nd Primary School of Acharnai in their English class posed and translated the sort of questions that a foreigner might ask about the Acropolis. Since the museum kits are really

another form of a book, they belong in a library. Thus, the kits were donated to institutions with libraries, as well as to library networks. Five papers presented the excellent use of the kits in school libraries: in the 6th Lykeion of Aigaleo the students produced a little athletic newspaper of classical times; in the 3rd Lykeion of Pyrgos in the lesson of local history the Parthenon Frieze was compared with the Frieze of the Temple of Apollo Epikoureios; in the 1st Gymnasium of Laurion, the emphasis was on a large exhibition with 25 posters in which the students presented the Panathenaic Festival and contemporary athletic games through 150 digital photographs; in the 7th Lykeion of Larisa, the museum kit travelled to 9 schools of the province and the students used it with emphasis on narration and description and, finally, in the Lykeion of Gastouni in Elis, where myth and the art of modelling in clay were emphasised. The students collaborated in a modern torch race, the goal being the ar-

rival of the Olympian flame. The above eighteen presentations give a representative example of the various works done by the students in the framework of the programme. In June, all the schools that participated in the programme handed in to our office full reports of their work.

Through the above activities we estimate that this year more than 15,000 students worked with the museum kit and over 30,000 students with the CD-ROM of the Parthenon Frieze.

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The Parthenon frieze as seen by a student of the 5th Gymnasium, Palaio Phaleron, Athens



Details of the cleaning of blocks W.III (above left), W. IX (above right) and W.X (below) of the Parthenon west frieze. Photo S. Mavrommatis, 2004



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