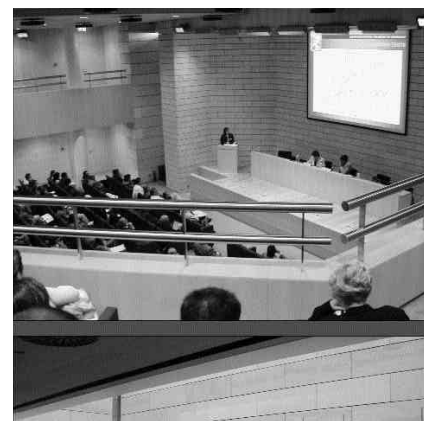


5th International Meeting for the Restoration of the Acropolis Monuments

Athens, 4-6 October 2002

New Administration Building of the National Bank of Greece – Amphitheatre of the Hellenic Ministry of Culture



loose sooty deposits and homogenous compact crusts it causes discolouration in the calcined Pentelic marble. Thus, for these two cases, the simultaneous use of infrared and ultraviolet radiation was tested for the first time, with excellent results.

These observations led to the designing of an entirely new system, developed by the FORTH-IESL, with technical features and ergonomic design specific for the cleaning of the west frieze. The system is able to work on two wavelengths (infrared 1064 nm and ultraviolet 355), with the possibility of using one or both of the two nodes together, with various energy ratios. For greater speed in the work, the new laser system works in parallel with the laboratory laser of the FORTH-IESL, which has been similarly modified. The first three blocks have already been cleaned and, according to the programme, in October 2003 it will be possible to exhibit the six blocks, numbered W.III, W.IV, W.V, W.VI, W.VIII and W.XIII. The conservation of the other blocks will gradually be completed by April 2004. After conservation, the blocks of the west frieze will be exhibited in the New Acropolis Museum. Copies in artificial stone will take their place on the monument.

The conservation group of the west frieze includes the conservators A. Panou and K. Frantzikinaki and the marble technicians C. Demopoulos and I. Skalkotos. The cleaning was carried out by the two above mentioned conservators and by the conservator K. Basileiadis together with the physicist Th. Ditsas, colleague at FORTH-IESL. The work is supervised for the Acropolis Ephorate by the archaeologist Ch. Vlassopoulou.

Evi Papakostantinou
Chemical Engineer
Head of the Department of Surface
Conservation of Monuments of YSMA

The art and architecture of the Athenian Acropolis is part of the curriculum in most schools throughout the world. The interest of pupils, teachers and the general public together with the conviction that the best form of conservation is preventive conservation, which begins with education, formed the impetus for the Committee for the Conservation of the Acropolis Monuments (ESMA) in collaboration with the 1st Ephorate of Prehistoric and Classical Antiquities, to launch educational programmes as early as 1987.

Today the Department of Information and Education of the Acropolis Restoration Service (YSMA) in collaboration



Museum kit "The Parthenon Frieze". Photo S. Mavrommatis, 2003

with the 1st Ephorate of Prehistoric and Classical Antiquities, provides information about the activities of ESMA and YSMA in keeping with modern international practice of informing the public about important public enterprises. It also exposes pupils to the art and architecture of classical antiquity, familiarising them with the great projects of conservation and restoration being carried out on the Sacred Rock.

The Department:

1) Organizes educational programmes

for specific groups and in particular for school classes –of around 25 pupils each– on the subject of the Acropolis and its monuments.

2) Conducts seminars for educators and students on classical architecture and art, as well as on the restoration of classical monuments.

3) Produces educational resources on the subjects of classical art and architecture and also on the Acropolis restoration projects, which is lent or donated to schools.

4) Organizes special symposia for educa-

tors under the general heading: "Educators and programmes about the Acropolis", the proceedings of which are published.

5) Designs exhibitions in cooperation with the personnel of the YSMA and other institutions.

A. Educational programmes

The educational programmes are addressed to school children whose schools include the thematic unit about the Acropolis in their curriculum. The visit is organized each time around a specific

subject and is determined by the age and knowledge of the children. The programmes are accompanied by special "path-finders" and visual material that is relevant each time. They take place on the Acropolis and at the Centre for Acropolis Studies.

Over the years many programmes have been developed and carried out. Special projects have been devoted to the Acropolis and its monuments: the ancient "Peripatos", the path around the Acropolis, the topography of the Sacred Rock through the texts of Plutarch and Pausanias; in addition, through the cult of the goddess Athena, the Parthenon frieze, the construction of ancient temples and the restoration of the ancient monuments. To date, some 62,000 students from schools throughout Greece have participated in these programmes. The Department collaborates with schools on the basis of the interest of the teachers themselves. Our interest is directed to the teachers since they can convey to their students the love and respect they have for the monuments. The order of application by the schools is strictly followed.

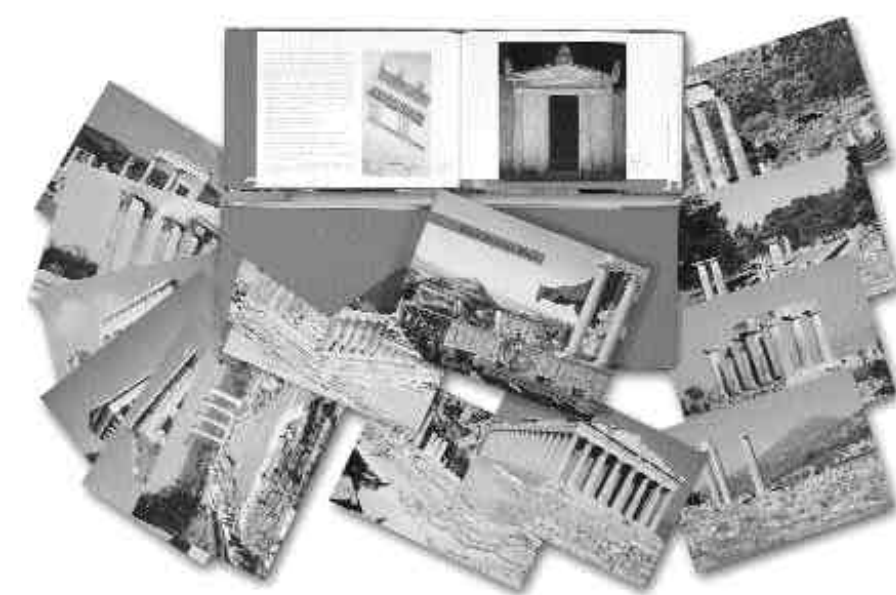
The collaboration of the Service with each school has been recorded since 1988 in an archive that contains information pertinent to some 1600 teachers and 1100 schools, their addresses, the programmes and special symposia they attended and the museum kits that have been lent. The processing of this information maps the schools and educators who have taken part in the educational programmes of the Acropolis over the past 15 years. Of great interest is both the periodical and continuous participation of a number of schools in these programmes, particularly from certain areas.

B. Seminars

The collaboration of the Information and Education Department with teachers takes a more specific form in the special seminars that take place regularly at the Centre for Acropolis Studies, throughout Greece and abroad as well. Seminars are held for groups of educa-

tors by request. Some 14,000 educators have taken part in the seminars, where the Department's educational resources are presented, with data from the architecture, art and history of the classical period and its monuments, to be included in the lessons so as to enrich the course being taught.

Seminars have been held for archaeologists, undergraduates and graduate students, for librarians of public, municipal, circulating, children's, university and school libraries throughout Greece and especially for many Greek and foreign educators through various institutions such as the many Directorates in the Ministry of Education (in Alexandrou-



Teachers' pack of the Museum kit "A Greek Temple". Photo S. Mavrommatis, 2003

polis, Attica, Ioannina, Kavala, Kalamata, Patras, Santorini, Thessalonike), the Institute for Education of Greeks Abroad, the Hellenic Ministry of Education, the Universities of Athens, the Aegean, Ioannina, Patras, Thessalonike, Thessaly, Thrace, the Union of Art Teachers in Greek Schools, the "MELINA Project-Education and Culture", the Greek Section of the International Council of Museums and the National Documentation Centre of the National Research Centre, and others.

A special network has been created between the Department and the For-

eign Archaeological Schools in Greece, as well as with the European Cultural Centre of Delphi. Groups of teachers of ancient Greek from England, Denmark, Germany Holland, Ireland and many other countries have taken part in the seminars.

Seminars have likewise been organised, in collaboration with the Ministries of Education of Belgium, Cyprus and the Ukraine, at Brussels, Leukosia, Kiev and Odessa.

All participants of the seminars or of the special symposia organised by the Department receive educational resources in Greek or in English.

C. Educational Resources

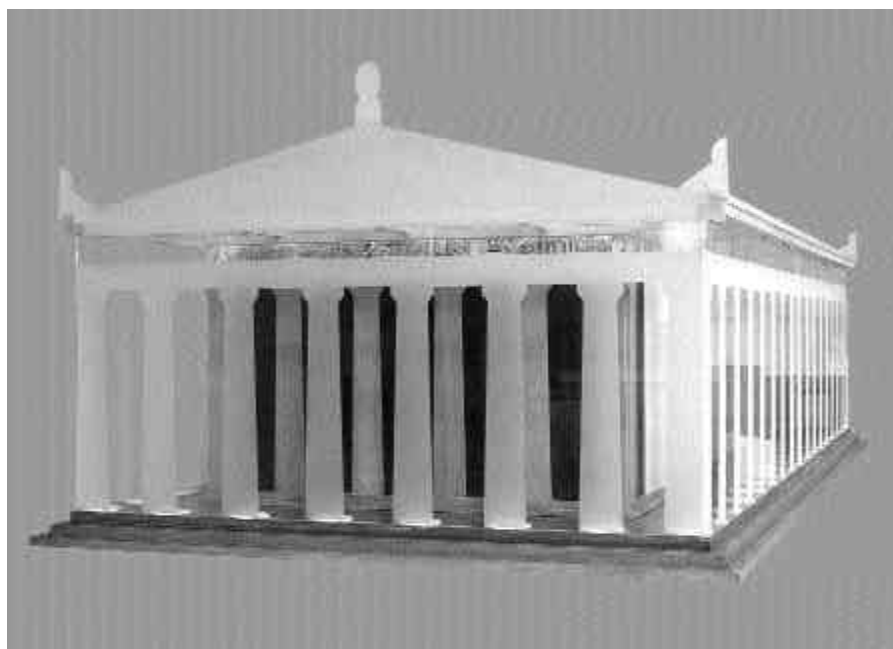
These comprise educational publications, museum kits, teachers' packs, books, special itinerary booklets or "path-finders" accompanying the programmes, films, CD-ROMs, posters and games. The Department's publications cover 20 different subjects and they have been circulated in more than 250,000 offprints in both Greek and English.

The resource material aims to help educators prepare themselves better both for the lesson at school and for the class visit to the archaeological site and the Museum.



Detail of the Parthenon educational model (scale 1:20) with the Panathenaic frieze in its original position. Photo S. Mavrommatis, 2003

Particular emphasis is placed on the distribution of material to educational institutions. Every school applying receives for its library a file containing educational booklets and posters, to maintain contact of the class with the monuments. Particular care is taken to achieve the best quality in scholarship, educational value and aesthetic appearance of the publications. The Department believes that the publications are of special importance because they are distributed to so many educators and students. Through the diffusion of these resources, the enor-



Educational model of the Parthenon (scale 1:20) with the Panathenaic frieze in its original position. Photo S. Mavrommatis, 2003

mous educational potential of the Athenian Acropolis and the era it symbolises, becomes available at a crucial level of education.

Through collaboration with all the above institutions as well as with the Hellenic Ministry of the Aegean, the Hellenic Parliament, many Embassies, the Foundation for Hellenic Culture, the National Technical University of Athens, the various Ephorates of Antiquities and Greek and foreign museums, it is estimated that some 4000 schools have the Acropolis publications in their libraries and the Acropolis posters on their walls.

Over the years it has become apparent that in addition to the training of each teacher through the material supplied, the seminars and the special symposia, in order to meet the great demand for participation in the programmes, it was necessary to enlarge the Loan Section, which is now growing continuously and is based primarily on the museum kits.

The museum kits comprise a multifaceted resource. Each one contains books, transparencies, games, models of monuments and copies of ancient objects. In their entirety they provide a spe-

cially designed educational resource of alternative teaching for use either in the classroom or in some other place of cultural reference. The old-fashioned idea of a closed box full of gifts for the child to open is associated with new technologies and the text is combined with new technologies, text, image and artifact complement each other to provide learning and fun.

The Department museum kits comprise the following subjects:

- 1) Let's Go to the Acropolis
- 2) A Greek Temple
- 3) The Art of Stone Sculpture
- 4) Ancient Greek Dress
- 5) Ancient Greek Musical Instruments
- 6) The Parthenon Frieze
- 7) The Twelve Olympian Gods

These museum kits-on-loan have travelled over the years to 2,350 schools in Greece and abroad and they have been used by some 150,000 students.

In 2001, an extensive special programme was completed, with the designing and reproduction of four museum kits in multiple copies. The new museum kits have evolved from their original form of 1990-1993, so that they are now easier to use and can be reproduced in numbers, according to the needs that may arise. They are circulated not only in Greece but also abroad and the publications have therefore been translated into English.

Until 2001, the Department was providing around 200 schools per year with museum kits-on-loan. The new kits have given us the opportunity for the first time to offer them to educational institutions and to lend them to more schools per year and for a longer period. Most of this material was a standing donation of the Ministry of Culture to a network of selected schools and educational institutions throughout Greece and abroad. The choice was based on a specific evaluation procedure so that the material would be used by the recipients to full advantage.

The four new museum kits are entitled:

“Let's Go to the Acropolis”, “A Greek Temple”, “The Parthenon Frieze” and the “The Twelve Olympian Gods”. Although the themes are separate, they can comprise an assemblage through which the culture of ancient Greece can be approached in a different way. The picture of a brilliant ancient sanctuary (museum kit “Let's Go to the Acropolis”) where the gods are worshipped (museum kit “The Twelve Olympian Gods”), in splendid temples (museum kit “A Greek Temple”) decorated by sculpture of unique artistic quality (museum kit “The Parthenon Frieze”), brings the sanctuaries to life before the eyes of the pupils. In this way they can approach the world of antiquity with pleasure, their intellects, imaginations and creativity activated. The museum kit on the subject of “The Twelve Olympian Gods” was selected in 2001 by the Educational Institute to be given as educational resource-material to the schools in the programme “Versatile Zone” of the Hellenic Ministry of Education. It has been given by the Ministry and the YSMA to 600 schools and educational institutions throughout the country.

Funding by the Stavros S. Niarchos Foundation enabled the Service to produce the museum kit entitled “Let's Go to the Acropolis” with 100 copies in Greek and 100 in English. Additional funding from the Bodosakis Foundation provided 100 copies in “A Greek Temple”. The assistance of the “Association of the Friends of the Acropolis” has been valuable throughout. These two kits were distributed to educational institutions in 2001-2002, in 47 provinces of Greece. The choice of the schools and educational institutions was made after a selection process based on a questionnaire sent to 1,100 institutions in all 54 provinces.

The basic criteria for the final choice were:

1. The greatest possible diffusion of the museum kits throughout Greece.
2. The total picture given by each school through the questionnaire (the number of students, school activities, coopera-

tion with other schools, participation in various programmes, the existence of a library in the school).

3. The determination of the teacher to use the museum kit in his school. The final selection of schools and institutions was made by our Service. Following this, a seminar was held on the contents and use of the museum kits in the educational process.

Distribution was spread over the Directorates of Primary and Secondary Education in the Ministry of Education, and



Teachers' pack of the Museum kit “Let's Go to the Acropolis”. Photo S. Mavrommatis, 2003

primary and secondary schools in both large and small cities and in the islands as well.

In addition they have been donated to the Classics and Pedagogic departments and Schools of Architecture in various Universities. They have also been donated to several networks of public libraries both for children and adults.

Finally, museum kits have been given to the departments of Education of several Archaeological Ephorates, Archaeological and Art Museums, and to other institutions with which the Department is collaborating.

In May 2003, a special symposium was held to evaluate the results of the use of

the two museum kits by the various institutions.

The museum kits have been donated to many places abroad:

Twenty museum kits have been given to Cyprus after an in-depth seminar.

In cooperation with the Institute for Education of Greeks Abroad of the Ministry of Education, museum kits were given to Educational Coordinators worldwide. Thus the kits have travelled from Egypt to Australia, from Canada to Scandinavia and to Turkey.

They have been given to large Museums,

such as the Metropolitan Museum of New York, the Ashmolean in Oxford, the British Museum in London, the Louvre in Paris, the Musei Civici in Venice, the Museum of Pisa and the Museum of Paestum in Italy, the National Museum of Bucharest in Roumania and the National Museum of Pancevo in Yugoslavia. The kits have also been presented to important universities such as the Universities of Berkeley California, Fairfield, Indiana, New York and Yale in the United States, in Germany to the University of Tübingen and to the National University of Kobe in Japan.

They have been given likewise to large schools abroad that have special Greek departments, in Austria, Belgium, Chile,



Museum kit "A Greek Temple". Photo S. Mavrommatis, 2003

Ethiopia, Germany, Holland, Ireland, South Africa and the Ukraine. The museum kit on the "Parthenon Frieze" is to be distributed during the school year 2003-2004.

D. Special Symposia

The department holds symposia on the general subject of "Educators and Programmes about the Acropolis". These provide a platform for dialogue between educators with a common interest in teaching through our cultural environment. The Acropolis, because of its importance and because it has an organised Education Department, provides the impetus and incitement for educators to proceed with their projects and to develop their own ideas. Thus far seven symposia have been organised (1991, 1993, 1994, 1996, 1998, 2001, 2003). Proceedings or summaries of the reports given at the symposia are published.

Taking part in these symposia are 150-200 educators and some 15-20 papers are presented each time. The value of the Symposia is evident in the multidisciplinary character of the reports. The 130 reports and proceedings comprise today an important and rich aggregate of projects related to the Acropolis that have

been applied by teachers. Over the years reports on some 100 applied projects have been added to the departmental archive.

These definitive results of teaching illustrate and describe in the best possible way the process itself of teaching that has been followed each time. The interested educator is able to examine original programmes about the Acropolis and its epoch, which contain new ideas, methods and applications that have been created by colleagues with the same background, the same possibilities and the same goals.

E. Exhibitions

In the framework of various exhibitions and meetings, the museum kits and in general the departmental publications have been exhibited in many parts of Greece, such as the Museum of Cycladic Art, the European Cultural Centre at Delphi, the Goulandris Museum of Natural History, the French Institute, many universities and libraries. Abroad, exhibitions have been held at museums in many cities such as Alexandria, Amsterdam, Belgrade, Bucharest, Kiev, Leukosia, Odessa, Osaka, Skopje and Zagreb. They have been shown also at interna-

tional book exhibitions, such as in Bologna and Frankfurt.

Finally, an exhibition of all the educational material was held in Brussels, by invitation of the European Parliament.

Connected with the above exhibitions, special seminars were held for teachers, at which the educational material and its possibilities for use in the teaching process were demonstrated. The relevant educational material of the department was given to those who had attended the seminar.

For the school year 2003-2004, the Department, sharing in the activities of Greece for the year 2004 and the Olympic Games of Athens, is organizing a special programme on the subject of "The Panathenaia seen through the Parthenon Frieze", using the new museum kit "The Parthenon Frieze".

The Panathenaia was the greatest festival of ancient Athens. Splendid athletic games were held together with competitions in rhapsody and music. A great procession, that illustrated on the Parthenon frieze, wound its way up the Acropolis on the 28th of Hekatombaion, around the 15th of August, thus coinciding with the time when the Olympic Games of 2004 will be under way.

The Department will be cooperating during the entire school year with select-



Museum kit "The Art of Stone Sculpture". Photo S. Mavrommatis, 2003

ed school and library networks. The project will be launched in November

with a special Seminar comprising several workshops. The attending representatives will be given resource-material. During the entire year the department will provide archaeological support and material to the participating schools. In May, shortly before the beginning of the Olympic Games of 2004 in Athens, the department will hold the 8th symposium, at which participating teachers will have the opportunity to present their work.

Through their teachers, the children who have benefitted from these programmes will participate in a very real way in the time-honoured celebration of the Panathenaia.

C. Hadziaslani
Architect-Archaeologist, Head
I. Kaïmara, A. Leonti, Archaeologists
Information and Education Office
of YSMA

The Parthenon frieze

A. Photographic reconstruction: the Parthenon frieze

This is a photographic unfolding of the frieze of the Parthenon on a scale of 1:20, length 8 metres. The photographs and their assembly are by S. Mavrommatis and the text is by C. Hadziaslani. It was published in 2002 in Greek and in English.

In this photographic reconstruction photographs of all the preserved blocks and fragments of the frieze have been brought together and the preserved drawings of J. Carrey (1674) and J. Stuart have been used to fill in what is missing so as to give the fullest possible picture of the whole.

B. CD ROM: the Parthenon frieze – Virtual representation of the Parthenon frieze

The CD ROM was produced in 2003 by our Service (YSMA-1st Ephorate of Prehistoric and Classical Antiquities) in collaboration with the National Documentation Centre of the National Research Foundation. It was composed by A. Choremi, C. Hadziaslani, S. Mavrommatis, K. Antoniadis, E. Sachini and I. Kaïmara.

It is addressed both to the general public



The CD-ROM and the photographic reconstruction of the Parthenon frieze. Photo S. Mavrommatis, 2003

and to specialists. The main menu comprises six units: general introduction, tour of the frieze, in which the user is led around the monument in order to see the frieze in its entirety, from left to right and vice versa, and also a block by block description of the representations on the frieze, in which each block is shown by itself, magnified, with its own descriptive text.

The photographic unfolding of the frieze and the CD-ROM comprise a tool with which you can "read" and understand the frieze, observe the correspondence between the north and south sides, make observations about the composition of a brilliant work of art, a work in which nothing is haphazard, where everything is according to a plan, which serves political, symbolic and religious purposes.

New publications

- E. Papakonstantinou-K. Frantzikinaki-P. Pouli-V. Zafropoulos, The Parthenon west frieze: a study of cleaning methods, Study for the restoration of the Parthenon, 7, Athens 2002 (in Greek with an English summary).
- C. Paraschi-N. Toganidis, Study for the restoration of the south wall of the Parthenon, Study for the restoration of the Parthenon, 6, Athens 2002 (in Greek with an English summary).
- Th. Skoulikidis, Methods for the Conservation of Pentelic Marble, Athens 2002 (in Greek with an English summary).
- T. Tanoulas-M. Ioannidou, Study for the restoration of the superstructure of the central building, Study for the restoration of the Propylaea, 2, Athens 2002 (in Greek with an English summary).
- N. Toganidis-K. Matala, Study for the restoration of the north wall of the Parthenon, Athens 2002 (in Greek with an English summary).
- C. Zambas, The refinements of the columns of the Parthenon, Athens 2002 (in Greek with an English summary).
- C. Zambas, Study for the structural restoration of the north façade of the Parthenon, Athens 2002 (in Greek with an English summary).