

## TRAINING PERSONNEL FOR ARCHITECTURAL CONSERVATION

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Efforts to protect historic monuments can be traced to the earliest construction of monumental structures. It is only over the past century, however, that there has been a conscious, concerted movement to conserve architectural heritage and to train specialists to carry out this task. At an international level there has been persistent, repeated and widespread recognition that the training of these specialists is one of the central issues in the success or failure of conservation programmes. Yet ironically enough, no organization has seriously taken the question up and thus this often expressed concern has remained little more than lip service.

1. C. ERDER, *Tarihi Çevre Bilinci*, Ankara: O.D.T.Ü., 1975, pp. 276-277.

2. C. ERDER, *Tarihi Çevre Bilinci*, Ankara: O.D.T.Ü., 1975, pp. 261-282.

3. This article is somewhat modified form of the report I presented at the Congress on European Architectural Heritage Year, Amsterdam, 1975, organized by the Council of Europe. I am grateful to Mr. Charles Zaegel, Head of the Division of Regional Planning, Monuments and Sites, for permission to publish.

At indication of the peripheral attention actually given to training may be found by noting the position of the topic in the agendas of the major international meetings concerned with architectural heritage held during the twentieth century. In 1904 the Sixth International Congress of Architects<sup>1</sup>, in 1931 the Athens Conference<sup>2</sup> and in 1975 the Council of Europe's Amsterdam Congress all placed this topic as the last paper on their agenda<sup>3</sup>.

No matter what the motives for this may have been, the education of professionals is one of the most central, complex and challenging problems we face because intrinsically it forces one to answer the question: what is restoration all about?

In this study we shall tackle the subject from three angles. First, approaches to training as they have evolved over time will be examined, linking them specifically to changes in the demands placed on the restorer. Then we shall present an overview of current training programmes and finally make some general proposals for the common bases that need stimulus and encouragement. Taking the subject in such a broad perspective necessarily means that the exploration of important national differences is secondary to distinguishing common trends and needs. Our emphasis on the restorer as an actor in response to his socio-cultural environment should put to rest any doubts about the importance of these differences. Nevertheless, the function of this exercise should be to provide a means of communication where all in the field may find common elements on which to build.

4. *Congrès International des Architectes et Techniciens des Monuments Historiques*, Paris, 6-11 May 1957, Paris: Editions Vincent, Fréal et Cie, 1969; *I Monumento per l'Uomo*, Acti del II. Congress Internazionale di Restauro, Venezia, 25-31 Maggio 1964, ICOMOS, Padova: Marsilio Editore, 1971.

5. M. GLEEN, "Historic Preservation, a Handbook for Architect Students," Unpublished Survey for the American Institute of Architects, Washington D.C. 1974.

6. *Programme of Courses: Architectural Conservation, Monuments and Historic Centres*, International Centre for Conservation - Facoltà di Architettura, Università di Roma, Roma: Istituto Grafico Tiberino, 1973, p. 5.

## GENERAL TRENDS IN THE FIELD FOLLOWING WORLD WAR II

Since the Second World War there has been an ever increasing interest in historic monuments and sites. Two International Congresses of Architects and Technicians of Historic Monuments<sup>4</sup>, one held in Paris during May 1957 and the other in Venice during May 1964, are direct evidence of this development. Moreover, the creation of ICOMOS, the spread of its reputation throughout the world, the large number of its member countries (57 in 1976), as well as its activities and meetings stand as a prominent symbol of this progress.

Together with these expanding activities and interest, some experts in the field tend to feel that there is an inflation in conservation. This inflation doubtless reflects itself in education as well. A survey by the American Institute of Architects<sup>5</sup> shows that nearly every American university with a Department of Architecture or City Planning has either formed or is planning to include in its curriculum a course, courses, or a department on the conservation of historic monuments and sites. This is certainly true for European countries as well. In addition, one finds other departments that deal with the social sciences, economics and tourism as well as official and semi-official organizations that are trying to cope with conservation needs within the domain of their own activities.

Ten or fifteen years ago undertaking a study of training programmes was comparatively simple. The number of centres was easy to count. Students interested in conservation could attend the traditionally known schools in Paris, Rome, Florence, Milan and Naples for longer periods of study or could go to Vienna or London for different types of specialized training. In 1965 the International Centre for Conservation and the Faculty of Architecture at the University of Rome established a joint course in architectural conservation to handle the burgeoning need for special, interdisciplinary training. The course offers its participants in six months "the broadest possible survey of cultural and technical problems of architectural conservation, while stressing the methodological aspects dictated by a strict approach to conservation problems."<sup>6</sup>

During this period regional training centres grew and developed with the aid of UNESCO. Examples of this development include the centre in Mexico city for Latin America, one in Jos for Africa, another in New Delhi for South and Southeast Asia, and a fourth in Baghdad for the Arab countries. The strengths and weaknesses observed in the formation of these centres and their points of success and failure offer a wide spectrum of experience which deserves careful evaluation.

Throughout this period the increasing exchange of views at an international level assisted older establishments to revise their programmes and stimulated new programmes as well as the expansion of individual courses into full-fledged programmes. In Europe these include universities and colleges such as York and Edinburgh, London, Louvain, Delft, Copenhagen, Aarhus, Stockholm, Berlin, Vienna, Naples as well as institutes such as the "Centre d'études supérieures d'histoire et de conservation des monuments anciens" in Paris, the "Istituto de Restauracion de Monumentes y Conjuntos Historico-Artistico" in Madrid, to

name but a few. Outside these geographical areas individual attempts mark important advances, such as the universities in Tokyo and Teheran as well as the programme in architectural conservation at the Middle East Technical University in Ankara established in 1963 and another at Columbia University in New York instituted one year later.<sup>7</sup>

7. C. ERDER, On the Training of Architect-Restorers for Turkey and the Middle East, *Monumentum*, v. V, 1970, pp. 25-31.

Tying these earlier developments to more recent ones have been two international meetings which have dealt specifically with the subject. The first was the Symposium on the Training of Architects and Technicians responsible for the Conservation of Sites and Monuments held in Pistoia during September 1968 under the auspices of the United Nations. The papers read and the conclusions drawn at the symposium were published in a special issue of *Monumentum*.<sup>8</sup> The second meeting held in Rome during February 1975 took up the matter in a wider sense but with a selected group of experts. This "Symposium on Environmental Education" sponsored by the International Centre for Conservation along with the British Council and the Goethe-Institut in Rome was oriented toward the evaluation of the historic environment as generally handled in education. The early publication of these papers proved especially useful.

8. *Monumentum*, ICOMOS, v. III, 1969.

In addition, one should single out several noteworthy contributions that fall outside the above pattern. One section of the First International Congress of Architects and Technicians of Historic Monuments presided over by M.G. de Angelis d'Ossat was devoted to the formation of architects in the service of historic monuments. Several meetings organised by the Council of Europe have also dealt with the subject.

## RECENT DEVELOPMENTS

This very general picture of the situation ten years ago has altered immensely. The sheer number of courses, training centres and publications on the training of personnel has multiplied. Even in Turkey, a country with only a recent tradition in this field, two more centres of advanced training in conservation one at Istanbul Technical University and the other at the State Academy of Engineering and Architecture in Istanbul, are now offering full post-graduate programmes leading to a masters degree in the conservation of monuments and sites and are adding to Turkish publications in the field. Other universities that offer architectural training in Turkey are weighing the establishment of similar programmes and nearly all of them already include some basic courses in conservation. This situation is even more striking in Europe.

Next to this quantitative explosion, there is also a rapid expansion and transformation in the programmes themselves. Programmes which we have had an opportunity to observe at close hand the Rome Centre, the *Centre d'études* in Paris, Columbia University and the Middle East Technical University have recently been going through soul-searching and fundamental changes. This pattern is not limited to these few examples but appears to be indicative of more general trends elsewhere.

## IS THERE A MODEL CURRICULUM?

To offer a well conceived model curriculum for the training of

professionals at this juncture faces serious difficulties that go beyond the complexity and scope of the subject. Once one could confidently if naively state that an historic monument was a structure which had historic, aesthetic and artistic values. The most we could do then was to expand this definition to encompass the monument's environment, its human values. Today this stands woefully incomplete. In many instances definitions themselves have become outdated. This is the case with the Venice Charter<sup>9</sup> (We consider the Venice Charter to be an historic monument which should be preserved as it stands). If we take a closer look at the definition section contained in Articles I and 2 of the Venice Charter, we find that the Charter is an expression of earlier concepts that were no longer current in Europe even at the time of its preparation.

9. C. ERDER, Venedik Tüzüğü: Uluslararası Tarihi Anıtları Onarım Kuralları, Vakıflar Dergisi, v. VII, 1968, pp. 111-115.

Today the conservation of historic monuments is no longer confined to the welfare of single structures, but includes a wide set of complex aspects. The evaluation of the historic monument and its environment is said to require deep knowledge of the past, a conscious feeling for the present and a perception of the future. Architectural monuments are no longer unique works of art; "they belong by right to a sphere of more complex values, and cannot be judged by aesthetic and historical criteria only."<sup>10</sup> We are aware that architectural monuments must continue to adapt to man's changing demands if they are to survive.

10. P. GAZZOLA, Restoring Monuments: Historical Background, Preserving and Restoring Monuments and Historic Buildings, Museums and Monuments, v. XIV, UNESCO, Paris: 1971, p. 16.

Because of these new dimensions historic monuments and sites cannot be viewed simply "as a reflection of the evolution of technology and society or like a picture or piece of sculpture, as the expression of the feelings and culture of an individual artist".<sup>11</sup> As in architecture, the principles and practice of conservation have undergone turning points over the last few decades. Parallel to continuing research and the application of new materials and techniques where the concept of the "historic monument" is being replaced by that of "cultural property".<sup>12</sup> Even the titles of themes discussed during the Amsterdam Congress are sufficient to illustrate this broad range of values.

11. P. GAZZOLA, Restoring Monuments: Historical Background, Preserving and Restoring Monuments and Historic Buildings, Museums and Monuments, v. XIV, UNESCO, Paris: 1971, p. 17.

12. P. GAZZOLA, Restoring Monuments: Historical Background, Preserving and Restoring Monuments and Historic Buildings, Museums and Monuments, v. XIV, UNESCO, Paris: 1971, p. 30.

In 1968 at the Pistoia meeting, it seemed possible to accept the preservation, restoration and presentation of monuments as a separate discipline.<sup>13</sup> Today, however, its multi-disciplinary aspects are more striking and press for a totally different frame of reference and approach.

13. P. GAZZOLA, Restoring Monuments: Historical Background, Preserving and Restoring Monuments and Historic Buildings, Museums and Monuments, v. XIV, UNESCO, Paris: 1971, pp. 259-260 and Monumentum, v. III, 1969, pp. 83-97.

Given these developments, one must ask whether there can be a panacea for training programmes. We shall challenge the prescription of cure-alls based on twelve years of first hand participation and observation as an educator in a training centre. Based on this experience, it appears to be absolutely vital to train professionals in this field for the time being in separate programmes until a common consciousness develops in all fields for the value of cultural property. Separate programmes, however, should be viewed as only a temporary solution, and if maintained too long isolated from other disciplines, especially from basic academic disciplines, become ingrown, shortsighted, and sterile. Eventually, all of those in separate professions should be in a position to take part in the conservation of cultural property.

## THE UNIFYING SUBSTANCE OF CONSERVATION PROGRAMMES

The following sections represent a highly distilled evaluation of our experience in preparing, establishing and implementing a framework for an actual conservation training programme. As such they necessarily bear the imprint of our own prejudices and successes. While those who form new programmes often try to justify their existence by claiming they represent a new discipline, we shall argue here the reverse.

The conservation of historic monuments is not a discipline, but an amalgam of different disciplines that have specific applications to the treatment of historic monuments. The terms we use are indicative; we used to speak of *historic monuments*, then we added historic sites, settlements, gardens, the natural environment and now we speak of *cultural property*.

Whether we speak of historic monuments or cultural property we could, for the sake of simplicity, divide the concepts in two. For practical purposes one is the *monument* or *property* while the other is the attributive *historic* or *cultural*.

By *monument-property* we try to express the material and the physical aspect of conservation. This entity must be withdrawn from its minute details and seen as a whole in its environment. To do this requires a variety of techniques and methods that originate in different disciplines: architectural design and structural engineering, methods of research and documentation from archaeology and art history, the analysis and application of old and new materials, and the place of the monument in its human landscape as well as within planning at both the town and regional levels.

For the adjectives *historic-cultural* that form part of the evaluation phase, a more challenging situation is encountered. The arts and sciences are all involved: mathematics, physics, chemistry, the essence and behaviour of materials, biology, history, human geography, economics, politics, education, psychology, administrative law, public relations. In fact, the list can grow uselessly long as can the qualifications a man in conservation is expected to hold. Not only should he be conversant with a great many fields but he should also be able to carry out analyses, effect a synthesis, make sound decisions, and ensure co-ordination. Ironically, the restorer is expected to be a *surhomme* and then at the same time to behave modestly as an *honnête homme*.<sup>14</sup> Unless a programme stresses specific areas of competence, even the gifted student runs the risk of becoming a professional dilettante. Thus one must aim for a specialist competent in a recognized field, but with an awareness of historical environment.

## TRAINING PROGRAMMES

What prescription can one offer for a training programme that will guarantee such a product, in a world where the dilettante can no longer be an authority and the authority must be a specialist perhaps the soundest approach is to develop a "basic attitude of mind".<sup>15</sup> This basis necessarily draws on buildings

14. A. CHAUVEL, *La Formation, le Recrutement et l'Administration du Personnel Spécialisé dans la Restauration et la Préservation des Monuments et Sites Historiques en France, Monumentum*, v. III, 1969, p. 57.

15. D.W. INSALL, *Training for Architects and Planners in Conservation Methods and Techniques, Monumentum*, v. III, 1969, p. 28.

and their environment where the architect-restorer and town planner take immediate responsibility for intervention. Diversity and flexibility must keep the programme open to other fields and professions, allowing the student to become aware and conversant with them and in some instances permitting specialization where the student's aptitudes and the country's possibilities for co-ordinated teams make this feasible.

When we examine current programmes certain basic similarities and differences emerge. They tend to take the monument or property as their main subject and to teach primarily methods and techniques; there is a lesser attempt to inject environmental problems. This aspect is newer and its minor role in many curricula may be due to its more recent development. Basic differences, on the other hand, are contained in the emphasis given to the history of individual countries and regions.

This is not the place to present a detailed list of these programmes but we have included a selected list at the end of the article as a reference for those who are interested. More exhaustive information is readily available. When evaluating these programmes the current educational situation must be kept in mind. First, the present confusion and uncertainty throughout the world about university education means that there are no unique criteria for evaluation which can consistently survey teaching in faculties of architecture and the performance of their end products, the students. Secondly, a curriculum on paper demonstrates very little unless one knows at first hand the course contents, the teachers, and their classroom methods.

Two basic weaknesses are apparent, however, in most programmes today. The young architect is generally a university product who has had little contact with actual builders and building materials and has had limited exposure to a variety of local conditions. As a consequence of recent training attitudes, he tends to be specialized and very often over-specialized for the actual milieu that he enters after graduation. This over-specialization can lead to inefficiency for the profession and frustration for the individual.

16. P. PRATT, *Curricula for Conservation, Learning and Teaching in England and Turkey*, *Bulletin of Association for Preservation Technology*, 1971, v. III, No. 1, p. 25.

With these pitfalls kept in mind, the training programme should aim to prepare a graduate who will "demonstrate the ability to find, express, and preserve the qualities of existing work"<sup>16</sup> and who will be able to make them live in the environment of today. Programmes should train their students to make surveys, to draw detailed and practical observations and make analyses, and to be able to use practical survey techniques aided by photogrammetry. This training should also include a study of the historical development of architecture in its political, social and technological background. If the student lacks adequate exposure to the development of his profession, he should undertake additional work in art criticism, general art history, and the history of town planning as they relate to restoration and conservation. Above all, each student should have considerable office and field experience because it is in this area that most training has proved inadequate.

This kind of practical exposure during training helps the student to understand more fully that his profession is an applied science which can be carried out successfully only in collaboration with others. Co-operation takes place at all levels from communicating with the ordinary workman to seeking the assistance

of specialized scientists in a variety of fields. The grounds for preparing this kind of communication are taken up again in the section of this article which reviews the state of preparing technicians involved in the treatment and care of historic property. Emphasis must veer away from the isolation of pure academic pursuits to their practical applications.

#### WHERE AND HOW TO ESTABLISH A TRAINING PROGRAMME

The relationship of education in medical schools to training and internship in hospitals indicates the kind of professional milieu that should be available for a training programme in the restoration and conservation of historic property. The school can provide an environment free of pressure where the student may benefit from lectures, discussions and research with a permanent, specialized staff that has full research and working facilities. On the other hand, offices afford an experience with real life where the student works both at his desk and on the site, in constant contact with the participation of individuals and the day-to-day problems of administration, citizen groups, and technology. Both ingredients are necessary for adequate training and the best place for a programme will be a location where all of these are within easy access.

To have an academic institution and professional offices in close proximity is not sufficient in itself. There must be a concerted effort on the part of both parties to work together continuously and this does not necessarily occur spontaneously because of misunderstandings about mutual needs and benefits. Here individuals become the keystone to a successful relationship and programme. Leaders at the educational centre must be prepared to enter into close contact with private and governmental offices that deal with areas such as regional and town planning, tourism, forestry and national parks, monuments and antiquities. The centre's research facilities such as laboratories for chemical treatment and dating, the study of structural problems, as well as archival and library resources are likely to attract requests from outside offices which have neither the staff nor the possibilities for such research. The willingness to work together must be fostered where the pure academic will listen to the immediate problems of the man in the field while the practitioner will show an understanding for the scholar's preoccupation with method and minute detail. In the long run it is individuals, not institutions, that ensure this communication and thus the ideal location and development of a training programme.

Within the training programme itself there must be a balance between the overburden of an office's workload and routine activities and the university's excessive preoccupation with theory devoid of practice. If effective communication is established there will be a natural give and take between the two. This keeps the academic's feet on the ground, the professional in touch with new techniques and findings, and the student at the forefront of his profession, ready to be immediately effective upon graduation.

Each country will have to envisage its own problems and needs for a long period of time and will thus be in a position to mold its curriculum and select students accordingly. Within this

framework the question of selecting the appropriate personnel to establish the programme will prove central. For it has been stressed that it is the individuals, not the institution, that in the long term guarantee the success of a programme. The primary requirement should be a staff that is willing and capable at the very outset of fostering a co-operative relationship with offices and other training centres. In current programmes, those that have developed most rapidly have had a young, dynamic staff. Universities have a penchant to attract a scholar with a well established reputation to form a new department. In our field this does not necessarily give the expected results. The famous scholar often finds it hard to emerge from his ivory tower and take a new academic stance where practical applications are of foremost concern. The fluidity of the field and the constant need to adapt the programme in the light of new developments are unlikely to find a receptive ear with such a man.

Professional mix is another important aspect of the staff for the training programme. Ideally the centre provides a place where specialists from a variety of disciplines, architects, surveyors and engineers, archaeologist and art historians as well as town planners, physicists and chemists can combine their knowledge in a mix that will enable new solutions and a common philosophy to develop. If one group dominates another there will be a tendency to professional parochialism and sterility. Participating staff must be selected from individuals who in spite of their academic and professional backgrounds exhibit an overriding curiosity and devotion to the understanding and care of historic property.

#### THE TRAINING OF TECHNICIANS: AN INTEGRAL PART OF A GENERAL PROGRAMME

Such centres are also an ideal place to provide courses for the training of laboratory technicians, craftsmen, museum staff, civil servants, and even site guards. Laboratory technicians usually have a well defined background in chemistry, physics or biology. Since the modern trend in conservation is to study the process of decay and seek remedies rather than to memorize recipes for repair, their training should be oriented in this direction. It should also supply the basic means for communicating with others in the field a feeling for the language and aims of conservation. This is particularly important because such personnel at the outset may not find themselves interested in old buildings and artifacts; their entrance into the field begins more often by chance than by personal choice.

Craftsmen or artisans who still practice traditional building techniques form a group quite different from the laboratory technicians but it is one that can also benefit from the centre as well as enrich its training programme for full-time students. These craftsmen still keep alive a building tradition which has direct applications to the conservation of historic structures. On the other hand, they are not conversant with new technologies and materials that may be used to enhance the effectiveness of the techniques they have learned as apprentices in an earlier generation. By opening the centre to train craftsmen for short periods the programme can contribute to increasing the effectiveness of work currently under way in the field and the staff and students can also learn from the hard-won practical observations and solutions of workmen.



Developed countries may find it advisable to set specific standards for the admission of craftsmen into the programme, such as an ability to read architectural plans and a specific number of years of formal education. Developing countries where these technicians are still most numerous, however, may find that they have to provide more innovative programmes where wit, skill, and experience under an architect restorer take precedence over formal requirements. In the second instance more demands will be put on the staff to find an effective means to communicate and work with the craftsman. Experience indicates that it is more difficult for the academic to shift mental gears in such situations than it is to instill in the craftsman a feeling for the value of the objects with which he works as unique historical documents.

Another function of the centre should be to keep museum officials, civil servants in government offices that deal with conservation and even site guards of new national and international developments in the field. This can be conducted on a continuous basis for the benefit of the centre and for participants in the field at large by inviting such personnel to seminars, lectures and discussions. When specific needs are pinpointed, the means for providing longer training programmes should be developed so that they dovetail with the centre's curriculum. The comments of such participants serve to underline problems that cry for swift attention and their co-operation with staff and students alike may help ensure the prompt application of mutually selected alternatives. Otherwise, officials tend to be suspicious of new approaches and thus reluctant to apply them in the field unless they have taken some part in the selection process.

Formal training for the professional cannot cease at graduation day, especially in this field where innovation has proved so rapid. The centre must keep in touch with its former students to obtain feedback for the improvement of the programme based on their post-graduate experience as well as to locate for advanced seminars and conferences. These activities help keep trainees up-to-date on modern building and preservation techniques and should be concentrated within a short period of a few days in view of the work demand placed on the professional. The centre should also take it upon itself to keep in touch with field technicians in order to retrain and instruct them when necessary.

#### HOW TO MAKE THIS PROFESSION ATTRACTIVE

In the review of the training of laboratory technicians, it was noted that personnel have often entered conservation jobs by chance rather than choice. This has serious implications for the whole field since it shows that personnel enter without adequate qualifications. Of even more concern is the rapid turnover observed among qualified conservationists. Finally, skilled craftsmen present a different class of problems whose central role in the success of conservation work has received all too little attention. Their skills are in demand in modern construction and industrial areas. Once they accept permanent employment of this sort, conservation projects can no longer

draw them back where their unique skills make them indispensable.

The field has failed to offer, in general, the kind of incentives and job security that can hold the experienced technicians and graduates of training centres. In the countries where their system requires, until there is a status for professionals and technicians which provides year round employment and a professional future can compete with other job opportunities, a career in preservation will fail to attract talented students and qualified graduates. In the countries where the state has definite legal power over the antiquities, the government have yet to give this field the priority in their educational system and government offices that would ensure a skilled conservation team. Other incentives available in all systems, such as annual exhibitions of the conservationist's work, could be used by government offices in this respect.

The solution to these problems rests with governmental agencies and the active campaigning of conservationist's as well as other concerned individuals in each country. More fundamentally, it presumes the existence of a demand for conservation projects and efforts to organize the market by all parties involved. At an international level, however, a coordinatory study should be made to show how to identify personnel needs in the field over the next decade so that rational manpower planning may be undertaken. This study could make an account of the underutilization of trained personnel and show the loss in efficiency that the system of individual projects rather than rotation and stable organization may cause for governmental agencies.

#### PRACTICAL ASSISTANCE FOR TRAINING PROGRAMMES FROM AN INTERNATIONAL LEVEL : SOME INITIAL RECOMMENDATIONS

In the preceding sections training programmes have been examined in a generalized form that assumes the context to be national one. It has also been noted, however (in the introduction and in the first section), that international attention to education in conservation and restoration has found itself at the end of a list of other topics and has never attracted the continuing attention that it deserves. The most practical starting point, in my opinion, would be to form a small team of persons with experience and training who would be willing to actively participate in evaluation and development.

It would be difficult to visualize at this point the ensemble of problems they might encounter. But they should certainly review and update the excellent work presented by Professor Gazzola at the Pistoia meeting on the training of architect-restorers<sup>17</sup>. They should establish contact with all educational institutions in the field and collect their programmes, theoretical and field work as well as their publications. To increase the effectiveness of the survey one or more members of ICOMOS with experience in education should be included in this group. Once this initial review is complete, the team could proceed with a work programme whose tentative activities might be in the following order :

17. P. GAZZOLA, *The Training of Architect-Restorers*, *Monumentum*, v. III, 1969, pp. 15-25.

I. *Establishment of a network for the collection and distribution of information*

a- establish close contact with the institutions which are awarding degrees and/or certificates of specialization in the protection of monuments and sites and small objects;

b- prepare a catalogue of the institutions giving individual or partial courses; scholars and experts who give individual courses of lectures should be included;

c- prepare a catalogue of the official and private organizations directly involved in conservation activities; the catalogue prepared by the Rome Centre some years ago could provide a good foundation for this;

This information would be sufficient for the team in charge to establish a network at different levels for gathering and distributing the information needed for educational purposes. Once this network is established we may begin to assess different courses of action more rationally.

d- prepare a bibliographical review of books and periodicals on the perils, destruction, and practical methods of conservation. Initial sources would be the libraries of the International Centre for Conservation in Rome and the Documentation Centre of ICOMOS in Paris.

II. *Intermediate courses of action*

a- provide the means to review and advise on training programmes through the appropriate channels and persons;

b- bring together whenever possible instructors and experts in these programmes to exchange their views and experience with these programmes;

c- find ways and means to arrange joint field work and student exchange programmes. At present this is done very successfully at one level by the Rome Centre; this kind of activity should be expanded.

III. *Co-ordination functions*

a- distribute information on the current activities of major organizations such as the Council of Europe, UNESCO, ICOMOS, Europa Nostra, etc., to educational centres and concerned individuals;

b- inform them of the services and facilities provided by the above-mentioned organizations;

c- distribute whenever possible the publications and notes of these organizations. The Newsletter prepared by ICOMOS should be at the head of any initial list.

These appear to me to be the basic functions which this team or some other group should perform if we are to improve the effectiveness of existing institutions and to ensure the rapid formation and quality of new entrants. The preparation of technicians and the arousal of public concern, while outside

the direct competence of this team, might also be included in the collection activities. In any event it is very important that these two neglected areas enter the assessment activities. The committee could thus advise on the organisation of courses for the foremen and craftsmen belonging to various disciplines of traditional architecture, if not in a practical way then in a theoretical fashion.

In addition it would be useful if sufficient means could be provided to collect material about the attempts of different countries to awaken public interest in the importance of preserving cultural property. Materials such as books, films, radio and television programmes, exhibitions, programmes for training guides, programmes about festivals and educational materials for children immediately come to mind. The last group is especially important because of the lasting impact it has on children at an impressionable age. Work on programmes for the early stages of learning that have covered toys, songs, books and other visual material could all be of value. This would prove to be a good source for a very broad audience that would include educators as well as administrators.

For in the ultimate analysis it is not international organizations nor the academician-turned-restorer, nor the technician who can turn a conservation project into reality, but it is the public. When individual home owners, a town council, the inhabitants of a neighborhood appreciate some quality of their immediate environment and make a conscious effort to protect, restore and refunction we find the genesis of living conservation projects. Others are doomed to failure from the outset. Once the specialist understands that his only hope for success is to live beyond the ivory tower of his laboratory and his office, it is possible to build a conservation programme. Contact and participation with public opinion and the formation of public awareness should make the foundations of a conservation programme for specialists.

## ADDENDUM

### TRAINING PROGRAMMES FOR CONSERVATION

Based on information collected by the International Centre for Conservation in Rome

#### ARCHITECTURAL CONSERVATION

##### A. DIPLOMA OR MASTER'S DEGREE PROGRAMMES

Centre d'études sur la conservation du patrimoine urbain et architectural. Collège d'Europe Dyver 7 B-8000 Bruges, Belgium	1-year program. Restoration of monuments or rehabilitation of historic centers. Certificate or Diploma.
Department of Architecture University of Laval Quebec, G1K, 7P4, Canada	Master of Architecture with option in historic preservation. 2 years.

<p>St. Lawrence College 20 Parkdale Avenue Brockville, Ontario K6V 5x3, Canada</p>	<p>Historic structures restoration and preservation technology. 3 years. Diploma.</p>
<p>School of Urban and Regional Planning 227 Ellis Hall, Queen's University Kingston, Ontario Canada</p>	<p>2-year graduate program for professional planners</p>
<p>Institute I, School of Architecture Royal Danish Academy of Fine Arts Kgs. Nytorv 1050 Copenhagen K. Denmark</p>	<p>2 or 3 years, foreign students must have degree</p>
<p>Centre d'études supérieures d'histoire et de conservation des monuments anciens, Direction de l'Architecture Rue de Valois, 75001 Paris, France</p>	<p>2-year program part time architects and advanced architecture students</p>
<p>Dept. of Architecture Heriot-Watt University Edinburgh College of Art Lauriston Place, Edinburgh EH3 9DF Scotland</p>	<p>1-year, post-graduate degree in environmental conservation</p>
<p>Institute of Advanced Architectural Studies, University of York King's Manor, York, YO1 2EP, England</p>	<p>1-year Diploma course in conservation studies mid-career architects</p>
<p>Liverpool Polytechnic Department of Architecture 53/55 Victoria St. Liverpool L1 6EY, England</p>	<p>2-year Diploma course part time 3 years in practice required</p>
<p>Leicester Polytechnic Department of Architecture Leicester, England</p>	<p>2-year Diploma course, part time. 3 years in practice required.</p>
<p>Architectural Association 36 Bedford Square London, W.C.1, England</p>	<p>2-year Diploma course part time. 3 years in practice required.</p>
<p>University of Technology Dept. of Architecture Berlageweg 1 Delft, Holland</p>	<p>2 or 3 years specialization during 5-year program</p>
<p>Section of Monuments Preservation Institute of History and Theory of Architecture Technical University, Budapest Hungary</p>	<p>2-year specialist engineering course in monuments preservation</p>
<p>Scuola di Specializzazione per lo studio ed il restauro dei monumenti Università degli studi di Roma Via Magenta 2, Rome, Italy</p>	<p>2-year Diploma course in connection with the International Centre</p>

Postgraduate school of restoration of monuments University of Naples Palazzo Gravine, Via Monteoliveto 3 80134, Naples, Italy	2-year post-graduate course
University of Split and the Architectural Faculty of the Split, Jugoslavia	2-year post-graduate course Master's degree
Escuela de Restauracion y Museografia Convento de Churubusco Mexico 21, D.F., Mexico	2-year course. Master's degree in Architectural Restoration
Universidad de Guanajuato Facultad de Arquitectura Division de Estudios Superiores Guanajuato, Mexico	Master's degree or Specialization. Restoration and operation of historic properties, monuments and sites. 2 years
Ecole Polytechnique de Varsovie Faculté de l'Architecture Plac Jednosci 1, Warsaw, Poland	Postgraduate studies in architectural conservation. 2 years. Part time. Diploma
Ecole Polytechnique de Cracovie Faculté de l'Architecture Kracow, Poland	Postgraduate studies in architectural conservation 2 years. Part time. Diploma
Ecole Polytechnique de Wroclaw Institut d'histoire de l'architecture, des beaux-arts et de la technique, Wroclaw, Poland	Specialization in conservation during regular architecture studies. 2 years. Doctoral program also offered. 3 years.
The Nordic Institute for Studie in Urban and Regional Planning Nordplan Skeppsholmen 111 49 Stockholm, Sweden	1-year Diploma course
Konsthögskolans Arkitekturskola Skeppsholmen Stockholm, Sweden	Diploma in City Planning and Preservation
Department for the Restoration and Preservation of Historic Monuments Middle East Technical University Ankara, Turkey	2-year course. Master of Architectures in Restoration
Technical University of Istanbul Faculty of Architecture Istanbul, Turkey	2-year course. Master of Architectures in Restoration

İst.Devlet Mühendislik ve Mimarlık Akademisi Mimarlık Bölümü-Mimarlık Tarih ve Restorasyon Kürsüsü Yıldız, İstanbul, Turkey	2-year program in Architectural Conservation Master of Architecture
Columbia University School of Architecture New York, N.Y. 10027 USA	1-year program. MSc in Historic Preservation
University of Virginia School of Architecture Campbell Hall Charlottesville, Va. 22903 USA	2-year course. Master of Architectural History
Dept. of Architecture University of Florida Gainesville, Florida 32601 USA	2-year Master's degree. Emphasis on Historic Preservation
College of Architecture, Art and Planning, Sibley Hall Cornell University Ithaca, N.Y. 14850 USA	2-year program. Master's degree in Preservation Planning
University of Miami School of Engineering and Environmental Design P.O. Box 8294 Coral Gables, Florida 3124 USA	Bachelor of Architecture with emphasis on Historic Preservation. 5 years.
Department of History Middle Tennessee State University Murfreesboro, Tennessee 37130 USA	B.A. or B.S in Historic Preservation Studies
Historic Preservation Program The University of Vermont Wheeler House, 442 Main St. Burlington, VT. 05401 USA	M.A. in Historic Preservation 2 year
American and New England Studies Program, Boston University Boston, Mass. 02215 USA	M.A. or PhD in Preservation Studies. 1 to 4 years.
Historic Preservation Program The George Washington University Washington, D.C. 20052	M.A. or M.S. in Historic Preservation 2 years
Department of Architecture Universtiy of Oregon Eugene, Ore. 97403 USA	Bachelor of Arch. (5 years) or Master of Arch. (2-3 years) with emphasis on Historic Preservation
Department of Historic Preservation, Goucher College Towson, Md. 21204 USA	B.A. in Historic Preservation 4 years
College of Architecture and Planning Ball State University Muncie, Indiana 47306 USA	M.Arch. in history of Architecture, Preservation and Restoration, 1-2 years

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| Department of Architecture<br>University of California<br>Berkeley, Calif. 94720 USA   | M.A. in historic<br>Preservation (program<br>planned to begin 1976)   |
| Dept. of Urban and Regional<br>Planning University of Illinois<br>at Urbana-Champaign<br>1003 West Nevada St., Urbana,<br>ILL. 61801 | B.A. (4 years) or M.A.<br>(2 years) in urban<br>and regional planning<br>with concentration<br>in preservation. |
| Dept. of Architecture and Art<br>University of Illinois at<br>Chicago Circle<br>Chicago, Ill. 60680 USA                              | 2-year, M.A. program<br>being planned   |
| Department of History/Dept. of Art<br>University of South Carolina<br>Columbia, S.C. 29208 USA                                       | M.A. in history or art<br>history with<br>concentration in<br>historic preservation<br>2 years.                 |
| Department of Architecture<br>University of Texas-Austin<br>Austin, Texas 78712 USA  | 2-year program being<br>planned. M.Arch. with<br>emphasis on historic<br>preservation.                          |

#### B. SHORT COURSES-CERTIFICATE

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| International Centre for Conservation<br>Via di San Michele 13<br>00153 Rome, Italy   | 6-month course in<br>Architectural<br>Conservation   |
| Cursos Interamericanos de<br>Capacitacion<br>Convento de Churubusco<br>Mexico 21, D.F., Mexico  | 9-month specialization<br>course in Architectural<br>Restoration   |
| Proyecto PER-39<br>Convento de Santo Domingo<br>Cusco, Apt. 775<br>Peru   | INC-Unesco Restoration<br>course 6-months<br>regional citizens   |
| Direccion General de Arquitectura<br>del Ministerio de la Vivienda<br>Madrid, Spain   | 8-month course<br>Restoration and<br>Lighting of Monuments   |
| Preservation Institute<br>Nantucket, Mass. USA  | 10-week summer course<br>in preservation of<br>buildings, sites and<br>districts   |
| The Regional Centre for Conservation<br>of Cultural Property in the Arab<br>States, Khadimiya-Abdulmuhsin Al Khadimi<br>St. 25/1, Baghdad, Iraq | 3 months or 6-month<br>course devoted to<br>monuments preservation<br>Arab citizens only.  |
| Centrum För Byggnadskultur i<br>Vastra Sverige<br>Chalmers Tekniska Hogskola<br>Fack, 402 20 Gothenburg, Sweden                                 | Short intensive courses<br>(1 week), night courses,<br>and 4-month course in<br>renovation, conservation<br>and restoration of<br>buildings and historic<br>centers. |



## C. SEMINARS, MEETINGS ON SPECIAL SUBJECTS

Institute of Advanced Architectural Studies, University of York King's Manor York YO1 2EP, England	1 or 2-week courses: "Conservation of Historic Structures", "Aspects of Urban Cons.", "Analysis and Recording Techniques", Etc.
The Society for the Protection of Ancient Buildings 55 Great Ormond Street London WC1, England	Annual, 1-week course on the Repair of Ancient Buildings
The Orton Trust Stoa House, Brigstock Kettering, Northampton, England	Short courses on stonework conservation
Secrétariat du stage d'été à Eger Knezich ú. 8, 11, em. Hungary	10-day conference on various aspects of architectural cons. translation provided
Cornell University, Center for Urban Redevelopment Research Summer Institute Program 726 University Avenue Ithaca, New York, 14850 USA	1-week seminar on Historic Preservation Planning
Institute of Government University of North Carolina P.O. Box 990 Chapel Hill, N.C. 27514 USA	11-day intensive course on Planning for Preservation
American Institute of Architects 1735 New YORK Avenue, NW Washington, D.C. 20006 USA	Annual short workshop on Architectural Preservation
The National Trust for Historic Preservation 740 Jackson Place N.W. Washington, D.C. 20006 USA	Williamsburg Seminar for Historical Administrators (6 weeks) and Woodlawn Conference on Historic Site Administration (10 days)
Association for Preservation Technology Box 2487, Station D Ottawa, Ont. K1P 5W6, Canada	Occasional short courses: various topics in preservation technology
Det Danske Selskab (Danish Institute) 2, Kulturvet DK-1175 Copenhagen K. Danmark	1-week travelling seminar on Building and Environment in Denmark-past and present

## D. INTERNSHIPS

Historic American Buildings Survey National Park Service U.S. Dept of the Interior Washington, D.C. 20240 USA	3-month summer field teams, recording historic architecture U.S. citizens only.
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Historic American Engineering Record National Park Service U.S. Dept. of the Interior Washington, D.C. 20240 USA	3-month summer field teams, documentation on historic engineering and industrial works. U.S.citizens only.
General Services Administration Office of Fine Arts and Historic Preservation, 18th and F Streets, N.W. Washington, D.C. 20405 USA	2-month summer internships: research, documentation, recording.
The Surveyor of Historic Buildings Dept. of Architecture and Civic Design County Hall, London S.E.1, England	2-year practical course: restoration work, research recording for this agency.
Zavod Zezestituspomenika Manastir Piva Cetinje, Jugoslavia	Practical work on restoration of Piva Monastery. Experience required.

## MİMARİ MİRASI KORUMADA UZMAN EĞİTİMİ

### ÖZET

Çalışma kültürel varlıkların korunması sorununu üslenecek kişilerin eğitimi alanındaki durumu saptamayı ve eldeki verilerle değerlendirme yapmayı amaçlamıştır.

Koruma anlayışında ve uygulamalarda görülen değişikliklerin, eğitimde de izlenmesi doğaldır. Bu nedenle eğitim alanındaki nicelik ve niteliklere açıklık getirmek amacıyla, korumadaki çeşitliliğe, özellikle İkinci Dünya Savaşı'ndan bu yana görülen değişikliklere eğilimmiştir. Uluslararası koruma anlayışı düzeyinde paylaşılan bileşik eğilimlerin ve çelişkilerin izlenmesine ağırlık verilmiştir. Uygulanmakta olan eğitim programların kapsamında belirgin benzerliklerle, tartışmaya açık görülen veya eksikliği vurgulanan hususlar üzerinde durulmuştur.

Araştırma korumayla ilgili eğitimde bugün için çeşitli bilim dallarını içeren ve esnekliği olan bir program gereğini ortaya koymaktadır. Kültürel varlıkların korunmasında davranı birliği, konuyla ilgilenen değişik bilim ve teknik dallarda ve bunların eğitimcilerinde uyum sağlanabilmesi için bileşik bir dilin geliştirilmesi gerekliliği belirlemektedir.

Eğitimde, korumayı kısa yoldan sağlayacağı sanılan, yapılardaki sağlıklı durumları hemen gidereceği kanısını veren reçetelerin öğretilmesinden kaçınılması bunun yerine konunun kapsamına yönelik, değişkenlikleri ve gelişmeleri içeren bir düşünce

oluşumuna yönelik bir tutumun temel ilke olmasındaki önem vurgulanmaktadır. Konunun niteliği ile ilişkin, varolan eğitim programlarında izlenen ve odak noktalarını oluşturan konular bulunmaktadır. Ancak gene konunun niteliği, tıp ve mimarlık eğitimlerindeki gibi uygulamaya dönüklüğü gerekli kalmaktadır. Arazi, laboratuvar ve büro çalışmalarının verilen bilgilerle ve oluşturulan düşünce düzeyi ile bağdaştırılmasını zorunlu kılmaktadır. Araştırmacı ile uygulayıcı ayrılmazlığı bu konuda da esas olmaktadır.

Uygulamayı oluşturan yasal yönde karar verici veya davranı yönünden etken kuruluşların sorumluluk alanlarının tanımlanması içinde eğitimle olan ilişki de ele alınmıştır. Bir tür pazarlama saptanması ve planlaması öngörülmektedir. Son yıllarda kültürel varlıkların korunması alanında dolayısıyla eğitimdeki enflasyonun olumsuz sonuçlarını önleyebilmek için bu alanda gerekli insan gücünün ne olacağını bilmekteki yarar öne sürülerek uzun süreli gereksinmelerin incelenmesi ve bu araştırmanın uluslararası ölçekte tutulması öngörülmektedir. Konunun uluslararası yaygınlığının nedenlerinin izlenmesinin eğitim programlarının düzenlenmesinde sağlıklı bir yöntem olacağı belirtilmekte ve uluslararası işbirliği için öneriler ileri sürülmektedir.

Araştırmanın sadece uzman veya teknisyenlerin eğitimine dönük olmasının yeterli olmayacağı da belirmektedir. Mimari mirası korumada asıl etken unsur, korumayı yapacak olan kamu oyunun oluşturulmasına da değinilmektedir.

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