

TERRA CONSORTIUM

A PROGRAM OF
PROJECT TERRA
AND THE
**UNESCO Chair on Earthen Architecture,
Constructive Cultures, and
Sustainable Development**

GUIDELINES FOR INSTITUTIONAL COLLABORATION

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Introduction

There is a wealth of earthen architectural heritage the world over and thus a widespread challenge to preserve this important legacy. From entire cities to monumental sites to intricate decorated surfaces to vernacular landscapes, the range and complexity of earthen architectural materials and applications make conserving this cultural heritage and building tradition a formidable task. Yet despite the need for conservation efforts, there are few organizations dedicated to developing the field of earthen architecture conservation and its professionals.

In November 1997, following their collaboration on PAT96 (the first Pan-American Course on the Conservation and Management of Earthen Architectural and Archaeological Heritage), the International Centre for Earth Construction–School of Architecture of Grenoble (CRATerre-EAG), the Getty Conservation Institute (GCI), and the International Centre for the Study of the Preservation and the Restoration of Cultural Property (ICCROM) initiated discussions to establish a joint program in the study and conservation of earthen architecture. These organizations recognized—through their independent and collective activities in earthen architecture conservation—that the most successful means of leveraging resources and developing the field was through partnership. Having a long history of involvement in the field, these institutions created a new, cooperative framework to pursue this work : Project Terra.

The overall objective of Project Terra is to develop the conservation of earthen architectural heritage—as a science, a field of study, a professional practice, and a social endeavor—through institutional cooperation in the areas of education, research, planning and implementation, and advocacy.

An important focus in the past two years has been the education component of Project Terra. In academia, earthen architecture and materials are largely absent from courses on history, design, construction technology, planning, and conservation. In areas of the world where earthen architecture constitutes an important heritage resource and/or building tradition, the lack of established educational programs dealing with this subject matter has had a number of effects. In particular, earthen architecture is often undervalued as a construction material and method, because it is not regarded as a “modern” building material. This attitude in turn influences conservation perspectives and priorities.

To promote earthen architecture as a valuable form of heritage and new construction, it is important to establish it as a recognized field of study. Short-term courses over the past decade (see *Historical Development*) have served to develop a network of professionals dealing with earthen architecture and its conservation, but few long-term, professional education programs exist. The Project Terra partners aim to foster the development of such programs through collaboration with universities and other training institutions. As a means to this end, the Unesco Chair on Earthen Architecture, Constructive Cultures, and Sustainable Development has been established at CRATerre-EAG, which will serve as a hub for a network of institutional collaborators, a.k.a the Terra Consortium.

The Terra partners are currently seeking partners interested in developing long-term educational programs in earthen architecture and its conservation. Through this initiative, institutions will work cooperatively with CRATerre-EAG, ICCROM, and the GCI, as well as with other institutions and universities, to develop faculty and curricula in this field of study.

Historical Development

During the first international conference on the conservation of earthen architecture (held in Yazd, Iran in 1972) the need to develop the field of earthen architecture conservation was voiced and systematically reiterated through a subsequent series of recommendations and international colloquia. The particular need for intensive training in the field was emphasized in 1983, during the international symposium and workshop in Peru. Four years later in Rome, commitments were made by the International Center for the Study of the Preservation and Restoration of Cultural Property (ICCROM), the International Center for Earth Construction (CRATerre), and the School of Architecture of Grenoble (EAG) to carry out training initiatives – amongst other activities -- with the establishment of the Gaia Project.

The Gaia Project made specialized training in the conservation of earthen architecture a reality. Four international courses (commonly known as the “PAT” courses) were organized at the headquarters of CRATerre in the School of Architecture of Grenoble : a pilot course in 1989, followed by three international courses in 1990, 1992 and 1994 (known respectively as PAT89, PAT90, PAT92, and PAT94). In addition to CRATerre-EAG and ICCROM’s own contributions, these courses were granted financial support from the Council of Europe, the European Union, the Aga Khan Award for Architecture, and the Rhône-Alpes Region. Twenty instructors, mostly from the Americas and from Europe, contributed to the development of the PAT curriculum in these years. These PAT courses addressed the general principles of preservation practice, scientific considerations on the material earth and its relevant construction techniques, documentation, survey and inspection, the preservation of archaeological sites and the rehabilitation of the earthen architectural heritage.

The continued development of the PAT courses involved an ongoing assessment of needs in the field as well as a growing synthesis of the many areas of knowledge that come into play in the conservation of earthen architecture. This continual “confrontation” with the realities, as well as the possibilities, of our earthen architectural heritage led to the emergence of some principal ideas for training in this area. For example, it has been recognized that in order to preserve earthen architecture -- both as a resource and a “constructive culture” -- it is necessary to reinforce the relationship between tradition and modernity. From a training perspective, that means that a significant investment must be made in teaching those charged with the conservation of earthen architecture about construction materials and techniques; they need to experience the use and application of earthen materials in order to understand its behavior and preservation. In addition, as recognized by the cultural heritage field in general, our ever-growing societal collection of cultural property means increasingly complex challenges for management of these resources and their conservation. Coupled with this is the need to connect better the technical aspects of our work to cultural values and contexts if we are to make conservation relative to the broader public, make it part of the social agenda. If this is our envisioned future, we need to appropriately educate the conservators of today to make that tomorrow possible; therefore training in conservation planning and management emerged as a critical need as well.

With these considerations in mind, and pursuant to an evaluation of the PAT94 course, the Gaia partners (CRATerre-EAG and ICCROM) determined that the evolving needs of the field would be best met through regional training activities. Since its creation in 1989, a fundamental principle of the Gaia Project was the importance of organizing regional activities, in an institutional framework, so as to guarantee the continuation and sustainability of its initiatives. Regional training would likewise allow for the aforementioned training principles (the connection between tradition and modernity, and the integration of the social, cultural, and technical aspects of conservation into methodological planning processes) to be demonstrated and reinforced by local conditions.

Therefore, in 1994, the Gaia partners pursued a proposal by government authorities in Peru for regional training. Over the next two years, a new collaboration was established among ICCROM, CRATerre-EAG, the Getty Conservation Institute (GCI), and the Instituto Nacional de Cultura – La Libertad (INC-LL) for the development of PAT96.

The first *Curso Panamericano sobre la Conservación y el Manejo del Patrimonio Arquitectónico Histórico-Arqueológico de Tierra* was hosted in Trujillo, Peru, in late 1996, with the sponsorship of the European Union and the World Heritage Fund of UNESCO. Classes were held at the museum of the archaeological complex of Chan Chan, a World Heritage Site. Chan Chan is a 14 km² earthen city constructed by the Chimú people during the period of 9C - 15C. The PAT96 course took advantage of the wealth of earthen architecture in the Trujillo area. Chan Chan served as a field laboratory throughout the course, as did several nearby sites in the Moche Valley, including Huaca de la Luna, El Brujo, Huaca del Dragón, and a number of earthen colonial houses and churches in the city of Trujillo. Balancing theory and practice, PAT96 took students out of the classroom and on to sites to learn up-close about earthen architecture and its conservation. Then – as now – the pedagogical philosophy of the course was best summarized in a quote by Montaigne, loosely translated: *Better a well-structured head than a well-filled head*. That is to say, rather than giving **information** to students about conservation problems and strategies, emphasis was placed on **methodologies**, on teaching students how to approach problems and determine solutions on their own. To move beyond a simple exchange of information, we had to move into the field and cultivate a rich understanding of earthen materials, earthen construction, and earthen heritage and of the processes by which this heritage and the values it represents can be preserved.

One of the new and very challenging aspects of PAT96 was the integration of conservation management planning into the curriculum. The vast earthen architecture sites and structures in the Trujillo area served as a stark testament to the fact that there are no easy answers, no technical cures, to the problems of earthen architecture conservation. Our work must be placed in a broader context, and approached methodically, if conservation efforts are to be sustainable and responsive to the social condition. Thus, management planning became a thread that wove the many aspects of earthen architecture conservation into a methodological framework.

As a result of the PAT96 institutional partnership, ICCROM, CRATerre-EAG, and the GCI established the collaborative initiative, Project Terra. It was under the auspices of Project Terra and in partnership with the INC-LL that the *Segundo Curso Panamericano sobre la Conservación y el Manejo del Patrimonio Arquitectónico Histórico-Arqueológico de Tierra*, PAT99, was hosted in Trujillo, Peru, in late 1999.

The development of the PAT96 Course Notes marked a critical step toward codifying the body of knowledge that has accumulated during the years of PAT training. Educational objectives were delineated for each session, and the content of lectures, exercises, and demonstrations were outlined. Reference materials were identified, a course bibliography compiled, and the development of a course glossary was initiated. These didactic materials, as well as the teaching facilities, were developed even further in PAT99. Information was synthesized thematically, with an aim toward integrating topics and elucidating the interrelationships between the many decisions taken during the conservation planning process.

The PAT99 course also utilized a team teaching approach, involving ten principal instructors from the Americas and Europe and fifteen associate instructors. The associate instructors consisted of alumni from former PAT courses and INC-LL staff; each currently teaches at a university, plays a teaching role in his or her home institution, or has a strong potential to do so in the future. Their participation in PAT99 served to introduce them to the scope of work involved in coordinating and teaching such a course, and to promote the development of similar or adapted educational activities in their home countries.

Altogether, the PAT courses from 1989 to 1994 served to establish a network of some 120 professionals from 36 countries in Europe, the Americas, Africa, and Asia. The two regional PAT courses organized in Peru in 1996 and 1998 trained an additional 52 participants from 18 countries in the Americas.

Unesco Chair – Terra Consortium

Despite the high number of professionals trained during the ten-year history of PAT courses and their derivative training activities, there are still few higher education programs addressing earthen architecture and its conservation. Given these conditions, it has been recognized that there is a need to establish long-term educational programs in particular regions of the world where earthen architecture is an important part of life and culture. A primary educational objective of Project Terra, thus, is to develop earthen architecture conservation as a field of study at the university level, through elaboration and testing of training methodologies and didactic materials, development of faculty, and building of a university consortium.

With this broader objective in mind, PAT99 was the last in the ten-year history of short-term, mid-career PAT courses. An important aim of PAT99, however, was to synthesize past efforts and to begin to codify the body of knowledge that has amassed through these years of training activities, in preparation for working with universities and similar training institutions. By both capturing this cumulative experience and exploring new and innovative approaches to education in this area, PAT99 served as a critical testing ground for improved teaching methodologies and materials that can be shared with institutional partners and beyond.

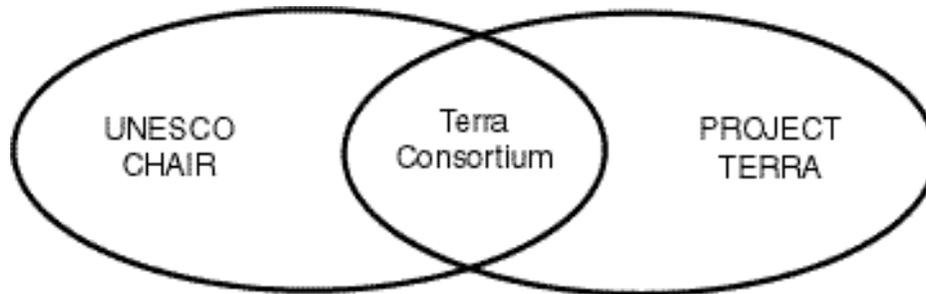
To provide a context and vehicle for collaboration with universities and other training institutions, the *UNITWIN/UNESCO Chairs Programme*¹ was identified as a useful mechanism for promoting the development of an institutional network. The *UNITWIN/UNESCO Chairs Programme* was launched by UNESCO in 1991 as an international action plan to strengthen inter-university cooperation amongst higher education and scientific institutions worldwide. The Programme serves to promote linking arrangements among institutions in industrialized and developing countries, to reinforce existing (sub)regional and interregional cooperation networks, and to develop centres of excellence for specialized studies and advanced research. The overall aims of the *UNITWIN/UNESCO Chairs Programme* include:

- The institutional development of universities in all regions;
- Increased solidarity amongst the world academic community;
- The rapid transfer of knowledge and know-how;
- Better distribution of excellence and expertise for sustainable development worldwide;
- The enhanced contribution of higher education to society.

Through this initiative, in October of 1998, the Unesco Chair on Earthen Architecture, Constructive Cultures and Sustainable Development was formally inaugurated. The Chair is based at the International Centre for Earth Construction – School of Architecture of Grenoble (CRATerre-EAG), which has a long-standing record in university and professional training in the field, developed in cooperation with national and international partners. At present, the School of Architecture of Grenoble is the only institution of higher education offering a degree program in earthen architecture construction and conservation, the *Diplôme Propre aux Etudes d'Architecture – Architecture de terre* (DPEA-Terre), and was the venue of the first four international PAT courses. Through the *UNITWIN/UNESCO Chairs Programme*, the inauguration of the Chair establishes CRATerre-EAG as a centre of excellence in the specialized study of earthen architecture and its conservation.

¹ For more information about the *UNITWIN/UNESCO Chairs Programme*, please consult the Unesco website at: <http://www.unesco.org/education/educprog/unitwin/>

The Unesco Chair on Earthen Architecture, Constructive Cultures and Sustainable Development addresses the need for training in this field from three perspectives: improving housing conditions, better utilizing resources, and valorizing earthen architectural heritage and traditions of building with earth. CRATerre-EAG has initiated the work of the Chair by promoting the development of educational programs in new earthen construction -- from the housing and resource perspectives -- among a growing network of universities and training institutions. Through a joint program of the Unesco Chair on Earthen Architecture and Project Terra, CRATerre-EAG, ICCROM, and the GCI aim to promote the development of additional education programs in the conservation of earthen architectural heritage and building traditions.



Through cooperation on the development of curricula, didactic materials, and faculty, it is anticipated that a consortium of universities and training institutions addressing the conservation of earthen architecture will grow. This “Terra Consortium” will be part of the Unesco Chair on Earthen Architecture through collaboration with Project Terra. The Project Terra partners (CRATerre-EAG, ICCROM, and the GCI) are collectively responsible for identifying institutional partners, coordinating the network/consortium, fostering the development of specific programs, and facilitating the exchange of information and ideas amongst collaborators.

The Terra partners will collaborate directly with interested institutions to develop educational initiatives in this area and to integrate them within the institution’s existing curricula/programs in conservation, architecture, engineering, planning, and/or related disciplines.

It is anticipated that, in addition to cooperation with the Terra partners, institutions will also work with other universities and training organizations involved in the Terra Consortium. A tremendous benefit of the program will be the sharing of information among Consortium members as the network develops.

Conditions for Collaboration

Scope

Though training is understood as the starting point and foundation of a new education initiative, the Unesco Chair and Terra Consortium advocate a comprehensive approach to education that, ideally, involves research, application, and dissemination, in addition to training. Any education program takes time to form and develop, and it is recognized that it may not be feasible to initiate all of these activities simultaneously. However, it is hoped that this broad scope will be envisioned by collaborators as a long-term aim.

Methodology

The cumulative experiences of the DPEA-Terre diploma program and the PAT courses have suggested that certain pedagogical methods and themes are important and germane to the teaching of earthen architecture construction and conservation. Among these, the connection between new construction and conservation and the integration of the social, cultural, and technical aspects of conservation into methodological planning processes are critical to achieving sustainable approaches to preserving earthen architecture and earthen building traditions. It is anticipated that new educational initiatives will build on these past experiences and endeavor to integrate better the many technical, social, philosophical, and methodological aspects of earthen architecture conservation.

Types of Programs

It is understood that educational initiatives will vary depending on institutional conditions and socio-cultural contexts. Some universities or institutions may be interested in developing a course or series of courses within an existing program on architecture, planning, engineering, etc. Others may endeavor to create a post-graduate program, while others may envision an intensive specialization course offered every few years. Any type of program will be considered for collaboration, so long the possibility for long-term sustainability is demonstrated.

Collaborating Institutions

To ensure that educational programs are long-term and sustainable, it is important that at least one of the collaborating institutions in a proposed initiative is a university or institution with an education mandate and the capacity to grants degrees, academic credit, or similar certification for the program.

Educational Context

The PAT and DPEA-Terre experiences have confirmed the didactic benefits of an environment that provides continued contact with earthen materials and structures. For this reason, it is important that educational initiatives take place in areas where there is a history and/or ongoing tradition of building with earth.

Terms of Cooperation

Collaboration with the Terra partners may take the form of:

- Identification and assessment of training needs
- Planning and development of curricula
- Development of didactic materials and methods
- Faculty exchanges and training
- Evaluation and monitoring of educational activities
- Facilitation of cooperation and information sharing amongst institutions in the Terra Consortium.

It is expected that institutional partners will collaborate fully in the joint venture and will provide staff, facilities, and other resources for the development of the program. Though the Terra partners will assume the cost of their own participation in a joint venture, it should be clarified that the Terra partners cannot give grants or similar financial contributions to institutions for the purposes of developing these educational initiatives.

Proposal Process

For those institutions interested in collaboration on the development of education programs related earthen architecture and its conservation, a proposal containing the following information should be submitted:

1. Proposed Education Initiative

Please provide information about the education program or initiative under proposal, including:

- Type of initiative envisioned, such as a course or series of courses, a degree specialization, a post-graduate program, etc. and indications as to which department or academic discipline the initiative will be integrated.
- Type of degree, academic credit, or certification to be granted upon completion.
- Preliminary scope of the program, including types of courses, subject matter, etc.
- Proposed duration and frequency of the program.

2. Information about the Sponsoring Institution(s)

Please provide information about the universities or other institutions that are sponsoring or will be involved in the proposed program, along with the following:

- Information about the experience of the institution and/or its staff in the field of earthen architecture conservation.
- A letter of endorsement from the director of the institution, university rector/dean, or similar authority, indicating the contact person for communications regarding the proposal and potential collaboration.

3. Existing Resources

Please provide information about the existing resources available to the proposed program, including:

- Faculty and personnel, and their institutional affiliation
- Teaching facilities and equipment, such as labs, classrooms, work yards, etc.
- Earthen architecture in the region that may be utilized for didactic purposes, including archaeological sites, historic buildings, townscapes, city centers, etc.
- Possibilities for financial support, including sponsoring institutions, local institutions and government, international organizations, etc.

4. Vision for Collaboration

Please indicate the reasons for seeking collaboration through the Terra Consortium, including:

- Potential role/contribution, if any, of the Terra partners (CRATerre-EAG, GCI, ICCROM) in the development of the program
- Potential for cooperation with other institutions and universities in the region and/or internationally, through faculty and student exchanges, coordination meetings, information sharing, etc.

All proposals received by **September 15, 2000**, will be considered during this first round of collaborator identification. Proposal received after that date will be considered in subsequent review processes. Proposals should be sent to the Terra partners c/o:

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Project Terra Partners

The International Centre for Earth Construction (CRATerre-EAG) is a scientific organization within the School of Architecture of Grenoble (EAG), dedicated to the promotion of earth as a building material.

Since its creation in 1979, CRATerre-EAG has developed its three main working programmes, preservation of the earthen architectural heritage, economic construction and industrialization, through **four** inter-related fields of activity: **education, research, implementation and dissemination**. The activities of CRATerre-EAG gather the experience of international experts in architecture, engineering, sociology, anthropology, research and training on different projects set up in more than **80** countries.



The Getty Conservation Institute works internationally to advance conservation practice in the visual arts—broadly interpreted to include objects, collections, architecture, and sites. The Institute serves the conservation community through four areas of activity: scientific research into the nature, decay, and treatment of materials; education and training; model field projects; and the dissemination of information through traditional publications and electronic means. In all its endeavors, the GCI is committed to addressing unanswered questions and promoting the highest possible standards of conservation.

The Institute is a program of the J. Paul Getty Trust, an international cultural and philanthropic institution devoted to the visual arts and the humanities that includes an art museum as well as programs for education, scholarship, and conservation.



The International Centre for the Study of the Preservation and the Restoration of Cultural Property (ICCROM) is an autonomous, scientific, intergovernmental organization founded by UNESCO in 1959 and headquartered in Rome, following the terms of an agreement between the Government of the Italian Republic and UNESCO. As of April 2000, ICCROM has 92 Member States and 115 Associate Members - public or private non-profit cultural institutions involved in preservation.

In the development of its statutory mandates, ICCROM contributes to international, regional and national activities exercising, in particular, the following functions: the collection, study, and circulation of information on matters relating to the conservation and restoration of cultural property; the promotion of research in this domain; offering consultancy on general or specific questions relating to matters of its competencies; developing training relating to the conservation and restoration of cultural property; and, encouraging initiatives that create a better understanding of the field.

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