

The four themes of BRAU face off in cultural aspects and in their economic and social implications, with reference to measures already implemented or just conceived and proposed projects.

Participants are invited to submit studies and projects on the following themes and subthemes.

## Theme A

# Permanent maintenance of small historic towns

The rapid changes in the European socio-economic environment and demographic and geographic transformations now increase the discrepancy between the development of human activities and the "built environment", giving rise to different policy interventions, employees mainly from the economic realities of each country.

All issues affecting the complexity of these processes, are modalities and permanent trial courts in small towns that have an interest in creating a "permanent maintenance" systems of the local housing stock.

Taking note of these prevalent realities, more effort is needed for discussion and debate on an international scale, in reference to this specific topic area.

### 1. Modern trends in risk management

- 1. Review of the technical literature relating to the risks built on marriage.
- 2. Priorities identified by management of the different types of built heritage and their

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- perception and understanding of the risks in their areas of competence.
- 3. Risk assessment of the assets and corrective measures from a scientific perspective.
- 4. Proposed legislation, both at national and regional scale, for the preparation of information tools on the conditions of the built heritage.
- 5. Monitoring protocols of residual performance conditions of the cultural heritage built, i) initiatives to institutional levels (political and administrative), ii) indicators that may signal risk conditions.
- 6. Cards of cultural heritage risk: risk mapping on a regional scale (seismic, geological, anthropic) in order to define priorities for action based on the seriousness of the situation.

### 2. Integrated risk management

- 1. Methodologies and systematic management tools, balanced and risk practice, specific to the cultural heritage.
- 2. Techniques and monitoring instrumentation. Processing and interpretation of instrumental data.

### 3. Risk classes

- 1. Characterization and therefore recognition of the full range and complexity of the risks to which cultural heritage is exposed.
- 2. Gathering statistics on damage to the assets of the risk; experiences by end users to select types of cultural heritage; consultation with organizations and agencies that indirectly affect the heritage conservation (public authorities, insurance agencies).
- 3. Risk assessment based on scientific management for each hazard class.
- 4. Integration of research results within a risk management framework with a multidisciplinary perspective.



# 4. Integrated strategies for the protection, rehabilitation and promotion of cultural heritage

- 1. National and regional laws which aim to ensure and regulate the gradual recovery of the historical and cultural heritage properties.
- 2. Prevention of the risk of collapse in residential buildings self-assessment cards.
- 3. Multidisciplinary processes for the evaluation of permanent maintenance strategies.
- 4. Tools for planning the permanent maintenance of the heritage, and the identification of knowledge and any further research needs gaps.

## 5. Maintenance and energy improvement in the recovery of minor historical centers

- 1. Preserving the architectural heritage and degraded its social fabric, through the operation of environmental protection and the use of new technologies, design and installation of energy systems with low emissions.
- 2. Integration of passive systems for heating and cooling, bioclimatic architecture, landscape design and other strategies to redevelop the local cultural identity.
- 6. Case studies relating to the abovementioned themes.

## Theme B

### Restoration of Monumental Complexes

Work on the architectural heritage consists of monumental complexes, I have always been torn between conflicting reasons and interests. Among them, the adjustment needs, even partially, to the new standards of life and safety (plant engineering, fire, seismic) that contrast with those of the preservation of their values, both tangible and intangible, contained in their workplaces and in their facilities; and also, in conflicts around the

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appropriate use of advanced technologies and reproposing of the past technologies.

The solutions to these and other unresolved issues can arise only from a direct comparison between experts internationally on all conflictual aspects that influence the decision-making process of the intervention on monumental buildings. Compare that over as well as take into account the degree of risk of the people and of the monument, it will also be considered, through careful analysis of social perceptions, an optimal combination of all the needs of citizens.

### 1. Management and planning of interventions

The conservation of monuments is an integral part of planning and management process of cultural heritage of a given community and should contribute to sustainable development, quality, economic and social of the community.

- 1. Authenticity, historicity, ceremonial, Identity of a monument. redefinition of criticism and proposals categorization of monuments.
- 2. Allocation procedures of '"Importance" at every monumental characterization, according to technical codes and moral values of the community.
- 3. Respect for the rights of future generations in relation to the monuments available today and conservation choices.
- 4. Political management of the monumental architectural heritage. The role of the Government and local authorities in the planning of the monumental heritage protection.

### 2. Conflict emerging in the intervention process

In all restoration practices in the various countries, their main feature is the contradictory nature of the monument values, but also their relativity, since every time is searched for an optimal combination, you have immediate impact in the design choices.



- Redefinition of a monument values: i) Protection of Human Life Value, ii) Protection
   Value of Form: aesthetic satisfaction that offers a view of a monument, from without
   and from within, iii) Symbolic Value: historical importance or religious monument and its
   contents, iv) Technical value: process of realization, construction details, materials
   incorporated.
- 2. Conflict in the conceptual triangle Functionality / Security / Economics in recovery operations-improvement-adaptation to current standards and regulations and optimization of the design choices.
- 3. Management of Quality and evaluation algorithms of expected benefits after the intervention: a) Reversible / degree of intervention repeatability, b) Durability in time of materials and elements added, d) Credibility Constructive intervention in specific technical conditions economic and control conditions, e) Feasibility and controllability of the proposed solution, g) Functionality for reuse in case of new uses (eg. tourist exploitation).
- 4. Conflict between structural safety and value of the monument Technical intervention in the different phases. Optimization of the design choices. case studies
- 5. Restoration / Anastylosis of Monuments: procedures, techniques, technologies.
- 6. The de-restoration. Legitimacy and limitations of the design choices.
- 7. The energy conversion to redevelop the monumental architectural heritage.
- 8. The architectural barriers in the restoration of monuments.

### 3. The structural intervention on monuments

Impact of policy choices on Monumental values: a) on the Monument shape (geometric or color changes, degree of damage eligible for the type of intervention under the project actions), b) on the historicity of the Monument (capable of eliminating accretions storable, obstruction of current functions, such as eg. the liturgical celebrations), c) on the Monument Technical value (degree of influence of the intervention on existing materials and on their constructive available).



- Quality Management and evaluation algorithms of expected benefits after the
  intervention: a) Reversible / degree of intervention repeatability, b) Durability in time of
  materials and elements added, d) Credibility Constructive intervention in specific
  technical and economic conditions and control conditions, e) Feasibility and
  controllability of the proposed solution, g) Functionality for reuse in case of new uses.
- Grado adequacy / inadequacy of international requirements (International Conventions and cards) in the field of structural restoration of monuments. Respect, deficiencies, proposals for updates.
- 3. Reliability Constructive. control and monitoring programs during and after the interventions. effectiveness audits of the results achieved during and after surgery.
- 4. Preservare monuments by natural disasters: a) actions for improvement / reinforcement / structural adjustment, b) approaches to safety differentiated between old structures and new structures.
- 5. Integrated global project: Assessment Procedures Importance attributed to different design aspects of architecture, structure, installations and functionality.

### 4. The shared heritage

- 1. The balance of the various emerging needs of different cultural communities in the decision making process of restoration of the shared architectural heritage. Conflict between the need for the values in the shared heritage protection and public expectations, visitors and locals.
- 2. The removal or alteration of any historic material: memberships, dislocations, refunds: the need for international regulation.
- 3. Socially useful purposes of colonial monuments and their conservation. The conservation of monuments is always facilitated by shared use them for some socially useful purpose, without perlatro change the architectural structure or the decorations nell'edifico content.



#### 5. Case studies

- 1. Monuments which are of significant importance for their historical significance and for the architectural and artistic characteristics of particular value
- 2. Monuments or representative monumental complex of the historic building fabric who have maintained significant features on the architectural and distribution plan
- 3. Buildings that are part of the historical building heritage, while not presenting special architectural and artistic characters valuable

## Theme C

# Strategies for the reappropriation of abandoned buildings located in urban and extra-urban areas; industrial archeology.

Referring to the growing edification demand and the demographic and infrastructural transformations of the cities, it has become critical search for a comprehensive strategy of reuse of industrial buildings or representative resigned (cinemas, theaters, buildings for the craft and industry, barracks, etc.), based on a careful and interdisciplinary analysis of the amending processes built environment.

Only through a landscape rich in ideas and constraints, such as the one that will offer an International Biennial of Restoration, it thinks will emerge strategies of "recovery", based on interdisciplinary approaches and focusing resources and values.

The objective of this topic is to raise a debate about the competences, Responsibilities and governmental mechanisms and urban design That future determinates of brownfield sites and working-class neighborhoods while pinpointing Also Those schemes of urban governance, urban policies and urban projects Which successfully balance between the imperatives of



transformation Imposed by market forces and preservation of urban memory.

## 1. Sustainable reuse of abandoned buildings and abandoned sites

Sustainability is a multidimensional process that involves social, economic and architectural emerging from the real needs of a certain community or may even have the potential to generate a certain need or request. There is need for a new ethic of architectural design, which will exceed the ego and the architectural concepts pretentious and abstract, and will result in a "dynamic process" design of the life cycle of buildings.

- 1. Responsibility: the capacity or Provoke Give Answers.
- 2. Dynamics (and transformation) Revitalization of Derelict Sites.
- 3. International cooperation exchange of experience.

### 2. Urban Rehabilitation and Decentralization

With the changes in the socio-economic structure of the city in recent decades, urban redevelopment and the subsequent decentralization they have acquired new importance as a strategy for ecological sustainability. In many cities around the entire world quarters (such as those of the bathing establishments, the former industrial plants and adjacent residential areas) are abandoned and processed for social status and new uses; therefore, special attention should be paid to the following sub-themes:

- 1. Social impact of urban / decentralization redevelopment.
- 2. Definition of urban / decentralization of regeneration policies.
- 3. Environmental impact of urban / gentrification redevelopment.
- 4. Communication sites in disuse (ports, railway stations, airports, border points).

### 3. Industrial archeology

The industrial archeology has evolved in recent decades as a discipline that takes into



account not only meanings in terms tehnologici and economic, but also takes cultural significance as a symbol of change.

- 1. Methods, procedures and techniques of intervention in Industrial Archaeology
- 2. Prospects of the industrial-Towards new recovery strategies heritage.
- 3. Sustainable reuse of historical industrial areas
- 4. Maintenance for storage.

# 4. Technologies of the interventions in the sectors industrial archeology and environmental impact

It requires interdisciplinary commitment and clear trends on the future use and improvement of abandoned industrial buildings, in the fields of urban planning, architecture and economic.

- 1. Environmental impact of interventions and technology.
- New approaches in dealing with construction waste arising from the disposal of industrial buildings.
- 3. Economic incentives to switch to energy-efficient practices and services.

### 5. Case studies relating to the abovementioned themes

## Theme D

# Interventions on the modern architectural heritage

The intervention on the buildings of significance criteria of the twentieth century, are always established on the basis of questionable regulations if not totally missing, thus leaving large space for private initiative and the free interpretation.



Nobody expected also to have to use reinforced concrete buildings built just after World War II, for a period exceeding ten or twenty years; the great post-war reconstruction of the fifties had been undertaken in the belief that "soon we could have do everything better and with more modern technology."

These buildings today so require "treatment" of structural restoration, installations and aesthetic improvements that must be carefully regulated in relation to economic and technological resources of each country. An international comparison of their residual potential (safety, aesthetic, technological values, etc ...) may suggest policy interventions aimed at stabilizing the buildings themselves, without losing sight of the 'local economies.

The various efforts that are placed in different countries (the poorest and the most advanced) to extend the life of the "life" of these buildings, can understand the vastness of suggestions and solutions that can result from a reasoned comparison on an international scale.

## 1. Education and theory for the protection of modern buildings and building complexes of the twentieth century

- 1. Strategic management for the restoration of modern architectural heritage on a regional scale.
- 2. Training for maintenance and recovery of the modern architectural heritage.
- 3. Initiatives within the Council of Europe and UNESCO for the preservation of architecture of the twentieth century.
- 4. The building heritage between the two world wars period: vulnerability and conservation. The knowledge and use of new materials and techniques (mineral and plant cell, fiber reinforced materials, agglomerated cork, linoleum, glass-concrete brick, metal, concrete and aluminum). The stylistic identity: a shared value systems that have the goal of widespread quality.



# 2. The housing stock in the 2nd World War and the nineties in Europe

- 1. Redesign of buildings and urban spaces.
- 2. History and development. Diagnosis and remedies.

### 3. Techniques of stone cladding in the 20th century

1. Restoration of the different technologies of stone coverings: prefabricated panel of exposed stone: monitoring and intervention techniques for the stabilization of the slabs.

### 4. Developing countries

- 1. The single house: the house and its evolution, the preservation of local technology, color technology and conservation.
- 2. The great works: "other modernism" to keep: public buildings, buildings relating to education, industrial buildings, sports buildings.
- Conservation and sustainability: conflicting aspects, innovative technologies, intervention policies; real possibilities of adaptation to the settlement strategies and plans for economic conversion.

### 5. Case studies relating to the abovementioned themes