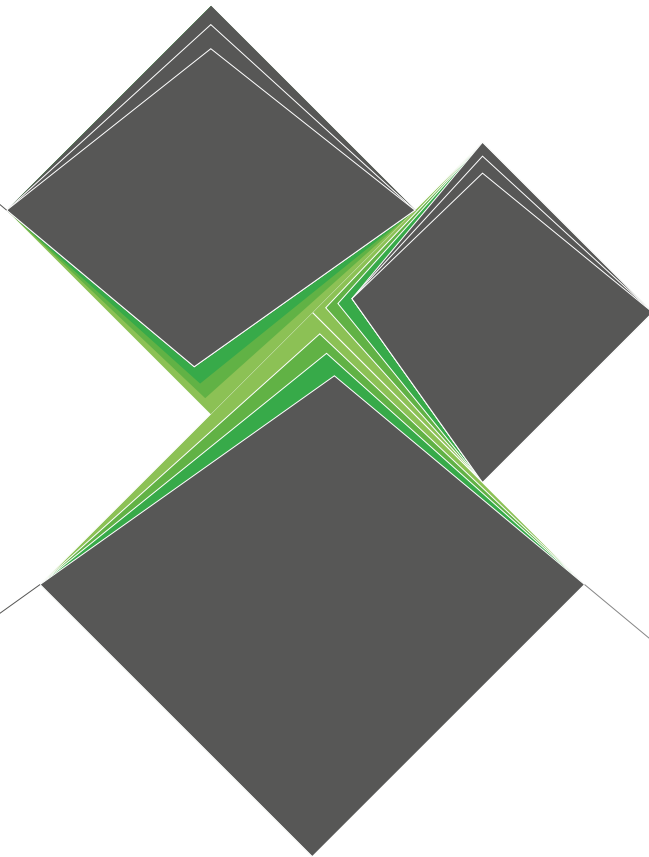


# Architectural Education and the Reality of the Ideal: **Environmental design** for innovation in the post-crisis world



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**EMUVE**  
**(Euro Mediterranean**  
**Urban Voids Ecology)**

## **Architectural Education from socio-economic perspective in environmental design**

In recent years, the concept of sustainability has been extended from technological research fields to the whole architectural discipline, including its social, economical and political aspects.

EMUVE (Euro Mediterranean Urban Voids Ecology) teaching project intends to educate the future architects in environmental design through the search of innovative reactivation strategies for the excess of real estate developments and urban voids produced by economical crisis along the euro-mediterranean coastline. The aim is to teach the students a new kind of symbiotic relationship with urban and natural landscape. With a responsible consumption of the resources available, we will be able to give in return renewable energy production, environmental recovery strategies, economic reactivation of degraded territories, and cultural value enhancement as an added quality of the territory.

How to deal with the unbridled real estate developments which have produced thousands of square meters of vacant houses while a huge amount of people lose their homes? The answers are in the field of recycling strategies, low cost interventions, flexibility of functions, public space qualities, civic participation policies and the development of spaces that generate community and solidarity.

Through EMUVE architecture studio course, the students will develop an analytic work and a range of proposals that will try to answer the following questions:

- a. How could we search for recycling intervention strategies for these large areas of degraded landscapes from a renewed environmental culture, as a tool for local/regional socio-economical growth and territorial cohesion?
- b. Which are the ways to investigate and promote institutional and business model transformations of Euro-Mediterranean coast urban development towards more sustainable criteria in symbiosis with landscape and its natural resources?
- c. Could we find alternative sustainable economic development for the Euro-Med local population beyond the present endemic dependence on unsustainable tourist urban development?
- d. How could we improve the environmental quality offered to the visitors of the Euro-Mediterranean coastline, for whom this new relationship with the territory could be considered as an added value?
- e. Which are the best eco-urbanism instruments and institutional coordination strategies with local stakeholders for the recovery of these degraded landscapes?

The principal aim of the present paper is to describe how EMUVE European project contributes to the awareness and training of architecture students in territorial, social and economic recovery strategies in the post crisis scenario at the Mediterranean context.

### **EMUVE Project. Euro-Mediterranean Urban Voids Ecology**

The exponential planning developments at the euro-Mediterranean littoral in the first decade of 2000 until the bursting of the real estate bubble of 2008 have produced a

deep wound in the Mediterranean Landscape and in his local population. The strong pressures received in the last years by previous human occupation models are compromising seriously many of the coastal ecosystem services that are essential for human welfare and economic development in the long term. Recent studies<sup>1</sup> show the decline of the Spanish tourism Industry, pointing out that this is the end of a development cycle based on unlimited housing growth and of bio-capacity overflow on natural resources.

Despite this saturation, the persistence of recent years in the construction of more housing developments, the bursting of the housing bubble and the global economic crisis from 2008 has produced not only an extensive vacant housing stock in the coast, but also a large number of half-built housing developments.

The Mediterranean coastline is facing a global change, which goes beyond the current situation of economic crisis to become a change of scenario and values, a change that will determine its future for the decades to come. This deep problem only should be approached from a restitution of symbiosis with natural processes of the coastline, in order to recover its landscape qualities and environmental resources.

The context of poorly planned development followed by an unprecedented housing crisis at the Euro-Mediterranean coastline leads to the presence of large number of half-built real estate, *future ruins*<sup>2</sup> that are waiting for an economic recovery that today seems more than uncertain. Despite the change of the economic scenario in the last five years, these large tracts of buildings skeletons and empty urban developments, now mostly owned by banks that had financed its promotion, have remained untouched. After several years of paralysis, until the date any clear and open alternative future proposal for these buildings has been developed. The only expected destiny for these *ghost constructions* is their future completion, with the unrealistic objective of its sale.

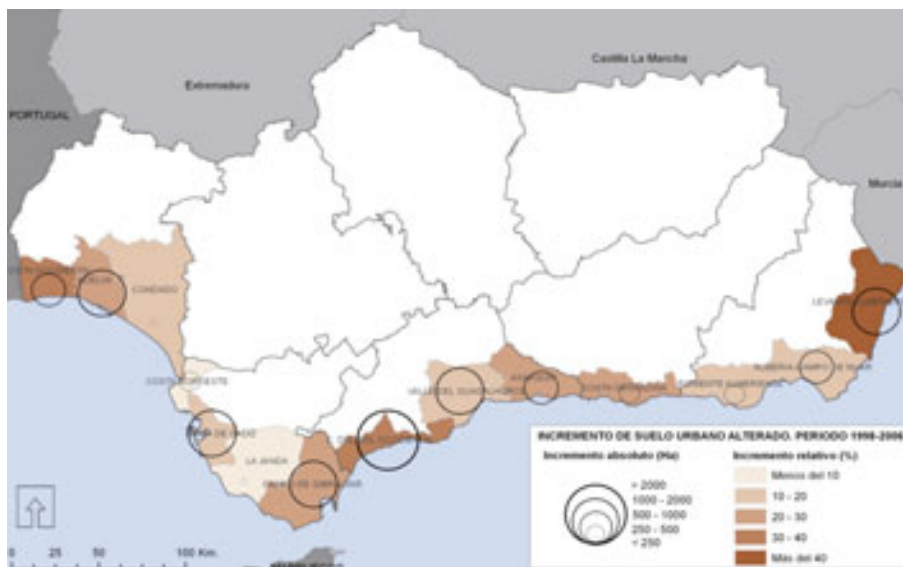


Fig. 1  
Map of urban territory increase in the south of Spain. 1998-2006.

The University as a space that generates research and development offers innovative and alternative answers to the present and future problems raised by society. The principal aim of EMUVE architecture studio course is the search for recycling intervention strategies for these large areas of abandoned voids from a renovated environmental culture. It can be the first step for the landscape recovery and economic reactivation of the deeply degraded Euro-Mediterranean littoral.

As future architects, the students could play an essential role in the regeneration of the devastated territories of urban speculation. Therefore, they must be aware of the need to change the relation model with the territory and its economy. The training received will influence their perspective on how to lead their practice in the Euro Med coastline, as well as in other territories with similar problems. In the future, they will assume the role of mediators between the different interests involved, having a positive effect in the decision makers, as well as acting as catalysts of the social demands of the local inhabitants.

### ***EMUVE project teaching aims***

- a. Understand the destruction processes of the Mediterranean landscape by real estate urban developments in the last 50 years.
- b. Explore intervention strategies in symbiosis with natural processes of the Mediterranean coastline, in order to recover its landscape qualities and environmental resources.
- c. Improve social and economic conditions of these post crisis abandoned areas.
- d. Learn and develop performance systems based on the idea of landscape and architecture recycling.
- e. Provide an understanding of instruments and methods for sustainable landscape recovery of the Euro-Mediterranean coastline through intervention on urban voids and half built developments stopped by economic crisis.
- f. Search for innovative sustainable urbanization processes and good practices on landscape recovery projects in similar scenarios.
- g. Utilize state-of-the-art methods and techniques from Landscape and Eco-Urbanism, urban planning, environment sciences, economic geography, urban sociology, anthropology, and history for the understanding of the Mediterranean coastline Ecology.



Fig. 2  
Algarrobo Hotel in Cabo de Gata National Park (Almería-Spain).

## **EMUVE teaching methodology**

EMUVE teaching course length is one academic year, divided in three terms. After a theoretical training before the beginning of the project, the students will select by groups the most interesting case studies and will learn how to conceptualize them as paradigmatic examples of relevant aspects of the project. At the same time, they will learn how to develop a comprehensive analysis of each selected case, from a coherent perspective with these previous established conceptual models. To that end, they will discover their architecture, urban, landscape, cultural, social and environmental aspects interrelations.

### **1<sup>st</sup> Term**

#### ***EMUVE Theoretical Introduction***

The course will start with a theoretical introduction on the different definitions and contexts of urban voids and decreasing cities, as well as how they have been recov-

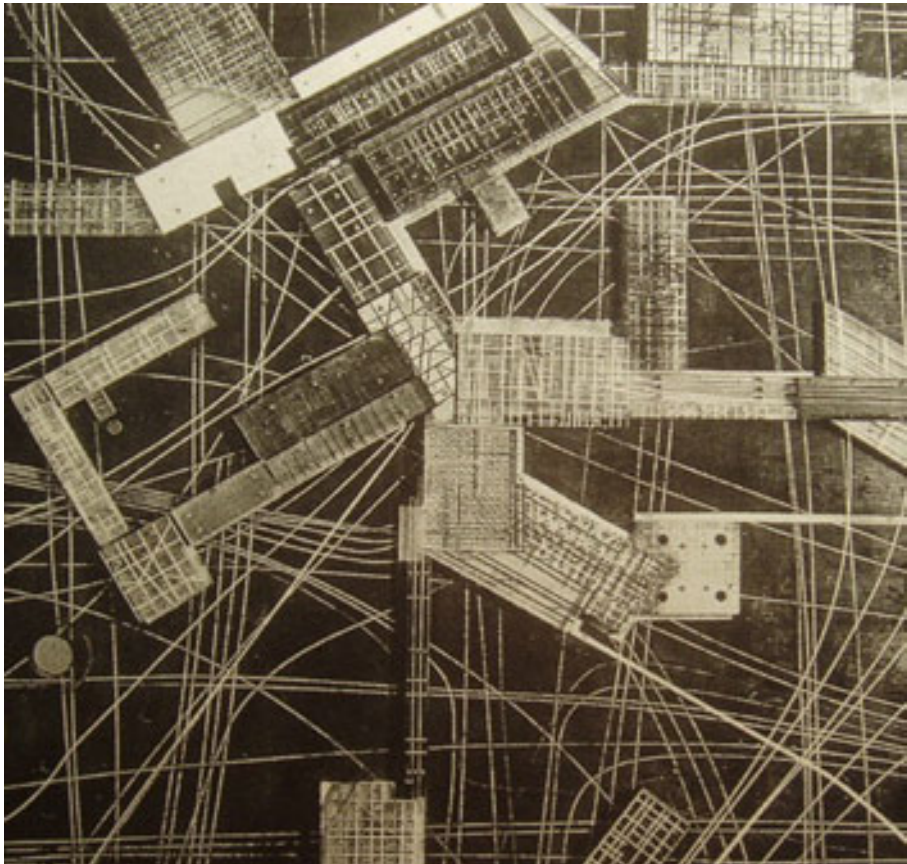


Fig. 3  
Situationist utopia. Benjamin Constant. 1959.

ered, recycled or abandoned throughout time. For this purpose, we will invite experienced academics and practicing architects to give monographic lectures on this issue.

These voids appear as territories where everything is possible, *ludic spaces*<sup>3</sup> out of the preset order imposed by current urban planning. Since 1953, the Situationism movement proposed a new way of relationship with the territory by studying the psychological influence of the environment in the individual<sup>4</sup>. The work of Robert Smithson<sup>5</sup> and Gordon Matta-Clark<sup>6</sup> about degraded architecture and *entropic* landscapes in industrial contexts<sup>7</sup> is a stimulating background for the project. The perceptive work of Tony Smith<sup>8</sup>, Cedric Price projects<sup>9</sup> and the works of Solà-Morales<sup>10</sup> offers a wide range of readings of these degraded landscapes. James Corner, Landscape Architecture Professor of UPenn and a founder of *Field Operations*, proposes *Landscape Architecture* as a potential tool for intervention in post-crisis voids<sup>11</sup>. He conceives the voids between buildings as “constructions” produced by an industrial logic and as reserves of “indeterminacy,” places of potential action. Charles Waldheim, Professor and Chair Department of Landscape Architecture at GSD-Harvard University, defined Landscape Urbanism as a branch of landscape ecology, concentrating on the organization of human activities in the natural landscape<sup>12</sup>. Both are looking for a new hybrid urbanism, with dense clusters of activity and the reconstitution of the natural ecology, starting a more ecologically balanced, inner-city urban form in the void<sup>13</sup>. The Eco-Urbanism research of Moshen Mostafavi<sup>14</sup> and the instrumental research of Douglas Spencer at Landscape Urbanism Unit of the Architectural Association of London will also be studied for the development of analysis, representation and intervention instruments<sup>15</sup>. The Mediterranean Cities Program developed by Prof. Eduard Bru at the Mies Van Der Rohe Chair<sup>16</sup> in Barcelona, will be of great interest for the course by its search for common issues among the Mediterranean urban Landscape.

### ***Case study selection and analytic phase - Parameters and critic representation***

The first exercise of the course will be the selection and the analysis of the case studies where the students subsequently will develop a project. For this purpose, the course will focus on the following aspects:



Fig. 4  
EMUVE Cases study.

### *Impact of economic crisis in housing prices decrease*

As a first data for the selection of the most affected areas by previous urban development model collapse, we will manage the economic information of largest decrease in housing prices at the Mediterranean coastline in recent years. For this purpose, the students have to look for statistic data and documents at national and European levels<sup>17</sup>, as the specific reports on this issue developed by the Ministry of Development of Spain<sup>18</sup>. A graphic documentation will be elaborate where the degree of the economic impact of these price declines will be displayed together with its relation to the presence of unfinished housing developments.

### *Study of the existing post-industrial, unfinished buildings and interrupted urban developments in each case.*

The urban voids under study in this project are named with the same acronym of the project: EMUVE (Euro Mediterranean Urban Voids Ecology). They are classified in three kinds, in many cases in close interaction between them:

- a. *Terrain Vagues (TV)*, free spaces out of urban planning regulations, or subject to obsolete planning rules after the bursting of real estate bubble. They have failed to be managed as public spaces neither as building land for future developments. However, the indeterminacy of these spaces is their potential, to be converted into areas of experimentation and new opportunities.
- b. *Future Ruins (FR)*, half-built buildings from real estate speculation and illegal licenses now paralyzed by economic crisis.



Fig. 5  
Urban Planning Voids in Spain.





Fig. 6  
Murcia Case Study.  
Heritage and Future Ruins  
(FR).



Fig. 7  
XIX<sup>th</sup> Post-Industrial Voids (PIV) in the Spanish Coastline.

- c. *Post-Industrial Voids (PIV)* with heritage values, many of them abandoned or whose recycling process has been halted by lack of resources and inefficient management.

A research will be developed on urban growth prospects during the period before the economic crisis (1998-2006) and its subsequent abandonment process. This analysis will help to detect how many TV and FR voids exist in each case study candidate, and which are their potential to be transformed. To that purpose, we will contact planning departments of each studied city council and citizen platforms involved in the complaint and recycling of these spaces.

In the case of post-industrial voids, the information obtained from the consultation of heritage catalogs and related research papers will be combined with a graphical documentation where we will analyze the impact of PIV in the transformation of the territory, in both its historical productive phase and abandonment process.

### *Case study conceptualization*

The students will model each case study within a conceptual framework which will focus on a specific aspect of the project. This will be a first step for the selection and interpretation of the information obtained. As an example, in Spain Marbella can be defined by speculative development and illegal urban license procedures, the northern coastline of Almeria could be defined as a landscape of exponential growth of urban voids, while Barcelona case will be identified with good practices procedures in social reactivation of abandoned urban spaces. Each model thus defined will develop an essential aspect of the overall project which could be used, through comparative studies of each case, for the development of conclusions and the study of recovery proposals.

### *Analysis of the historical evolution of economic models applied to each case study*

Over time, landscape has been transformed by man through the use of available resources. In XIX<sup>th</sup> and XX<sup>th</sup> centuries, many areas of the Mediterranean coast focused on traditional intensive agriculture evolved to different models of industrial exploitation. Finally, in the last 50 years, they move to real estate monoculture focused on tourist customers. Exploitation models over time should be studied in each case, in order to know if they have been always unique or dominant, and if the local economy was more diversified throughout history. The current abandoned landscapes of real estate speculation are largely the result of a development model overly dependent on a sector that has been much more volatile than expected by investors.

It should also be studied how the development model applied in recent years has affected the resources of the territory. To this end, we will develop territorial mappings of economic uses in relation to the transformation processes and simulations of the model evolution over time.

### *Origin and evolution of EMUVE's*

The emergence of EMUVE's will be explained in each case through the study of the implementation of previous urban development model, the urban growth prospects and the paralysis of economic activity due to the crisis. Other factors may be considered,

as the developments paralyzed by local governments after irregular licensing concessions given by previous administrations. Students should reconstruct the history of each EMUVE, documenting its planning and development process, as well as its subsequent abandonment, degradation and biotic occupation.

### *Social Impact*

Social pathologies caused by the crisis of this previous economic model will be identified<sup>19</sup>, such as unemployment increase, conflicts between public administration and private sector, loss of economic value of the area and marginalization of the population.

### *Environmental Impact*

The degree of landscape degradation caused by EMUVE's will be studied, including its visual impact, their contribution to land erosion, the unsustainable use of natural resources available, the loss of biodiversity, if their location is within or near protected natural areas, and the degree and type of pollution produced.

For this study, we will work with GIS environmental risk maps, environmental impact reports and the information provided by ecology groups specialized in Euro Mediterranean coastal protection<sup>20</sup>.

## **2<sup>nd</sup> Term**

### ***Project Phase***

At the beginning of this phase, students will receive a first theoretical introduction of best practices in urban voids recovery and coastal landscape regeneration.

Among others, we will learn on previous successful intervention experiences on voids intervention for large scale landscape recovery projects, as the reactivation strategies for American post-Fordist voids in shrinking cities as Detroit<sup>21</sup> or Philadelphia, the post industrial interventions of OMA in Mélon-Sénart and Zollverein, and the works of Peter Latz and Florian Beigel in German reunification landscapes<sup>22</sup>. The work of Beigel was an important contribution for the appreciation of the devastated landscapes of former German Democratic Republic, as well as to implement on them concepts in order to achieve a compromise between ecological and industrial perspectives. The social activism of Roma Stalker group of Francesco Careri and Lorenzo Remito is also of great interest for the proposal development<sup>23</sup>.

The best practice experiences developed by citizen platforms for appropriation processes, self-management and negotiation with local authorities to activate abandoned spaces will also be studied. Barcelona offers a number of interesting experiences, as *Plà Buits*, an annual competition promoted by the council for the activation of urban voids<sup>24</sup> and other successful citizen initiatives as Can Batlló<sup>25</sup> or Espai Germanetes<sup>26</sup>.

The qualities of the case studies and their EMUVE's thus defined in the analytical phase will anticipate the proposal strategies. The definition of urban, social and envi-



Fig. 8  
 Urban voids Reactivation Project: *Plaça Buits*, Barcelona, Spain.

ronmental pathologies will help to establish a diagnosis for each case study, which will be treated with coherent intervention strategies that contributes with optimal and coordinate solutions to the problems raised.

The groups should establish the most relevant EMUVE's in each case study, based on its potential to be recycled and the degree of impact that their transformation will affect the surrounding urban fabric, the environment and other less relevant EMUVE. We will focus on their morphological qualities, landscape integration possibilities, urban and infrastructural connections and the relation with the social fabric.

The recycling of these spaces could work as future cultural and economic magnets for the social and economic reactivation of these degraded areas into productive and ecological landscapes.

The recovery interventions on these empty spaces should address the following issues:

How can we make interventions in each specific EMUVE for the reactivation of the economy and employment of the whole case from sustainable criteria?

Do we have to develop local interventions on some specific voids that will positively affect their surrounding environment, or should we develop large scale recovery systems that link these spaces with existing urban landscape?

How can we capitalize the flexible and indeterminate qualities of EMUVE's to become urban connectors or new public areas, in coordination with the open spaces network of the case?

In which cases the EMUVE's should be reintegrated into the natural environment, taking precedents as the proposals for the city of Detroit?

What kind of links could be established between EMUVE networks and existing ones, such as networks of environmental interest and heritage sites?

In a first stage, large-scale interventions will be developed in groups. Then each member will focus on a specific EMUVE, in coordination with the rest of the team. Finally, the group will design a global project assembling the individual proposals of its members.

The final results will be presented in an exhibition at the architecture studio, where a critical debate will be developed, with a comparative review of the analysis and design methodologies of each group.

### **3<sup>rd</sup> Term**

#### ***Comparative study phase***

Based on previous review session, a comparative study will be carried out on the different methodologies used in each case study and the degree of success in providing answers to social, economic and environmental problems raised, as well as the level of collaboration with local stakeholders. To this end, this work will be developed by new groups, now composed by one member from each previous team. A critical summary report will be written to reflect the conclusions of this study.

#### ***Publication and public exhibition***

One of the ultimate goals of EMUVE course is the development of outreach activities through a publication and a public presentation of results through a travelling exhibition. In collaboration with local and regional administrations, the exhibition will travel through the different concerned areas. The timely environmental, economical, social and political approach of EMUVE project has the aim to collaborate in the landscape recovery policies of the Euro-Mediterranean coastline. The outreach actions are intended to strengthen the relationship between the University as a think tank which provides new proposals to local authorities in charge of the protection of the environment and urban habitat. The ultimate goal of this project is to arouse the interest of public administrations, social platforms and private stakeholders of each case in order to develop with them the real implementation of these projects.

#### ***Thematic workshops for each kind of EMUVE (PIV, FR, TV)***

As an additional teaching activity, three thematic workshops will be developed. In a limited period of two weeks, students will have to think and produce proposals for these three different kinds of voids, focusing directly to the production of a project. Unlike EMUVE annual course, in these workshops the case study will be a given data. The workshops will be held at the end of each term, and will be organized in each case study to collect directly the required information and test the proposals

### **Conclusion**

This teaching project has the purpose to aware students with the euro-mediterranean landscape social reality within the framework of the post crisis scenario, from sustainable and responsible perspectives. As Greenpeace notes in its 2012 report<sup>27</sup>, this fu-



Fig. 9

Nature and Future Ruins. Marbella, Spain.

ture scenario should include policies to promote a change in the urban development model at the Mediterranean littoral, based on a new economic and environmentally sustainable culture, focusing on rehabilitation and reduction of existing infrastructure and its integration with a renewed nature, which would control urban growth, reduce the environmental burden, and improve employment and wealth. The present project has the aim to inspire and train a new generation of EMLU (Euro Mediterranean Landscape Urbanism) Architects, who will go on to devote their careers to ensure the future prosperity of present deeply degraded Mediterranean coastline. Therefore, the training program and the complementary skills have been designed with a variety of activities to strengthen their professional training and to establish strong links between the students, local stakeholders and experienced leaders in the field; to promote active civic engagement, advancing practical research and creative thinking about environmental, economical and social recovery Landscape planning practices.

The EMUVE training can be the basis of the knowledge necessary to the development of future landscape recovery projects and good practices guidelines towards the horizon of a new sustainable approach for the Euro-Mediterranean coastline. It will provide innovative insights and scenarios that can be used as a critical guide for the development of alternative sustainable urbanization processes and landscape recovery projects for the Mediterranean over the next 20 years.

#### Notes

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