The European research project EMUVE (Euro Mediterranean Urban Voids Ecology), funded by EU within the Marie Curie Research Program and developed at the Welsh School of Architecture in association with the [Metropolitan] Atlas and the research laboratory INAMA of l’Ecole Nationale Supérieure d’Architecture de Marseille (ENSA-M), focuses on the study of the current problematic of territorial abandonment produced by the economic crisis in the metropolitan areas of the Euro-Mediterranean coastline and the investigation of new methodologies of urban experimentation for their reactivation from flexible and resilient perspectives.

EMUVE research project, theoretical and case studies

With the Industrial Revolution in XIXth C., many areas of Western Euro Mediterranean coastline which were focusing on traditional intensive agriculture evolved to different models of productive landscapes. From the end of the decade of the 50’s and the 60’s of XX.C, some of these areas moved to real estate monoculture focusing on tourism while others increased their industrial density to become wider primary productive sector areas. The current processes of abandonment of these territories are largely the result of their overly dependence on a main economic model, either tourist real estate or primary industry. When the first collapsed during the global economic crisis since 2008 and the South European primary industry was mainly relocated in cheaper emergent countries as a consequence of the globalization of the economy, extended areas of the Euro Mediterranean landscape started deep urban degradation processes.

EMUVE research project has developed a comparative research on several case studies along the Euro-Mediterranean coastline in Spain, France and Italy, with references in United Kingdom in London (Hackney Wick) and South Wales (Cardiff Bay). Each selected case study was defined from a distinctive conceptual approach which will focus on a specific aspect of EMUVE. These different approaches on abandonment processes could be compared in terms of socio-political context, spatial organization of the territory and different models of governance where the public, private and citizenship stakeholders have different balance of power. Finally, we have investigated the different kind of engagement of the communities in these processes and the new role of architects, urban planners, landscape architects and public agencies officers in these regeneration processes.

Since 2008, along the Spanish Mediterranean coastline the key factor of abandonment was the collapse of the exponential growth of real estate urban speculation from the 90s onwards aiming on tourism. On one hand, this collapse has produced thousands of square meters of vacant housing stock and half-built developments in the coastline. On the other, an important part of the population can’t afford anymore the payment of their housing mortgages, being evicted from their homes. This dramatic social situation has increased this vacant housing stock, exacerbating the urban and social degradation. To date, even if some initiatives have been positive in the political debates of European Parliament as The Aukén Report, EU policies still protect more efficiently the interests of real estate owners than the primary social need for housing, a right specifically protected in most of the Constitutions of Western European Countries, as it is the case of Spain.

In Barcelona case study, EMUVE focus on the innovative processes of community self-management strategies for urban regeneration. In recent years, there was a significant evolution in the role of public institutions of the city from their previous role as promoters of urban development with a clear leadership and future vision for the city as was the case for Barcelona 1992 Olympics, to become mere mediators between communities and the private sector. The Municipality of Barcelona is now constrained by successive cuts in the public budget produced by Spanish economic austerity policies guided from Brussels to overcome current economic crisis. They are signing temporary concessions of leftover spaces with communities which are developing economic self-management strategies for urban reactivation increasingly independent from public sector.
The role of collectives of architects engaged in these processes is becoming key as spatial translators of the needs of the communities and as necessary mediators between the citizenship, the public and the private sector. They are exploring alternative professional fields in a context where traditional professional commissions are lacking, such as programmatic design of economically sustainable uses for these spaces that could generate new sources of income for the communities. In horizontal collaboration with civil society, they are engaged in the spatial configuration of these new activities into former degraded urban areas, which will be converted into new spaces of opportunity.

EMUVE has investigated in the city of Rome the role of heritage in contemporary urban abandonment processes. The urban history of Rome was defined by a continuous recycling of its past urban fabric into new uses with complex and rich interactions between present and former layers of the city. Paradoxically, the conservative approach of the Italian legislation on heritage is breaking down with this tradition by imposing a rigid limitation for the type of interventions in the historical urban fabric of the City. This strategy is constraining the development of public-private synergies for the development of urban regeneration strategies on this heritage sites. The result is that large areas of the city have entered into processes of decay and abandonment just for being heritage sites. This structural problem is becoming increasingly important with the current economic downturn and the subsequent cuts on public investment.

The solutions for these abandonment processes will involve using the heritage values of these sites as assets for their regeneration, from a flexibilization of urban and heritage protection regulations to wider strategies of intervention, always leaded, defined and supervised between the public sector and the citizenship.

At the centre of the Aix-Marseille-Provence metropolis, the site of l’Etang de Berre, a wide sea water lake Northeast the Phocian city, is particularly interesting to study as an EMUVE case study. The richness and complexity of its different stratifications and its current processes of territorial transformation with dynamics of industrial decline, growth of technological and environmental productive activities, port and logistics infrastructures, traditional agricultural landscape are strong assets for its regeneration. The future creation of Aix-Marseille-Provence Metropolis in 2016 makes the study of this case specially timely.

EMUVE theoretical modelisation of this case is the study of the potentialities for territorial hybridisation between these dynamics of decline, growth and the preservation of traditional agriculture as a key for sustainable regeneration of this territory. The interaction of these various layers could provide a potentially resilient base for reuse and reinvention of the industrial buildings and brownfield sites.

**The Etang de Berre, invention and evolution of a territory**

The history of the Etang de Berre starts with the rural landscape, its little inland sea provided a place for fishing and, in the area stretching from the banks of the lake out toward the hills that shield the area, a series of villages grew up taking advantage of the agricultural possibilities provided there, building an agricultural ecosystem (Orillard C., Bartoli P. et al., 2000). In a second phase, the creation of the salt farms took advantage of the flat landscape and the value of this resource grew, with industry springing up to refine and transform this "white gold". The lakes strategic position, connected to the mouth of the Rhone River by the Caronte channel, facilitated its connection to the surrounding areas with infrastructure: banks, ports and railways. After 1930, the industrialisation of the area intensified, chemical Industry developed in the west of the region, and the aviation industry developed to the east.

This development was intensified after the war in the 50s. The original central pole of the channel was divided into two parts. In the east the airport and industrial zone of Vitrolles, in the west the industrial harbour of Fos-sur-Mer as an extension of Marseille. This was followed by the construction of two new highways in the 60s and 70s, the development of an urban centre in Vitrolles, and Fos was becoming the biggest industrial port of France.

The regional planning of the OREAM in 1969 was the first overall vision of this territory, and it imposed a very top down process, typical of the French technocratic functionalist system. Its aim was to organise the infrastructure and transport system, and it developed four new towns around the lake (Borruey, 2008). Even if the plan partly failed, for political reasons and because of the economic crisis of 1973, it was the starting point of the autonomy of the lake from Marseille.
The second economic crisis in the 80s and the decline of the oil industry also affected the development of the area, but at the same time it allowed the territory time to begin to digest the planning of the 60s and 70s. In the 90s, new planning projects confirmed the independence of the lake area from Marseille, and in 2007 the Directive Territoriale d’Aménagement set the limits of urban extensions protecting the landscape of the lake by identifying the most remarkable areas.

Fragmentation process and systemic approach

The historical stratification process shows a stratified and complex territory, but also rich in itself. The inherited infrastructures of the 60s contrast with the traditional rural landscape. The waste land is everywhere around the lake, testimony to its the industrial past.

The territory is neither industrial nor agricultural anymore, it is an heterogeneous and composite area, being less imposed, more spontaneous and open. It is a huge metropolitan laboratory, crossed by contradictory dynamics of decline (traces of agriculture, remnants of industry, railways and the port) and the explosion of the peri-urban space (huge transport infrastructures, big public facilities, commercial centres, parking lots, offices and housing sprawl).

For the regeneration of this territory, our methodology is based on a cartographic layered analysis to build an efficient spatial tool aiming to understand the current issues (Hodebert, 2014). We are aware of the different layers that have built the landscape of the lake and we propose a territorial systemic approach to build the matrix of a new project. We need to find a key for the project which is neither planning, nor spatial coherence nor composition, but which ‘sews and repairs’, proposing an open system as a “plan guide” (Chemetoff, 1999). The relation between the layers has to be multi-scalar and will produce an interlacing which will be potentially rich for the work hypothesis (Bonnet, 2014).

Potentials for the reactivation of the territory of the Etang de Berre

The redefinition of the identity of the site through the integration of the diverse elements of this landscape into a coherent whole is the key element. The contrast and the interaction of the industrial and the natural space is a unique opportunity of this landscape. The constellation system of the in-between wastelands is a strategic resource for the exploration of the margins and the limits at both global and local scales.

The outlook for this territory is not so bleak, with the strong landscape identity of the lake, the growing dynamic of the population and some emerging new enterprises, plus a more cooperative approach between the cities. Also the stratification process, all the layers that have marked the ground, the wastelands, the artefacts and the infrastructures, participate to built a social and economical landscape capital and that they are major elements to built a cycle of life (Vigano, 2011).

The major reference for the reactivation of this large industrial site is the IBA for the Ruhr valley in Germany (Emscher Park, 2008). This example of recovery of the industrial wastelands along the river Emscher, in the core of the heavy industrial Ruhr basin, is a crossing system of top-down and bottom-up actions. Where the landscape strategies are defining actions on specific sites, in order for the series of acupuncture actions to have an impact at the global scale. So that the project takes place in this interaction, the collection of local meets the territorial systems (Secchi, 2009). The symbols of the declining industrial system have been converted in positive images of the new future of the region.

Actual challenges and future actions, a new coherent territorial network within hybridisation strategies

The conventional urban planning instruments have been unable to make a correct foreseen scenario for this abandonment processes studied in EMUVE Cases. Its rigid instruments were not adapted to provide effective solutions for these degraded landscapes which need urgent and adaptative solutions.
The degraded condition of these abandoned territories could become an opportunity to rethink innovative regeneration strategies from the perspective of a sustainable symbiosis with the landscape, the interaction between bottom-up initiatives through community involvement with new top-down approaches. The search for new synergies between the citizenship, its representatives and the private sector could foster the embedded resilience of these abandoned territories.

To solve the present actual frictions and incoherences, the methodology for a future innovative plan should be based on a territorial recycling process built upon geo-urbanity, a methodology for the hybridisation between urban and natural, as an interaction between categories that initially seem to be incoherent. This will lead to new cooperations, to an intelligent “new nature” that will dissolve the former unequivocal approaches towards the development of cross-fertilisation processes thanks to opened, flexible and multi-faced spatial actions (Gausa M., 2001).

This research was possible thanks to the collaboration between EMUVE European Project (WSA Cardiff) and the laboratory INAMA (ENSA Marseille) as a first cooperation action in research and teaching activities between both schools. The current next steps of this close and intense collaboration is the development of EMUVE+, a European Program of Doctoral Network (Innovative Training Network-ITN) within the framework of Horizon 2020. EMUVE+ Doctoral network is composed by six European Universities: Spain (ETSAB-Barcelone), France (ENSAM-Marseille), Italy (Politecnico di Milano), United Kingdom (University College of London UCL-DPU and Welsh School of Architecture de Cardiff University) and Belgium (Liege University).