03/STUDY DAY | SECOND SESSION

Research & Projects. Public spaces and urban waterfront toward 'The New European Bauhaus'

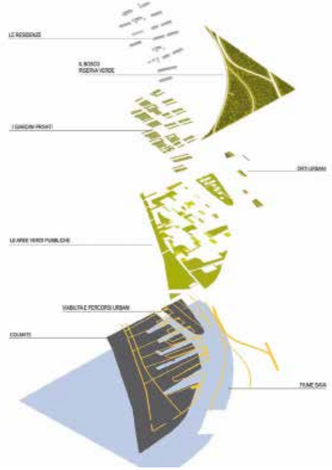
THE DANUBE WATERFRONTS AS A VECTOR, IN THE PERSPECTIVE OF THE EU INCLUSION OF THE WESTERN BALKANS COUNTRIES. *Focus on Belgrade*

Roberto A. Cherubini

In the near and concrete perspective of an extension of the EU to Western Balkans countries, the Danube represents the river able to act as a vector for the development. Vectorial is the sense of the water that flows, dammed by the natural and urban waterfronts. Following one another the Danube from the Alps to the Black Sea as an axis. Within the countries of next inclusion. Vectorial is also the desirable sustainable development of the riverfronts, once the entire course of the Danube will be part of the European Union. In this sense, the cross-border experience AW_Across Waters, gained from Rome over the last decade in terms of urban regeneration on the riverfronts of the Danube in Belgrade, the only city with a tradition of supranational capital in the context of the Western Balkans, may be an indication about the mainline generally to be followed. A quick focus on Belgrade can therefore be useful as an introduction to show the t perspective of the discourses of today's study day. Together with colleagues from the University of Belgrade we have carried out long studies of urban modelling, aimed at experiencing the original orientation of our School in the context of the informal city that grew up in the last twenty years on the opposite bank of the Danube than the old town of Belgrade. The question was the measure in which our regeneration design modalities were able to be adapted to the reality of the banks of the great river disorderly crowded with casual building fragments since the end of the Balkan wars. The results of this action are the subject of the following text while they are completely documented in the book AW_Across Waters. Il fiume riprogettato*, written and published in Italian and English in Rome (Cherubini, 2012).*

In these pages, I will try to summarize the complex modeling design action carried out together by researchers of the Faculty of Architecture of Sapienza University in Rome and researchers of the Faculty of Architecture of Belgrade. Focus of the action to the urban and architectural scale, during the first and second decade of the years 2000, was the north bank of the river Danube in Belgrade, when the town became, after the Balkan war, fully open to the market economy. The consequent phenomena of chaotic building growth saw the river assume the function of cut-off axis between what was a consolidated historical town and what is still largely building disorder.
To clarify the scope of the action, it is necessary to premise a brief note on what we really intended and still intend today for modeling design in the team of Labmed research laboratory.

Opinion of Labmed is that "… the draw up of a design modeling is a speculative abstraction, based on reflections that are sometimes systematic and sometimes intuitive. Any way leaded by a real knowledge of the state of the art and by a clear perception of the nature of the problem under study and of its concrete context of application. The model does not result deterministically from the set of analysis factors taken into consideration, because it would not otherwise possess those characteristics of autonomy and abstraction able to solve the problematic for which it is developed. Therefore, it does not represent a formula that can be adopted uncritically but rather expresses the materialization of a design modality that maintains the plurality characteristic of experimental applications. (Like a manual) it therefore implies a coexistence of competing but closely related models with which to deal as an alternative materialization of the same order of possible solutions".
In this sense, the action in Belgrade had the result of building a real illustrated manual on the subject as a whole, so much, so that the book that reports in full the results of the action has the subtitle "The remodeled river". If the five years in which it took place are now beginning to be distant in time, the action on the Danube has more recently experienced a new notoriety in being reported among the



Belgrade beyond the Danube, CSIAA Masterplan, 2006
AW_Across Waters. Modeling action, Belgrade, Serbia 2006-2012. On the river, in the town. Design model

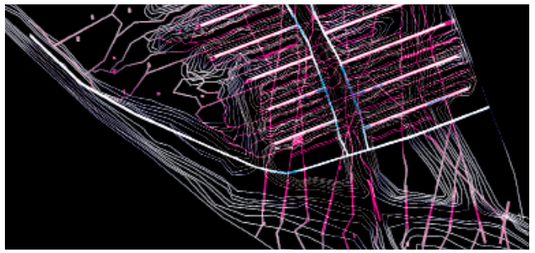
most significant study-cases in the UNESCO collection of transformations and regenerations of urban waterfronts around the world.
More than 10 years ago, during a long meeting at the Town Hall in Belgrade, it was introduced the opportunity to work on medium to long term at shaping the identity of the uncertain urban area recently settled on the left riverbank of the Danube, north of the old town. Belgrade, as it is known, stands on a plateau at the confluence of Sava and Danube rivers and it has always suspiciously looked from above to the other side of the great river without ever going to do it right in urban terms. In some locations, the rivers produced on their opposite banks twin cities. Different twins, it is quite clear. The Danube gives a good example just a little further upstream, where Buda, Óbuda and Pest became a great capital on both sides of the water. More often, the towns on the waterways prefer one of the sides. There is always a place across the river characterized by its own otherness. Oltrarno in Florence and Trastevere in Rome share the same meaning with Rive Gauce in Paris (and we wonder the bank in Paris to be Gauce - left - not only for the river but because being different) or with Sachsenhausen , the Saxon village on the opposite bank of the imperial town on the ford of the Franks (Frank-furt) on the river Main. It is unusual instead that this otherness is so radically manifested up to contemporary times as in Belgrade. On the one side the White City (Beo-grad, Serbian) on the hill, on the other side, a poor rural settlement and trees, ponds and clearings until a few years ago. At the architectural scale, on one side aligned docks and buildings ordered to define collective spaces and public areas, on the other side alluvial areas, embankments, irrigation ditches and canals essentially untouched until the recent invasion of out-of- control buildings which gave rise the informal settlement across the Danube. Historical and social reasons exist to explain the fact and they are meaningful, but it would be too long just to summarize. That morning at the City Hall in Belgrade we were interested mainly by the actual fact: here is a well-developed historical town with urban architectural forms and proportions, beyond it is a melting-pot of mostly illegal constructions irregularly raising along and side of the roads that run through the flood plain to other cities in Serbia. In the middle, only one bridge on the Danube, survivor of the 1990s war. In addition, especially dividing the two banks, an almost irreducible diversity of scales, of materials, of culture and common identities: the richness of values and meanings on the one hand, a kind of primitive and aphonic materialism on the other. It seemed linear, as well as relatively easy, in the immediately following days, to respond the requests that were submitted there, by proposing, through a direct mechanism of projection, a translation of some alignments, sizes and strong points of the historic town to the other side of the river. An attempt to convey with a play on proportions however altered – and adapted to the larger size of the plain - some values of the existing urban form to the chaotic

contemporary context. We were wondering that the sense of centrality that was giving value to the buildings on one side of the Danube, once inserted in a certain quality - even if just for fragments - on the other, could redeem the irremediable marginality of the settlement beyond the Danube.
The architecture was still missing across the river, along the alignments and in the space between.
We did not know it yet, but we had been involved in this work until now: a direct confront with the elements of the river reality, able to stress our architectural capacity in signifying the terms building on the water and near the water. Our capacity of intending the presence of the water as an opportunity more than as a risk. We realized that the hastiest river problem solving was by cancelling its presence.
We found out that the poverty of the self-generated urban context on the plain behind the riverbank was right in its denying to architecture any relation with the water. We noticed that, in order to pursue a different attitude, we needed to point out and to reproduce the urban characters that the authentic cities on the water developed from their original identity, in a long process of genetic mutation. This could only be the task of a collective group as LabMed and colleagues involved in Belgrade represented.
We needed to redefine natural principles such as steadiness of the building levels or unicity of the springer point, such as certainty of practicable ways or safety of the connections with the ground.
We had to reckon with different absolutely unexpected questions in which concepts, apparently not related with architecture, such as ambiguity, uncertainty, unbalance and entropy became key-words of our design activity. These last are all concepts having undeniably to deal with liquidity rather than with the solidity of the construction.
This is ultimately the paradox inherent the river town, built to complete and not to delete the presence

AW_Across Waters. The alluvial area. Design model
W_Across Waters. Living the riverbank. Design model

of water: in its construction turns inevitable to combine liquidity with solidity. However, if the Modern applied to order and to safety, demonstrated the limits of its perspective, the Contemporary has accustomed us to coexist with other paradoxes. Consequently, Belgrade North of the Danube was a design action on the town across-the-water of the river but it was also an action on the present condition of the town: an experiment of temporary balance in a place of paradoxes.
The action was focused on six design themes, all significant for the character of the riverbank. Themes and sites to investigate at a detailed design scale over time. At a design scale able to describe urban identities oulined by the form of architecture.
First theme: On the river, in the town
The design exploration of the other riverbank of the Danube moves – a further inevitable paradox - from Belgrade riverbank, from a site that is actually flooded by the Sava, just before this second river flows into the Danube. A paradox: but the area is of such an importance for the consolidated town and for the river, although currently so distant from them in terms of use and urban structure, that it convinced us that it was worth locating right there - among the bundles of abandoned tracks of the railway terminal and the river harbor warehouses - a first design reflection on the question of living on the water - living the water - in the contemporary town. The so-called amphitheater of the Savski Venac district was, in the time of the action, one of the places with the highest potential from an architectural point of view for the Serbian capital and this was confirmed by the further development. If the concept to be practiced beyond the Danube was to intend the water as a design resource, if the philosophy to be applied was the reinterpretation of the embankment in non-defensive terms but as an opportunity for alternative living, verifying the practicability of the action in an area that from Belgrade is evidently redeemable in terms of centrality - it had the value of an early confirmation.
Second theme: The alluvial area
The floodplain strip outside the embankment becomes an at least seasonal resource of spaces and functions for the surrounding town. Especially when, as in the case of the area North of the Danube in Belgrade, the profile of the shore and the excursion of the water level are such that between the embankment and the water usually hundreds of meters remain dry in summer. This does not exclude that the floodplain belt periodically returns to perform its functions as an outlet surface for the flooding of the river. It simply indicates that the town, having overcome the atavistic fear of floods, can discover new opportunities to rearrange its front towards the water in a less monotonous way than the usual embankment, intended in earth or stone but in any case as a work of pure hydraulic engineering.
Third theme: Living the riverbank The embankment is an element of urban and territorial scale whose

construction over the centuries has meant that the amortization of social and financial investments made, was so long and diluted over time as to be irrelevant in our eyes. This tends to overlook the enormous potential offered by the rethinking, as well as on the functional level also from the point of view of the identity and image of the places, of a so dormant hydraulic engineering work. The embankment is not just an defensive structure but an available and underused element. It offers an inert energy to the thrust of the flooding river. Let's try to enhance that energy, let's try to overturn that inertia.
Fourth theme: Between sluices and ditches
Beyond the embankment, the water is still present in a dense network of drainages and basins. Solid and dry land - the mainland where to build - is also an achievement there. If the habitable land and even the only walkable (roads, public spaces) is in any case detected to the humid plain of the countryside, a model of general applicability is envisaged, consisting of the opportunity to proceed by layers system in the construction of the town beyond the embankment.
Fifth theme: The Great Pond North of the Danube in Belgrade, just beyond the riverbank, the existing network of drainage canals centers on a large pond, hidden among the reeds, which the expanding city is gradually approaching. The water in the pond is low and yet in sufficient quantity to remain healthy and to act as a climatic mitigator for the surrounding areas. The banks are uncertain and muddy but the soils are fertile, suitable for fast-paced reforestation. The roads and railways present run in embankments but constitute a good premise for the local infrastructure. The Great Pond is a resource for the shape of the new town north of the Danube if the city manages to give itself strength to colonize its water, not to arrange itself prudently only on the shore but to accept its liquid presence right inside the houses.



AW_Across Waters. Between sluices and ditches. Design model
AW_Across Waters. The Great Pond. Design model

Sixth theme: New centralities

As well known, settlement alone does not produce urbanity and the urban in itself is not always a unique sign of centrality. Centrality by definition is an exception, a built character that only a design will - perhaps collective and prolonged over time - can pursue. This explains why along the river - as well as in the rest of the territory - the building density and even the conspicuous presence of population do not directly produce the town, nor in it that civil sense and that physical characteristics of the built structure that we attribute to centrality. There are also important rivers without any authentic urban centrality along their banks. On the other hand, the contemporary has accustomed us to multiple centralities and hybrid and unusual centralities. The result is a series of intriguing oxymorons: eccentric centralities, linear centralities, marginal centralities. These are the new centralities that dot the territory and whose reason often escapes at first glance.The tuning of the architectural shape of the new centrality along the river concluded the design experimentation on the Danube.

Outcome was a relevant modeling production, designed and applied across waters, having Belgrade, North of the Danube, as test site.

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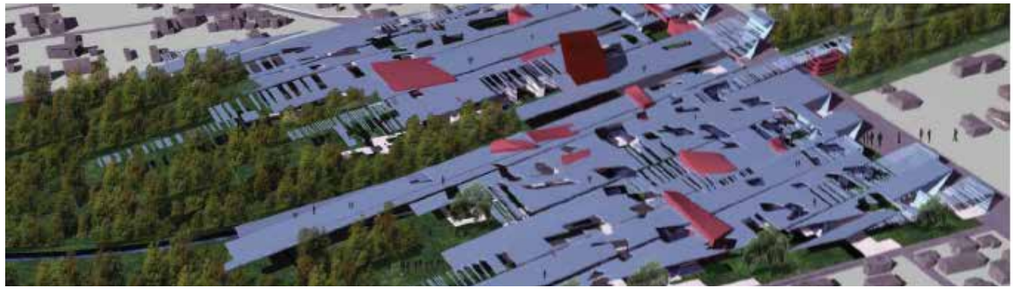


AW_Across Waters. New centralities. Design model

BLURRING BORDERS

João Nunes

This pandemic moment has brought to our attention a very interesting structural problem about the way we think about our spaces, the way we design them and, above all, the way we understand them. Actually our habitat is not the built space, but it is a very complex built space that also involves many kind of different spaces (places of production, agriculture, channels of distribution): we live in many different places that articulate each other and it is precisely when people are forced to stay home, that we begin to understand the complexity of the things we need to live and, of course, to be happy. Through a selection of projects, we will explore the meaning of the borderline between spaces, places, domains and how this ambiguity is an opportunity for design.

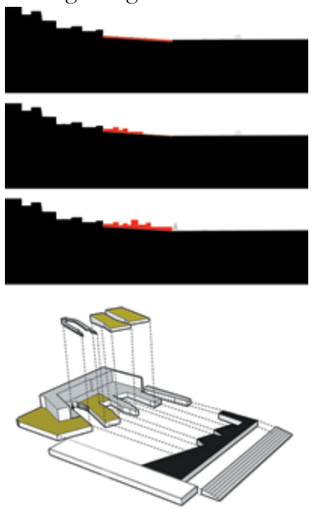
This pandemic moment has brought to our attention a very interesting structural problem about the way we think and design our spaces and, above all, the way we understand them. I think that we come from a moment of time (the last 50 years) where the invention of borders, the invention of barriers between things was really important in order to make us understand the structure of those things,

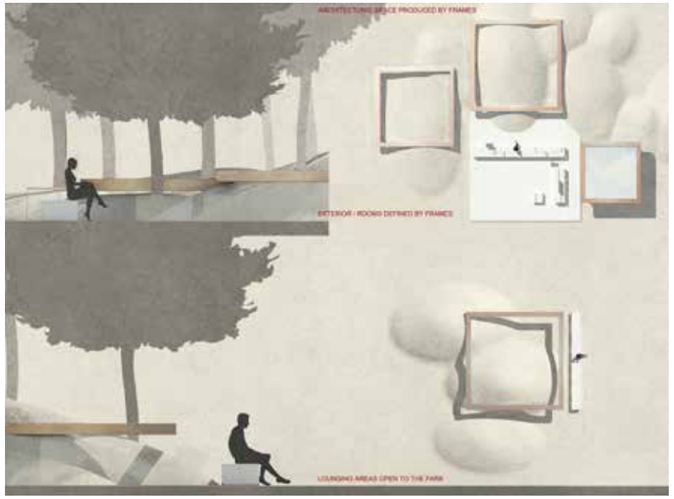
SANTA CATARINA_the view from the belvedere and the railing_©PROAP.jpg

the structure of the world. And finally, these borders have started not only to describe the world, but also to design it, because the world itself started to be designed by the thickness of those barriers and borderlines. Suddenly we discover that things that were thought as unquestionable for a long time (such as, for example, the strong barrier between natural and artificial, or between nature and culture, between built space and outer space) start to be less important and we need not only to dissolve those barriers, but also to make them become more permeable and much more transparent in order to be able to understand the way that we have to live today.

One of the myths that were created in the last 50 years was that the idea of inhabiting is immediately attached to the idea of a house, a built space. Pandemia was a very good help in order to understand that the idea of inhabiting is much more extensive in terms of space and typology than the house. Suddenly, we understand that we inhabit the road, the land, the square, the garden, the park, the neighborhood, the countryside, the country. Actually our habitat is not just the house or the building, but it is a very complex built space that also involves places of production, agriculture, the channels through which everything that is produced reaches our homes. So it is something that we cannot simplify with such a caricatured and reductive approach by saying that "we live in houses": we don't live in houses, we live in condominiums, in streets, in neighbourhoods, in parks. We live in many different places that articulate each other. And it is precisely when people say "you have to stay at home", "you have to stay inside your home", that you begin to understand the complexity of the things you need to live and, of course, to be happy. This has to do with the idea of the first border between culture and nature. And perhaps the representation of paradise that Pasolini makes in „The Canterbury Tales" is one of the most interesting, because it puts these fantastic Adam and Eve in a topiary garden, which is probably the most extraordinarily artificial environment we can think of, because not only it is a garden (that is, a nature that is in itself already artificial), but it is a garden that is also controlled in terms of form: it is as if it were the emblem, the symbol of culture and artificial. So the way in which very naturally Pasolini brings Adam and Eve into this totally artificial paradise leads us back to the idea of very complex frontiers and boundaries, which begins to replace the schematic representation that either in terms of figures, or in terms of concept has been created since the earliest days when we tried to represent the world, with the work of intellectuals such as, for example, Alexander Humboldt (who designed and explained the world through the interpretation of these frontiers as the ecological levels) or when we tried to understand what lies beneath the surface; up to trying to understand the most obvious frontiers of the world, such as the one that separates the earth from the sky or that separates the visible from the invisible. Suddenly we understand that the words that could be explained

through this structure of borders, barriers and boundaries is something much more complex. For example, when we look at the representation we used to start a project in Albania with the point cloud, we understand the complexity of the representation that results from the fact that we have a 3D representation of five points per cubic centimeter: the immense amount of boundary lines we have in this space we are going to work with contrasts sharply with the schematic representation resulting from the use of traditional topography. The fact is that now, if we want to describe the world in terms of space and architecture, we have to go beyond the limits of interpretation and we have to break out of the topographical reading, detach ourselves from the place we are going to touch, eventually creating a representation that becomes our reality and the space on which we are going to work, replacing the existing real space. Even the border line which tended to separate different times has now been completely erased. I believe, in this case, it is a phenomenon that has been going on for many years, because, for example, the idea of Pangea, which was brought into the scientific world at the beginning of the 20th century (and discussed between 1911 and 1925), was initially ridiculed and





RIBEIRA DAS NAUS_evolution of the coastline_©PROAP.tif
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practically doomed to non-existence, until suddenly was declared as a scientific proof. But it is only to the generation of children who study in the 60s, 70s that the idea of Pangea and the idea of a dynamic world education is presented for the first time at school as a didactic test, since until then it was still a revolutionary idea. So together with this idea of the unity of space comes the idea of the unity of time: it is a very recent awareness, which has added revolutionary ideas, such as that of the mechanization that gave rise to the industrial revolution. Even in that case, it was an idea of world construction and a succession of events that did not imply the presence of extraordinary protagonists, but the setting in motion of an organic system, in which various spheres and structures participated transversally. Now, suddenly, the interstitium has become a protagonist and has taken on an identity, even in the medical world, where it is declared as an organ of the human body: an idea that simply could not have existed in the mid-1990s. because we were so concentrated in distributive functions to the protagonist organs that we could not even think that there was something that represented the existence or expression of a generic function that did not also have a specific identity (and that could be clearly defined and recognized as a liver, kidney or heart).

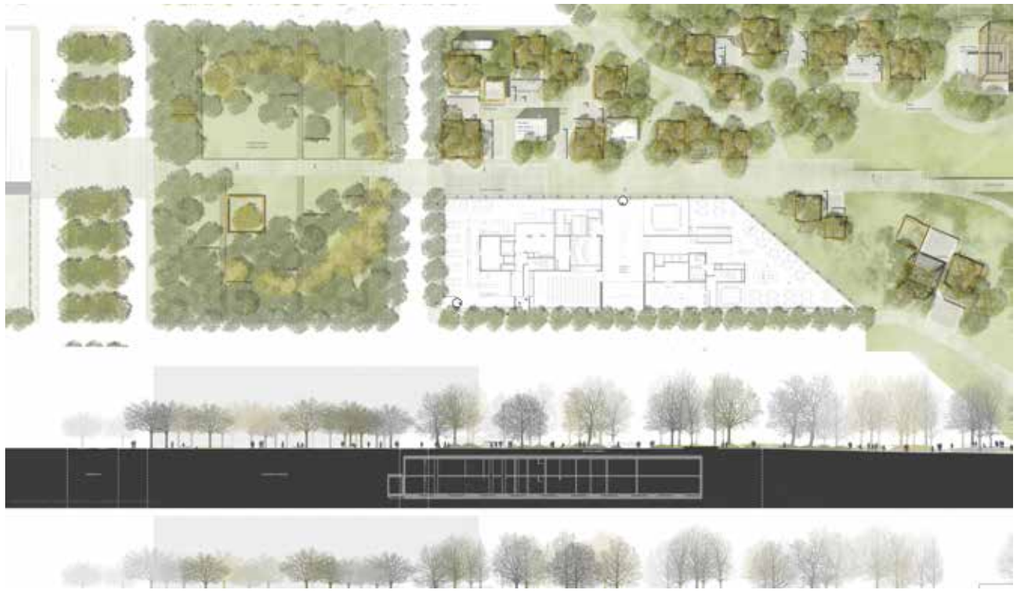
The fact is that for three years the interstitium has now officially been a human organ with all that this implies in terms of culture and cultural change. I think we are at a very interesting turning point where we are no longer concerned with the objects or the protagonists of space and history or the mechanisms and metabolism, but we are much more interested in relationships, in what is happening between things. What are the movements, what are the flexors? What are the things that change places between things? As in the projects that I present, basically we only invent the places where people move and live, we work by superimposing layers and creating relationships between different levels and structures of a new geology of the site: we overlap different drawings, representing different stages and elements in the living articulation of the park; or we use the topography to create not really limits, but moments of transition between accessible and inaccessible places, multiplying all the relationships that wind, sun, radiation, salt can have with the vegetation and with all the other species that inhabit a park. So the topography, in the case of the Tejo Park, is the key to creating these boundary lines: they are not sharp barriers, but they are moments of transition that create completely different environments from one side to the other. Or, for example, in the project for Novartis, the central idea of the project is to create diversified spaces through the correspondence between what is under the Earth and what (depending on the mineral characteristics of the subsoil) grows on the surface, contaminating the topography with different metallic compositions. The idea arose from the fact that the park is dedicated to Imhotep, an Egyptian medical scientist who worked with minerals and metals - a practice now

almost forgotten because all this pharmacopoeia has been replaced by plants and botanical pharmacy. Following the contamination of the topography with different elements, we expect different species to appear on the surface; we then insert elements on the site that create a complex architecture, a structure that frames and isolates the plants, exposed to different soil conditions, giving a key for reading the surface of the ground according to what happens under the surface, diluting the boundary line between above and below, showing how in reality two worlds are the same.

The people who use the park experience a very large boundary in space and time: the relationship is established between people who become the observers of a phenomenon that occurs on the scale of this park and in this moment, but it is also linked to the experiences and history of Imhotep; at the same time we are trying to understand if the changes we have made in the soil affect how plants and trees will live, and what kind of consequences they produce. We thus have a continuous plantation and we frame the elements that are in contact with different soil qualities that will change the behavior of the plants. And both things (the way the framing built the architecture and the way the changes built the relationships between people and the site, between people and plants) together create space-time and create this ideal park. So we are trying to shift the idea of the park from an object, from a context delimited by the boundaries of time towards something that involves people within the manifestations of the site itself, widening and dematerializing the boundaries. It is somewhat the same we did in Jardim da Cordoaria in Porto, where we created a very abstract surface that is frozen in the fact that we are using pruned evergreen hedges (something that is really stable all year round) on top of which a sort of cloud made of everything that moves contrasts sharply with the stability of everything that is attached to the ground, placing people in this border between stability and instability and creating a space that is developed only by the senses of being together, being between something that is very stable and very unstable. Even in the design of the Belvedere in Santa Catarina, a public space in Lisbon that was completely changed during the Pandemic as a meeting place, the central idea is the limit. But a limit that creates something that keeps us away from the view and offers a way to read the city at a distance: because the first levels of observation are terrible, we have to make sure that people do not see what is in the immediate vicinity. Through the design and planning of the railing elements, we materialise the boundary line that makes people stay away from the edge: we never see the boundary line of the edge itself, nor the space immediately near the edge, we only have a side view.

When we walk in Lisbon we understand that this kind of beach in Ribeira das Naus, close to the Praça do Comércio (an extraordinary place in the heart of Lisbon) is a mobile boundary line, which has moved over the centuries along several lines, depending on the needs: first a port line, then an

embankment and probably in a few years another line will be created because all the port activities will need more space and more “draught”. So we know that the boundary line will later shift and come to fix the relations between the stable and the unstable, causing people to occupy and appropriate the more stable places. We tried to make a reflection on the permanence of this place, noting that the place we were working on was the only one where the historical city directly touched the river: it was a unique opportunity (compared to the context, characterised by embankments) to redraw the historical boundary line by designing a new boundary line detached from a very abstract surface transformed into a public space defined and built by the fact of being between the starting position of the coastline and the future position of the coastline. Through this process we have built a place consisting of a site (the result of an archaeological process of reconstruction and replacement of the historical boundary line of Lisbon), and another site capable of creating the new future boundary line



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(which is a totally different way of building). The results of this process are now manifested in the most important public space in Lisbon between this sort of beach of the future (which will probably start to be used in direct contact, as the water quality of the river is increasing) and these areas for meeting and staying on the other side of the beach. Of course, it is easy to imagine the importance and impact that these places may have had for the inhabitants of a dense city like Lisbon after the lockdown, and how even just the existence and availability of this kind of public space may have fulfilled a therapeutic role in satisfying the enormous need for space by making us understand the role of public space and gardens in the lives of people and cities. The project for the Alcântara treatment plant shows another way of mixing, blurring borders. This site used to be an agricultural site - borders often have a lot to do with being part of the same period. We are faced with something that has changed completely from a productive, even poetic, and bucolic agricultural existence, to a very infrastructural place. It is a very recent change, which took place in the 1930s: suddenly the accessibility of Lisbon for cars begins to completely suffocate this river, this valley, until the river is drained, completely changing the topography of the valley; the place changed from a valley to a flat surface at the bottom of the meeting of two slopes - and this is totally artificial (it is a change that is even celebrated on postcards, showing that people are proud of the change that has taken place). Infrastructures continue to settle in this valley, as in the case of the first water treatment plant, built here. The infrastructure for the new bridge over the river encroaches on the valley, transforming it from an agricultural place to a site of infrastructure bundles. The competition launched for the restoration of the power station envisaged its expansion with a new body and the addition of new treatment levels. To meet the needs of the programme, the construction of an enormous building, corresponding to the size of eight blocks in Lisbon, was required, which could be a problem unless the whole operation was seen as a topographical operation (and in this aspect we had a very supportive team who followed us in this approach): since the first treatment plant had cut out a slice of the valley’s topography to accommodate it, we suggested that the new building should fill the gap left by the previous subtraction, replacing the missing piece of hill. In this way, the new building responded to the need for new spaces for the new programmes, housing the voids necessary to encapsulate the machinery required for the new treatment procedures; but also on the external surface it housed a green roof that marked continuity with the topography. We have thus created a new artificial topography consisting of terraces containing the artificial terrain itself as a result of the design of the new topography. The result is a construction that breaks a boundary line by taking us in an unexpected direction: the roof, used to represent the landscape that once existed in this place, is the real façade of the new building; it is something both symbolic and pragmatic.

THE NEW EUROPEAN BAUHAUS

Georg Pendl

The President of the European Commission Ursula von der Leyen has launched a creative and interdisciplinary initiative entitled New European Bauhaus with the aim to trigger the virtual construction of a space of encounter. The goal is to design future ways of living between art, culture, social inclusion, science, and technology. One of the most relevant elements is architecture, which will embody the new vision of the New European Bauhaus.

In the context of the New European Bauhaus, it is worth taking a closer look at the "Work Program for Culture 2019-2022" by the European Council that among others deals with the role of architecture: "High-quality architecture and built environment" is a core chapter in this document. The future focus will be put on architecture as a discipline that encompasses the balance between cultural, social, economic, environmental and technical aspect for the common good. In other words, architecture has been introduced in the cultural discussion, which has never been the case in declarations by the European institutions before. Putting architecture in the center of public interest is a remarkable wording for European institutions.

A final conference of the OMC group (Open Method of Coordination) on the topic, mutually organized by the Austrian and Slovenian government, followed. The results led to a political declaration of the European Council concerning the architecture and the built environment. Underlining the fact that architecture is an important object to focus on, means that improving its quality implies a positive impact on the everyday life of European citizens.

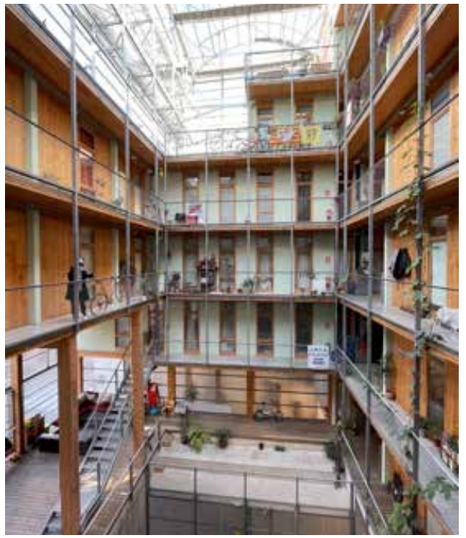
A second important conference was the ACE conference in 2019 which took place in Innsbruck. It examined different systems of evaluation criteria for the quality of the built environment. Another event was the ACE-UIA conference in the UNESCO building in Paris, which dealt with architecture and design competitions. A declaration promoted architecture design competitions as the best tool to procure architectural services and to guarantee high-quality solutions.

The New European Bauhaus initiative has been finally officialized in a speech in 2020 by the president of the European commission, Ursula von der Leyen. She stated: "I want NextGenerationEU to kickstart a European renovation wave and make our Union a leader in the circular economy.

But this is not just an environmental or economic project: it needs to be a new cultural project for Europe". This speech was a base for a fundamental change. European institutions started to focus on architecture as a cultural issue, promoting it to a core discipline in the cultural discourse and to an investment for the European recovery funds.

This initiative has been started from the cabinet of President von der Leyen and is broadening into a public debate, which will have an impact on the work of the commission in the future. It is not a self-runner. In fact, it is a social project where everyone of us can contribute and disseminate the following message: "This is why we set up a new European Bauhaus - a co-creation space where architects, artists, students, engineers, designers work together to make that happen".

The call is primarily important for architects to play an active role in the project. In this instance the ACE felt personally appealed, so the members started a direct collaboration with the European



Bellevue di Monaco by Hirner & Riehl Architekten, Photo credits: Maurizio Tami
La Borda by Lacol, Cooperative housing, Photo credits: Maurizio Tami, Barcelona, Spain

Commission. Interior designers, landscape architects, urban planners and especially researchers joined forces to guarantee broad expertise in the future. The result was the establishment of the NEBC (New European Bauhaus Collective) that published the declaration "The New European Bauhaus - Making the Renovation Wave a Cultural Project". The NEBC is a group of several pan-European organizations representing architects, spatial planners, landscape architects, interior architects, engineers, designers, artists, educators, and researchers of the built environment, and more broadly the cultural and creative sectors. They joined forces to collectively support the development and implementation of the New European Bauhaus initiative. An important aim of the New European Bauhaus Collective is the focus on the development of the city but also the improvement of rural areas.

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THE CURRENT OF CONTEMPORARY ART ON THE TIBER

Luca Zevi

The Tiber was the first reason for the birth of Rome, the engine of its economic development and a theater for the daily life of the city. With the construction of the retaining walls, to cope with the frequent floods, in the 70s of the nineteenth century the river was separated from the urban context, condemning it to decay and abandonment. The only users, since then, have been the rowers, who have been joined by cyclists and pedestrians. In the summer months alone, the "Lungo il fiume" event animates the two banks of the river section that crosses the center of Rome in an exclusively commercial key. Tevereterno onlus, since 2005, has renamed the straight stretch of river, between Ponte Sisto and Pone Mazzini „Piazza Roma", assigning it to contemporary arts with performances of figurative art, concerts, conferences, walks. In particular, the wall on the right bank was affected by two large temporary artistic installations, generated by the selective cleaning of the biological patina accumulated on the surface by means of a jet of water under pressure, without any addition of material. This unprecedented technique, completely respectful of the pre-existing structures, has allowed "Summer Solstice", the frieze by Kristin Jones inaugurated in 2005 - depicting a procession of gigantic Capitoline wolves taken from their historical

Tiber and Rome in the History

iconography - to be blackened by the patina itself within some years. And today it is allowing "Triumphs and Laments", a monumental frieze by William Kentridge - created with the same technique and inaugurated in 2016 and depicting eighty episodes that have marked the almost 3000 years of history of the city also drawn from historical iconography - to dissolve day after day for another couple of years.

The Tiber in history

The Tiber represents Rome's deepest genetics, its true *raison d'etre.*
Over the centuries, it naturally retains its original infrastructural role, but it is also gradually assuming that of an enchanting view of the western perimeter of the city, with progressively more daring incursions on the right bank: the emperor Hadrian, from that innovator he was, had wanted build his own Mausoleum there, just upstream from the beginning of Campo Marzio, on the edge of that Ager Vaticanus which would have developed so much in the following centuries; at the southern stretch of Campo Marzio itself - where the Tiber Island "exploded" - the river wedged itself deeply into the central area of the urbs, until it touched the Circus Maximus, and then slowly returned along the urban edge at the ‚Emporium; the urban fabric supported this geographic compression with an ‚overflow' on the right bank, punctually supported by the walls which, with a move that was anything but obvious, freed itself from the grip of the river to circumscribe an abundant portion of peri-urban territory; this annexed portion became Trastevere, the first nucleus "beyond"; consequently the Tiber, in this stretch, saw its own identity as an infrastructural and panoramic ring road pale, assuming that of linear centrality culminating in the Tiber Island - probably the real cause of this upheaval - powerfully backed by the Circus Flaminio, the Theater of Marcellus and from the aforementioned Circus Maximus. A centrality underlined by the presence, in such a short river segment, of four bridges.
The following centuries would only confirm the genius of those ancient urban planning intuitions, with the creation of a "universal" center beyond the Tiber, with the transfiguration of the original genetic nucleus (the Mausoleum of Hadrian) in Castel S. Angelo and the construction of the new ‚navel of the world' in St. Peter's Basilica. The two "twins of the Tiber", via Giulia and via della Lungara (the latter on the grounds of the ancient Via Triumphalis) were traced on the same bank, and the Janiculum was splendidly colonized to watch its back to the expanding Trastevere district. The Port of Ripetta and the Port of Ripa - flanked by the Arsenale Clementino just outside the walls - preciously punctuated the slow flow of water, regulating the traffic of what continued to be the main artery of Roman mobility.

The Tiber after the unification of Italy

In 1970, a few months after the new national government took office in Rome, there was a particularly dramatic flood of the Tiber, which made it necessary to immediately address the issue of securing the river through the establishment of a commission specifically wanted by Giuseppe Garibaldi. Schematically, very schematically, two antithetical approaches were faced. The first, the one that would prevail through the project of the engineer Raffaele Canevari, aimed to continue to make the entire flow of water flow through the center of Rome, transforming the natural landscape on which an important part of Rome's daily life took place - so suggestively represented by the nineteenth-century landscape painters - in an artificial canal destined fatally to introduce a destruction of the osmosis between the city and the river with a definitive separation operation. The second, promoted with passion by Garibaldi also with the help of technicians Paolo Molini and Alessandro Castellani specifically hired by him, aimed primarily at preserving the historical river landscape, with a deviation of the main flow near the confluence of the Aniene, creating a sort of ring of water ring road to the built-up area in the eastern part of the city, destined to rejoin the old course to the south in the Ostiense area. A hypothesis that placed at the center of attention the architectural value of the ancient river structure - and of the prestigious artifacts mentioned above - orienting the contribution of engineering not to a violent superimposition on the old course, effectively erasing it, but opening a way new to the exuberant waters with their deviation in an external area of the urban agricultural territory. An operation, we could say with hindsight, not devoid of a prophetic character, if it is true as it is true that that new course of the river could have spurred the development of modern Rome as the historical one had done with the ancient city. A prophecy made even more surprising by the location of the most important urban project of the second post-war period in Rome - the Equipped Axis, envisaged by the General Regulatory Plan of Rome of 1962, also in the eastern area of the city - which in the early sixties of the following century proposes substantially the alternative route advanced by Garibaldi. If those two visionary projects had been carried out in their respective eras, the capital would have been equipped with a backbone of the new urban development that would also have been a "green and blue infrastructure", a forerunner of the most advanced urban orientations of our times. An operation that was completed a couple of centuries later in the Spanish city of Valencia, where the course of the Turia river, which was also the cause of flooding, was diverted from the original riverbed - which similarly to the Tiber penetrated aside apart from the historic center - to unload the main course on a tangential groove. This made it possible not to modify the traditional landscape with safety works, instead enhancing it as an urban river park, enriched by works of contemporary architecture, which contributed a lot to the tourist development of the city.

The Tiber as an axis of sport and commerce

With the prevailing of Canevari's, technical approach over Garibaldi's architectural one, the Tiber is definitively separated from the daily life of the capital, of which it had been a pulsating artery until then and, consequently, is exposed to the phenomena of degradation that characterize it even today. A condition only mitigated by mostly sports activities that develop along the banks thanks above all to the "rowing clubs" that are gradually founded.
In recent decades, the number of walkers and cyclists has also grown, thanks to the preparation of the suggestive cycle path. This people has the opportunity to observe, above the containment wall of the opposite bank, the succession of architectural seasons that mark the capital, from the sports center of the Foro Italico to the growth of the post-war city, to the north, to the historic center with the its transformations, in the central section, to the suggestive industrial landscape - with the long decadence and the ongoing relaunch - and again to the development of the post-war city to the south. Each of these seasons launches its bridges over the river, lastly the pedestrian bridges of Music and Science, to try to reconnect the two banks in the stretches where the disconnection was more pronounced.
Among the equipment of collective interest, the controversial Ara Pacis Museum stands out.
For decades now, the central stretch of the banks of the Tiber has also been affected, during the summer months, by an exhibition of an artisanal and catering nature which, after having taken on various denominations, has for some years been called "Along the river". This is an event that attracts a vast audience of users due to the multiplicity of offers particularly targeted specifically to ‚mass' users.
In more recent years, the equipment of a "beach" on a stretch of quay has proved very attractive, particularly valuable for those who work in the neighboring areas during lunch breaks in and for those who do not leave the city during of summer weekends.

A new focus

The multiplication of initiatives and active subjects on the banks of the Tiber has awakened in the institutional world as well as in the cultural one a renewed attention towards a possible new protagonism of the river in future urban scenarios. An attention so to speak "from above", "sanctified" by being the river included in the 2008 General Town Plan as one of the five "strategic planning areas" and by the recent reactivation, by the Municipality of Rome, of a "Special Tiber Office" absent for decades. An attention also "from below", which has led the vast world of associations that move along the river to try to overcome an attitude of, defense of one's own garden, in favor of an integration of actions aimed at enhancing overall of this historical infrastructure as a "river park" of metropolitan

and territorial interest. On 3 March 2017, the constitution of "Agenda Tevere" resulted, a sort of "federation" of the dust of institutional and associative subjects in various capacities active in the river area, which is trying to sign a "contract River" capable of directing the efforts of individuals in a shared and widely participated strategic direction.

The role of art, culture and teaching

The work that the Tevereterno Onlus Association has been carrying out on the banks of the Tiber in Rome for years goes in this direction. A work that seems to confirm the fundamental definition of this discipline primarily as a "methodological moment of recognition" (Brandi, 1963) of a physical reality - a work of art, architecture or landscape - as a bearer of values and therefore to be transmitted dutifully to future generations.
The operation proposed by Tevereterno - the "recognition" of an abandoned stretch of the river, in the middle of the historic center of Rome, as "Piazza Tevere" - on closer inspection goes in the same direction as it is aimed not only at safeguarding, but also and above all to the enhancement of that site as a fulcrum of temporary figurative events capable of revealing, from time to time, its nature and potential. An operation of "re-centralization" of the presence of the Tiber in the city of Rome from which the day after the national unification - as mentioned above - the river was separated due to the construction of the containment walls.
Therefore a cultural program of great quality, the one proposed by Tevereterno, aimed at proposing innovative forms of transformation of the city, for a new form of public spaces in which citizens and tourists from all over the world can recognize themselves. The programming sees every year a series of events in "Piazza Tevere" (the space identified in the river basin between Ponte Mazzini and Ponte Sisto), which is configured as a skilful work of weaving relationships between institutions and local communities, between territorial associations, on the one hand, and the bodies responsible for managing the Tiber system, on the other, aimed at designing this virtual river square, dedicated to contemporary art.
Tevereterno, created in 2004 by the New York artist Kristin Jones together with a group of architects, has been organizing over the years a series of high-level artistic performances, transforming the space in question into a real air museum open, a place of social inclusion, cultural enhancement of landscape and historical-architectural identities, promotion of production chains.
The great frieze "Triumphs and Laments" by William Kentridge, inaugurated on April 21, 2016, represents the epiphany of the great intuition of Tevereterno with the revival, in a very modern key,

the “giant” scale of the artistic interventions of ancient Rome, giving to a story of almost 3000 years of history of the city, in its Triumphs and in its Lamentations, in its victories and in its sufferings.
The technique of representation exclusively “via di levando” - through the selective cleaning of the biological patina that is incessantly deposited on the wall, without any addition of material - has started programmatically, from day one, a process of dissolution of the work which within 5-6 years of birth, it will be definitively concluded. An intervention, that of Kentridge, which has its roots in the many events already organized by Tevereterno in its first ten years of life and was accompanied by many cultural and artistic events. A promise of many other future initiatives aimed at the regeneration of the city also through the decisive contribution of contemporary art.

Garibaldi project for Tiber
Piazza Tevere

William Kentridge, Triumphes and Laments, 2016

HYDRO-INFRASTRUCTURES

Alessandra De Cesaris

Upgrading the water system and reactivating the relationship between waterways and urban space are actions that can now play a crucial role in the regeneration of our cities. In this direction it's necessary to identify strategies for the redevelopment and enhancement of the water network in an alternative vision to the hard strategies that have characterized the last century. The most advanced experiences show that it is possible to transform the water crisis into an occasion for integrating public spaces, structures and facilities for free time, systems for production of clear energy and waste disposal and in several projects the variations of water level become a characterizing element of the landscape. According to this strategy, the great works, masterpieces of modern engineering, are being replaced by a series of water infrastructures, due to their smaller scale, can be scattered all over the territories; often they are also able to hybridize with other functions, setting aside their mono-functional status. Moreover, if the most advanced experiences are confronted with the management and regulation of excess rainwater in other parts of the planet, it is the question of scarcity. A shortage that is causing massive exodus, substantial modification of the landscapes as well as of the way in which the urban space is lived.

Towards a new generation of hydrological Infrastructures: managing abundance, managing scarcity

Re-developing the water system and reactivating the relationship between waterways and urban space are actions that can now play a crucial role in the regeneration of our cities.
In many cities around the world, redevelopment of the banks of river areas and the urban systems that connect to them has proved to be an excellent way of regenerating large urban areas: Nervion River in Bilbao, Besos in the northern suburbs of Barcelona, Seine in Paris Spree in Berlin, and many others (De Francesco, 2020a). The Tehran Comprehensive Plan (TCP) also identifies a series of regeneration corridors starting from Rud, seasonal rivers that run along 7 valleys of the capital (De Cesaris, 2022).
The vision that emerges from the most advanced experiences moves away from the dominant ideology of the last two centuries: on the one hand, an alternative vision emerges to engineering works based mainly on regimentation and canalization such as dams and embankments; on the other hand, an attempt is made to integrate these water infrastructures with other functions and activities including public space. And if the most advanced experiences are confronted with the management and regulation of excess rainwater in other parts of the planet, it is the question of scarcity. A shortage that is causing a massive exodus, ana substantial modification of the landscapes as well as of the way in which the urban space is lived.

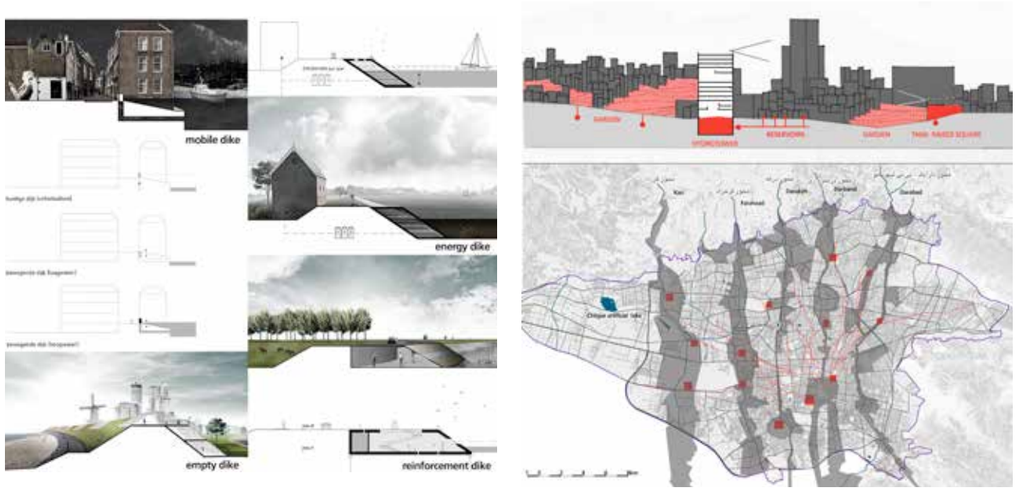
Towards a new generation of elastic landscapes

From the end of the 18th century onwards, the idea of controlling nature through engineering advances became the dominant ideology, and the management of the water system was done using a mainly technical-engineering approach, according to the strategies of dams, weirs, embankments, pumps. These types of works, sometimes indispensable, have often defined many fragilities. For example, dams have wiped out life in the valleys and altered the delicate balance of the ecosystem;

Chulalongkorn Centenary Park, Bangkok, 2017 (Landprocess/N7A architects). @ Landprocess
Rethinking Zayandeh rud, Online Workshop, Department PDTA, Sapienza, Daneshpajoohan Pishro Higher Education Institute, 2021, proposals of: Sima Khaleghian-Ziba Azar, Fatemeh Behrooz, Elam Abdolmohammad Arab. @ Alessandra De Cesaris

many river channels have shrunk, confined between increasingly high embankments and dams: the result is that water, discharged into the sea at a greater speed, makes it impossible to recharge the aquifers. Moreover, in Iran for example, some traditional water networks such as qanats (1) have been abandoned due to the construction of dams and wells.
Current strategies favor alternative modalities: not just barring, containing but living together, letting the waters expand. Room for the River – a natured based solution – is the strategy adopted in The Netherlands National program (2007-15) and the key of the approach is to restore the river's natural flood plain (De Francesco, 2020 b) .
In this vision, water infrastructures designed for better stormwater level management may be able to define new water landscapes along riverbanks and seashores, a new kind of elastic and adaptable landscapes. After all, floods and river overflows have not always caused damage. Before the construction of the Aswan Dam, floods from the Nile fertilised the soil. Historian David Blackbourn reports that the villagers of the Oderbruch - in eastern Germany on the border with Poland - were ‚amphibious' in the sense that they lived with the floods: in times of overflow, they fished and used the river for transport, while in dry periods they grew hay and legumes in the land fertilised by the river sediments (Rossano, 2021). The Dutch strategy called Room for the River has been applied several projects in the Netherland: Landschapsarchitecten in Nijmegen–to name just one –designed and built a bypass canal to safeguard the town from flooding of Waal canal. The remodeling of the soil through excavation and fill works has reduced the risk of flooding and has defined a new "multilevel topography park" with an artificial island designed to be partially flooded.
In Santiago de Chile too the Zanjon de Aguada floodable park the water, from element of risk, has become the park's defining element (De Cesaris 2016); in Bangkok the Chulalongkorn Centenary Park (Landprocess/N7A architects) has been conceived not to be exclusively a space of leisure but also play a role in managing abundant rainfalls (2) (Bochicchio, 2020). Multilevel topographies thus define elastic landscapes where the variation of the water level becomes the characterizing element of the new park. These examples therefore demonstrate that it is possible to design places for recreation and free time that solve hydraulic problems with strategies that are far from, if not opposite to, the containment strategies adopted in the past. They also show that it is possible to find solutions capable of integrating hydro-infrastructures and urban space. We are therefore witnessing a paradigm shift, as the engineering approach, exclusively technical, is being overcome.
After all we have seen that in recent years, many transports infrastructure projects have been able to combine the technical infrastructure with the public spaces of the city by integrating transport and

public space. The same approach can be used for the hydraulic infrastructures: even the structures such as waste-to-energy plants and power plants, typologies considered monotasking are proving to be able to accommodate other functions (3).
The definition of elastic urban landscapes, with high variability in relation to water levels, is a very topical issue even in countries characterized by drought with often unsustainable management of water resources. That is what is happening at the River Zayandeh in Isfahan, a city which owes its origin to the presence of the river. Today the river bed, for centuries a central element of the life and of the shape of the city, is dry for most of the year. It is an empty space in a central area of a densely built city; a space that could be used to equip the city with the new services required by the needs of contemporary life. It is necessary to think of solutions that are valid both in periods of flooding and when the river is dry; for example, it is possible to think of buildings with floodable bases capable of restoring forms of life to the river that are currently absent (4).



Richer Dikes, DELVA 2012. @DELVA Landscape Architects + Dingeman Deijs Architect
Tehran, hypothesis of qanat reuse: the trajectory of water as a vector of urban regeneration @ Alessandra De Cesaris

Towards a new generation of multitasking hydrological infrastructures

The new approach of the plans furthermore tries to transform these water crises into an n opportunity to intervene in urban areas, integrating public spaces, structures and facilities for free time, sustainable mobility paths, systems for production of clear energy and waste disposal and new volumes, overcoming the dogma of mono-functionalism.

We can find many such solutions in history. The columns of the Hypostyle Square in Park Guell (Gaudi 1900-1914) channel rainwater into an underground reservoir used to irrigate the park and excess water is expelled through the mouth of the famous salamander.

In Bastia (Corsica), the small Place du Donjon square sits on top of a tank - built by the architects of the King of France between 1776 and 1778 - which supplied water to the upper town.

For centuries Iranian cities presented a complex integration with water infrastructures and the Kajou bridge built under Shah Abbas I in Isfahan (about 1650) is not only a connection among the two banks of the Zayande Rud (literally: the river that brings life) but it was and it is, a multitasking building. It connects the 2 banks of the river, it is a dam with the role of regulation of water and it is a public space organized on three different levels.

The upper level is used as a passageway and is flanked by walls with niches and pavilions overlooking the river. The second level can be flooded, but when the river is not full you can stay cool under the large arches. The lower level on the downstream side is connected to the river water by a system of steps that measure the water level. You can sit and watch the water flow by with your feet in the water.

This bridge was therefore conceived as a multifunctional building. It is a hydrological infrastructure: it regulates the flow of water, connects the two banks and at the same time integrates the public space.

The most innovative recent projects go in a similar direction: trying to integrate flood management with services and public space.

In this direction, the policy of large-scale works is being replaced by a policy of diffuse works; the great engineering masterpieces are being replaced by a series of water infrastructures spread throughout the territory This new generation of hydrological infrastructures, due to their smaller scale, are able to better integrate with urban texture. It is therefore crucial to identify the right size of these works.

Copenhagen adopted the Climate Adaption Plan (2011) and the Cloud burst Management plan (2012); the latter wonders whether excess water in the city can be seen as a vital resource rather than a problem: In line with this strategy, it identifies the cloudburst tools: a system of 8 multifunctional infrastructures. These are mainly streets with water reservoirs, subterranean conduits, vehicular, bicycle and pedestrian routes that integrate the landscape and public spaces, as well as floodable squares and parks and - crucially

- reuse residual spaces, empty car parks and underused areas.

According to this philosophy, Rotterdam, a true watercity, has created watersquares, which protect against the risk of flooding by relieving water pressure on the sewer system and storing water for future reuse in the event of drought; they represent an alternative to large-scale parks: capillary solutions capable of regenerating empty spaces by defining attractive public spaces in which water is not only an element to be regulated but an inseparable part of their identity and design.

In São Paulo, Brazil, a megalopolis subject to constant risk of flooding, MMBB arquitetura e urbanismo has proposed the creation of a series of tanks called piscinaoes to store and regulate rainwater. In spatial terms, the pools are large excavations distributed in a capillary way in the degraded urban fabric for the regeneration of informal suburbs without services and public spaces (5).

Finally, recent experiences in the Netherlands show that even a dam can integrate functions other than containment and damming.

De Urbanisten identify four kinds of dikes: the dike as instrument to transform areas, the dike as an urban public domain, the dike as a basis for urban development and the dike integrated into a building.

Delva instead identifies alternatives to the traditional method of dam reinforcement and several new types of dams have been developed, depending on the specificity of the sites: empty dike, (in Vlissingen) which host houses and services; energy dikes (in Nieuw Lekkerland) which enlarges the existing embankment and produces 1.500.000 kWh/year, migratory dike, (in Lauwersoog) which houses ecological corridors, mobile dike, (in Dordrecht) which rises and falls in relation to water level and sedimentation dike, (in Wall) which enlarges the existing dike in a natural way.

These “richer dikes” not only offer a sustainable solution for water safety, but also contribute to broader spatial, social, economic and ecological issues on and around the dike. Dams that are among the oldest hydraulic infrastructures in the Netherlands are therefore reinterpreted in a contemporary way to better integrate with contemporary needs.

Similarly, even if in a totally different context characterized by a shortage of water, the ancient network of qanat in Iran can be actualized and reinterpreted in the light of contemporary needs.

Today, the regeneration of this underground network may be able to sprinkle green and oxygen into the areas through which it passes and reactivate green spaces and gardens in contexts where there are no public spaces. Along the route of these water infrastructures, it is also conceivable to build water reservoirs integrated with a series of services and public spaces in cities that are severely lacking. This could be a way of reconciling places with their own identity, which an idea of unsustainable progress that pays little attention to environmental balances has partly compromised.

NOTES

(1) Qanats are one of the most sophisticated systems of water collection and irrigation "They have made a garden of what would otherwise have become an uninhabitable desert" (Wulff H. E.). They are underground aqueducts, generally dug into alluvial soils, which collect the water in the aquifer at the foot of the mountain and convey it downstream by gravity.

(2) Landprocess since the 2011 Bangkok devastating flood has been working with the tools of landscape architecture to painstakingly create space for "green cracks" in the asphalt covered urban jungle.

(3) In Copenhagen f. i. the hydroelectric power plant in Kempten has been conceived as a panoramic device to appreciate the river landscape and the roof was conceived as an artificial ski slope.

(4) This has been the topic of the workshop organized by Department PDTA, Sapienza and Daneshpajoohan Pishro Higher Education Institute (sept. 2021), which tried to find solutions reinterpreting the complex relationship between the city of Isfahan and its waters in a contemporary key.

(5) The importance of the strategies adopted in Rotterdam with the water squares and the unfortunately unrealized solutions proposed by MMBB are highlighted since 2012 in my book De Cesaris A. (2012).

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ATOLLS | DUNES | ISLANDS

Mosè Ricci

This article is presenting three urban regeneration projects "beyond" the coastal Borders.
FLOATING ATOLLS | This urban renewal project has been designed for a district located in Castellammare di Stabia. The project includes interventions on the urban space, on the landscape and also on city-owned buildings. The regeneration action of this area behind the old town represents an important objective of the city for the coming years. Becoming aware of the complexity of the entire urban system and its strong decay, it is possible to identify structural interventions in order to generate a real action of "regeneration".
DUNES | The environmental sustainability project to restore the dunal environment aims to enhance the coastal landscape and raise awareness of a new model for the use of natural resources. The social and fruition aspect is resolved with cycle-pedestrian spaces, with the integration of urban furniture and the necessary greenery. The ultimate goal of the intervention is to allow users to have a series of services to enjoy the seafront even out of season and to fully take advantage by a regenerated natural environment.
CPN ISLANDS | In the new Copenhagen, where the ecological paradigm guides urban changes, traditional infrastructures seem to open up to new life cycles and take on different roles in the city. Adaptation and recycling are the words that best describe how they are regenerated. The docks are like beaches where you can tan and swim in clear water. And there will be islands. A Parkipelago of small islands where you can go to be isolated (as the word says), to sunbathe, meet friends or simply go somewhere while time passes.

This article is presenting three urban regeneration projects "beyond" the coastal Borders. The first two of them are mine with other collaborators and are international competition winners. The third is under construction in Copenhagen. All of them are animated by the same objective of creating by design new spaces of beauty and happiness in our cities.
The transformation of the existing city into the city of the future, as an objective of shared quality for life in the living space, is a complex operation that involves new skills, strategies and adaptive design devices. Urbanism from the science of urban expansion becomes the science of the regeneration of the existing city. And science, as Carlo Rovelli writes (2014) is above all a visionary activity. Scientific thinking feeds on the ability to see things differently than we did before.

The development model based on the concentration and speed of flows in a metropolitan settlement horizon goes into a strong crisis with the pandemic emergency. Concentration levels of PM10 and PM2.5, as many recent studies seem to demonstrate, lead to the more intense spread of the virus and its associated disease. Right now, is the time to affirm a vision that is no longer degenerative of habitats development - which requires energy, water and materials to produce goods that will become waste - but regenerative, that is, which reclaims and recycles energy, water and materials and which is capable of cultivating human nature and its natural, social and cultural environment. The role of design disciplines is to deal with what is already here rather than organizing the construction and operation of the new. It is role that involves the project to regenerate the existing physical space as a scientific ability to guarantee healthy, comfortable and happy living conditions in beautiful cities where to live well. It seems trivial but it is not.
It is an issue that requires a change of mind for designing the existing physical space and that proposes at least three new paradigms, in the Thomas Khun (1962) perspective as new points of view on the future: performance, sharing and narrative. For obvious reasons, society has always been interested in forms of living, but the quality of the built environment is increasingly perceived as environmental, economic, and social sustainability of the interventions.
Project as a performance (performance vs. function) is the paradigm of enabling technology declined as a conceptual principle of operational aesthetics. The performance project - versus the function project means to put at the centre of the idea of change not the use but the innovative outcome

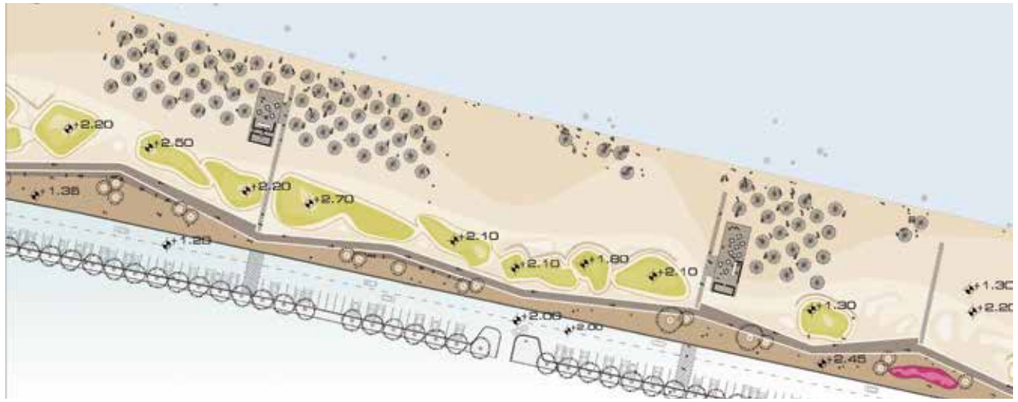
Atolls_masterplan
Ecological Atolls

noticeable on ecological grounds, but not only. Ultimately, the performance principle projects out the design disciplines into the contemporary age, making them the terminal or interface of a system of environmental, physical or immaterial relationships that substantiate their existence. It is the re-contextualization of the project idea within a new (and not necessarily material) space of intervention.
Project as a social action (sharing vs. participating) is centre stage in many works on spaces (even temporary) for living and on systems for collective mobility. Sharing vs. participating represents not only a way to authorize a work by its end users, but their direct and meaningful engagement in the process of designing and creating those works. In this type of project, the traditional concept of authorship is challenged by the co-creative process and the implementation process is often self-managed and hic et nunc. The project is therefore carried out in an immediate actuation, somewhat anticipating the long times of its approvals.
The Project as a narrative (narrative vs. description) is an interpretative device that establishes the need for "gestaltic" disciplines at the time of the digital revolution of shared information. The paradigm of the project as a narrative shows the need to load of the sense the existing, by far discovering with what is already there with new eyes and with more marked figures. Even in a narrow etymological sense, the narrative reveals different meanings, tells the story of the city and of those who live in it through the signs of its re-signification. It serves to give new value to what is already there and to enhance people's aspirations and sense of belonging.
The intervention themes are those of the quality of life, of the ecological and social roles of open and green spaces in the city, of the mitigation and adaptation to climate change, of social inclusion, sustainability of development, abandonment recycle, sustainable infrastructures and built spaces.

Floating Atolls

This urban renewal project has been designed for a district located in the Northern suburb of the city and marked by a significant urban decay. The innovative element of the project is the building recovery and renovation with the introduction of green areas and bio-architecture aimed at improving the housing quality connecting, by a uniform process of development, the entire seafront of the old town overlooking the harbour and the coastline that includes the waterfront of Corso Garibaldi up to Crown Plaza. The urban fabric has been characterized by residential buildings mixed with agricultural plots, greenhouses and disused areas, creating a morphological and functional disharmony, in addition to the absence of public services and infrastructures. Therefore, the overall objective is to make the area a part of the city with well-defined identity and features, forgetting the image of a "dormitory" neighborhood

and social exclusion. The project is focused on the valorisation of the entire coastline, which includes the last stretch of Corso Garibaldi up to the tourist structure of Crown Plaza through the potentiality of the commercial harbour, as an important regional "gate" for the archaeological and environmental sites behind. The harbour represents a junction between land and sea relations, destined to be expanded as a result of globalization. The aim is to introduce social, functional, morphological, architectural and original complexity. The entire coastline requires a uniform planning design, eliminating illogical interventions, unable to show a uniform vision of the development of the entire area.
Therefore, the project includes interventions on the urban space, onthe landscape and also on city-owned buildings: the rehabilitation of the Molo Borbonico; the new artificial beaches; the re-use of the Ex Corderia as a convention center; the re-use of the salt cellars as a commercial area; the building of a new ferry terminal; the increase and the implementation of the accommodation capacity; the conversion of the Ex Colonia and the Ex Caserma into Hotels. The regeneration action of this area and behind of the old town represents an important objective of the city for the coming years. Becoming aware of the complexity of the entire urban system and its strong decay, it is possible to identify structural interventions in order to generate a real action of "regeneration".



DUNES_Corigliano_masterplan

Dunes

The project involves the functional and environmental requalification of the Schiavonea waterfront, through actions aimed at safeguarding the environment of the dunes. There is also a pedestrian and cycle path that gives the opportunity to join the coasts of Corigliano Calabro and Rossano and support seaside accommodation. Environmental enhancement and restoration of dune naturalistic systems are the guidelines of the project intervention.
The environmental sustainability project aims to enhance the coastal landscape and raise awareness of a new model for the use of natural resources. The social and fruition aspect is resolved with cycle-pedestrian spaces, with the integration of urban furniture and the necessary greenery. The ultimate goal of the intervention is to allow Schiavonea users to have a series of services to properly enjoy the seafront even out of season and to fully appreciate a regenerated natural environment.
The pedestrian walkway system consists of a series of paved articulated areas. Near the bridges, the new route will join the existing driveways to connect the walk with sections of mixed cycle-pedestrian path. Other rest areas will be enriched with large flower beds that collect colorful shrubs. Bike lane: the cycle path follows the promenade from the beach side and therefore in direct contact with the

DUNES_Corigliano_public space
DUNES_Corigliano__dunal replanting

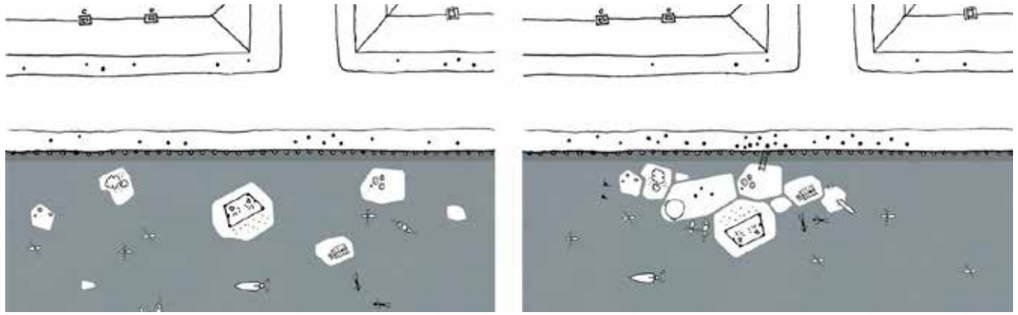
dunes and the pedestrian promenade. Appropriately sized, two-way, it is paved with ecological wooden slats. There are also direct connections of the track with the walkways that lead to the bathing establishments. Green furnitures: main goal is to keep a low maintenance of public green areas to contain management costs. Also, rustic and highly resistant green essences have been chosen for the cycle-pedestrian area. The "dune" system: coastal dunes envisaged by the project fulfill a dual function. On the one hand they guarantee the protection of the sandy coast by slowing down erosion, on the other they protect the urban environment from possible winter floods. The new marine landscape of Corigliano will be char¬acterized by the high quality of the "new dune belts" modeled and colonized by numerous plant species. Services: the project also plans to place 6 small kiosks for additional services in the size of 3 x 3 m or 6 x 6 m.
The re-naturalization of the waterfront. The naturalistic engineering techniques used for the construction of the dune system, aim at the reconstitution of new units capable of self-support through natural processes, with positive repercussions on the natural landscape. A larger re-naturalization project triggers an evolutionary process that leads to a dynamic balance capable of guaranteeing higher levels of stability as well as an improvement in the quality of the landscape.
The project involves the construction of the "dune" system through: windbreak screens constructed to form 2x2 m sized "plant cells" arranged in a checkerboard pattern; intervention for the restoration of dune vegetation consisting in the planting of herbaceous and shrubby essences, the typical vegetation of maritime dunes habitats in the Mediterranean climatic region; dune belts, 1 m deep trenches excavated all around the dunes, that serve to absorb the effect of the waves and reduce impacts on the dunes in areas subject to erosion by sea storms; protection of the dune through a palisade outside the perimeter of the trench to provide additional protection, to favor algae and sand's accumulation, thus allowing the spontaneous growth of an ante-dune cordon. Paradise is an island.

Islands

The pandemic has changed the use and nature of public space. We have overcome the isolation with virtual relationships, but also on the balconies, from the long Mediterranean windows, from the condominium terraces. And then in parks and squares and wherever it is possible to be together outdoors isolating. Just like that, like being on an island in the city. Near and far at the same time in a quiet, remote and safe place at the center of social life.
A surprising book by Judith Shalansky (2009) that I have never set foot on and that I will never do begins just like this: Paradise is an island. So is hell. There may be places on earth that are still unknown

and we are fascinated by the idea of discovery. With this atlas, Judith Schalansky takes us to fifty remote islands, far from everything and everyone and tells us mysterious stories that show that the most adventurous journeys always take place in the imagination. Another author, this time an architect, Stefania Staniscia in her Islands (2011) notes … "islands represent the whole trough a part (…) hybrid and particular identities (…)". Islands have always been nodes of contact and exchange within the network of flows of the system of communication which considers the sea as a solid medium. It is true. Islands are fragments. Small pieces fractured from the mainland that contain all its meaning and its hope in a bordered environment easy to imagine, to explore and even to control (in this pandemic eventuality). They are powerful devices for narratives and social life in a liquid plateau.
In the new Copenhagen, where the ecological paradigm guides urban changes, traditional infrastructures seem to open up to new life cycles and take on different roles in the city. Adaptation and recycling are the words that best describe how they are regenerated. The old port silos that become condominiums (Frøsilo, MVRDV), the power plant which is also a hill and a ski slope (Copenhill, Big + Topotek1 + others), the road transformed into an urban park (Superkilen, Big + Topotek1 + others), are just the best known examples of the innovative possibility of marrying infrastructures and social spaces and transforming them into a landscape, into a beautiful, happy and popular place where to stay safe in the pandemic.
In this strategy the port is the largest and most valuable public space in the city, a huge square as in the Mediterranean old tradition. The docks are like beaches where you can tan and swim in clear water. And there will be islands. A Parkipelago of small islands where you can go to be isolated (as the word says), to sunbathe, meet friends or simply go somewhere while time passes.
The harbour was the center of commerce and transport, then it was enlarged, filled, excavated, built and navigated and became the main infrastructure for urban development, not without creating conditions of environmental risk for the city. By the end of the century, for example, the water level in the port is expected to increase by about 1 meter.
These concerns generated the Re-imagining the Harbor City debate at the Danish Architecture Center, which involved architects, artists and the wider community in a dialogue on the development and potential of the port, including climate adaptation. The idea of the park of the islands took place from this public comparison.
As the authors write with the islands project, a new type of urban space breaks into the port of Copenhagen. The intention is to renew the proud traditions of Danish port life by strengthening social cohesion and awareness of maritime life in and around the port. Users determine the different uses

of the islands. The activities and functions of each island are flexible, depending on its position in the port and the different periods of the year. A park of floating islands creates endless possibilities for fun activities and daily explorations.
The first prototype of "CPH-Ø1" island, from 2018, has now become a popular port figure. Always on the move from one place to another, it hosted a photographic exhibition, a series of conferences and many picnics on the sea. The prototype will be followed by three other islands which will be launched in 2020, CPH-Ø1, CPH-Ø2 and CPH-Ø3 with the plan to increase their number in the following years.
All the islands are built by hand in the shipyards in the southern port of Copenhagen using traditional construction techniques for wooden boats. They will be moved seasonally to the underused parts of the port or to the newly developed ones, catalyzing their life and activities.
Copenhagen Islands identify the concept of focusing citizens' attention on the quality of the port environment, on global climate change and on rising water levels (1). These are some of the most difficult challenges that urban planning must face in order to return to healing the existing city.
The floating "park" brings back wild nature and adventure to the harbor basin.
The islands offer a generous and ever-changing green space in the city center. On the surface with endemic plants, trees, bushes, herbs and underwater in the anchor points provide a habitat for birds and insects, algae, fish and molluscs.
Parkipelago is open and free to be used by boaters, fishermen, kayakers, star watchers, swimmers



Copenhagen Islands_Urban Diagram_01

and lovers. Its islands define a space for fantasy and dreams. You can go from one to the other to try different experiences as in a minimal Odyssey, or simply imagining to make it while looking at them from the mainland, or even telling you did it.
Copenaghen Islands suggest an urbanism made of performances, social cohesion and narratives that resists the climate, is intrinsically flexible in destinations and only uses sustainable sources and recyclable materials ... like our imagination.

Copenhagen Islands_Visualisation_Portrait1
Copenhagen Islands_Prototype Ø1

NOTES

(1)The Copenhagen Islands project received the Taipei International Design Awards for public space and the social design award, was a finalist in the Beazley design award at the London Design Museum and was just announced as finalist at the Danish Design Prize.
The Copenhagen Islands are a non-profit initiative launched by the Australian architect Marshall Blecher and Magnus Maarbjerg of the Danish design studio Fokstrot. It is supported by københavns kommune, by og havn and den gode havneliv.

Who: FOKSTROT / Marshall Blecher
What: Concept development, Design, Production
Where: Copenhagen Harbor
When: Ongoing
www.copenhagenislands.com
(airflix.com)
(www.mir.no)

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MARSEILLE EUROMÉDITERRANÉE
REGENERATING THE CITY, PUBLIC SPACES BETWEEN HISTORY AND NATURE

Françoise Blanc

The case of Marseille Euroméditerranée is an example of a large design process to regenerate the city, between urban and harbour heritage and port activities. With its metropolitan contemporary stakes threatened by environmental and mobility problems, territorial instability, thinking the city of Marseille as a renewable resource and introducing the "possible" becomes a driving force for this great design process. This urban project, particularly based on public spaces, is elaborated in a wide perspective, within the complexity of its scales and issues, and has opened innovative strategies for new equilibriums. The essay explores the conditions of Marseille at the end of the twentieth century and the factors that pushed the authorities to organize the city renewal, invent new governance and create new planning tools through a long process going from 1992 to 2030. Within a global vision of a sustainable and rethought economically "maritime new metropolis", the four different components and phases of the urban project were elaborated and are here examined: Euroméditerranée 1 and 2, Belle de Mai, Vieux-Port. A summary description attempts to reflect its goals and principles as well as its results of urban forms and landscapes. They were selected and managed to sew up the city with the sea, to relate culture, nature and history through the conception of the past in progress with the future developments. A quick evocation of the context of the urban regeneration gives a frame to situate the case of Marseille in a larger perspective.

Map of Euroméditerranée site and general aerial view

"New Boundaries" and Urban Regeneration

The issue of the "New Boundaries" and the public spaces related to it, in the contemporary city, offers an opportunity to consider the current urban evolution with an integrated approach regarding particularly the regeneration of existing conditions. This notion, in the case of Marseille's project Euroméditerranée, is understood as a driving force in the strategy for a sustainable urban design at all scales, on a territory of experimentation.

Facing the context's conditions, threatened by the metropolitan imbalances and sprawl, the territorial instability, the socio-economic and environmental problems, the idea of the regeneration introduces the "possible", a potential evolution considering even the governance aspects, rules and norms issues. The Marseille's example allows to figure out new consistent lightings for contemporary and future approaches, thus for new critical methods of planning and design processes within complexity. The tools of urban management became more fertile within a large cultural approach with the multiplicity of the physical, temporal, social, institutional scales and therefore the methodological inter-disciplinary confluence. Examining the Marseille's case questions the socio-economic and environmental stakes within a crisis situation (1), innovating founding strategies from the "new urban question" (Secchi, Vigano, 2011): thinking the city as "renewable resource" in its social, physical, biotic dimension, conceiving an evolution for the urban and territory concepts, regarding the new meanings and values with innovating approaches with the nature, its knowledge and protection.

The issue of resources is a central stake and the regeneration strategies are becoming crucial to think and design new equilibriums, respectful for inhabitants and their habitat conditions, for diversity of activities to develop, protect and modernize, for the build and landscaped integrities, for the environmental quality. Facing the existing to re-vitalise, the relationships between inherited from past, stratified city and diffused metropolis, new social, mobility and temporality conditions.

This project can be connected since its origins in the nineties with the urban renewal in France (2); it can be also referenced with a larger reflexion, particularly in Europe, with the Aalborg Chart (3) that invites to promote the density and mixing urban functions for the sustainable development. Furthermore, the UNESCO recommendation 2011 proposes the "Urban historical landscape" concept, using an integrated approach for its regeneration and its management.

Marseille, a Millennial Maritime and Port City

The city is characterized by its installation into a complex, beautiful maritime site in South East of France. Constituted by its multiple relationships with the sea, Marseille has been a great port in constant evolution since the Greek antiquity, shining on the Mediterranean world. Its territory and urban form were conditioned along history by the port activities and over the two last centuries by their related industrial development. As the most important port of France during the colonial period, Marseille became a cosmopolitan sea metropolis and witnessed an important urban growth, particularly during the twentieth century. The settlement of La Joliette Port in 1844, along the coast, as well as the first railway in 1854, the oil refinery installed in the North area in the thirties and the traffic highway

General map of the project, with an image of the Boulevard du Littoral (by Christian Devillers architect and Alain Marguerit landscape architect) and a view of the 'façade maritime' today

infrastructures across the city centre, transformed the historical site into a large industrial port, deeply modifying the landscape inherited from the past and damaging the relationships between nature, sea and the city. Great monuments, as the Cathedral La Major, or Notre-Dame de La Garde which dominates the antic port, the Vieux-Port, fortresses, parks and historical neighbourhoods represent meaningful landmarks for Marseille in its formal, cultural and social aspects and in its relationships with the maritime landscape. Those remarkable places were also impacted and heavily damaged by the modern evolution evocated previously.

A long Process of Projects within a Global Vision

The modernization of the industrial port, moved away in the sixties to the North of the metropolis, in Fos sur Mer, left great wastelands and areas with unemployed population, provoking social instability; this fact combined with the necessity of regulation of new urban functions such as transportation and mobility infrastructures, housing, public facilities, pushed the authorities to elaborate a new project. From 1987, with the Projet d'Intérêt National and further negotiations between Municipality and State in 1991, a long process started to elaborate a global vision for the renewal of Marseille: 1994, competition for a project Euro-Méditerranée; 1995, creation of the Etablissement Public d'Aménagement Euro-Méditerranée (EPAEM), new public authority in charge of conceiving, developing and building 'the Mediterranean sustainable city for tomorrow" into the Marseille Provence Métropole (4). A first phase is defined, from 1995 to 2015, to develop a global project, the "Nouveau Marseille", on the damaged port areas. The program, managed by the French State and by the local

Vieux-Port project: general map and traffic system; http://vieuxportdemarseille.fr

councils (region, department, municipalities), is conceived as "unprecedented accelerator of the economic, social and cultural attractiveness and development (5)".
It concerns the projects Euroméditerranée 1 and 2, 1995-2015/ 2008-2030, Belle de Mai, 1992-2015, Vieux-Port, 2012-2016. The creation of a partnership between public institutions and private corporations allows the metropolis management, attracting the investors. The principles of the project are to sew up the central city and metropolitan surroundings, linking them to the sea, restoring the seaside facade and building an urban window, to begin the metamorphosis of the urban landscape.
It lies on the articulation of various scales, the definition of the perimeters, juxtaposing, overlapping and coordinating them. The integration of culture and heritage represents a meaningful part of the program. It attempts to experiment the urban development by testing, deploying and valorising the innovating services and technologies, creating events to benefit the urban project and to give dynamism to the economy of trade and shops.

Euroméditerranée 1, 1995 – 2015

On a 480 hectares-territory, the project nests development of public and green spaces, mobility and parking infrastructures (public transportation, highway systems), social and cultural public facilities (schools, European hospital, International City, Museums as MUCEM…), commercial structures (200. 000 mq), housing (400.000 mq built for 18.000 new and 7.000 rehabilitated apartments, of which 20% social housing), new offices and tourism structures. It offers in its perimeter more than 37.000 private jobs, 6.500 public jobs with the installation of 5.300 private firms. It is considered as the third

Vieux-Port project: general view with Notre-Dame de La Garde, the 'Ombrière' of Norman Foster and the docks on the basin; http://vieuxportdemarseille.fr1

business district in France that lies on seven great activities sectors: real estate and public infrastructural works, green growth, bank and insurance trades, health, logistic and international business, digital industry and tourism. The site works began in 1997, along the littoral.

Euroméditerranée 2 (2008 – 2030)

On a 170 hectare-territory, this project expands Euroméditerranée 1 area to the North. It proposes to design a labelled "EcoCité" (6) that lies on an ecosystem partnership, as a driver project designed for 30.000 inhabitants and 20.000 jobs. Conceived with environmental principles based on recycling seawater and energy, it nests new housing (14.000 mq), commercial structures and facilities (200.000 mq), transportation and flexible parking systems, parks and public spaces. One of them is already realized, the new park "des Aygalades", on 14 ha of the Canet site (25 ha), ex railways SNCF and industrial area. Designed as an easy flooded park, it will ensure the hydraulic regulation, recreate biological continuities and biodiversity, and restore the air quality by reducing the urban building blocks' heat. As a link of the various areas of the "EcoCité" this park will also connect it with the entire area of Euroméditerranée.

Belle de Mai (1992-2015)

After the social and cultural mobilization in 1992, the Belle de Mai old industrial 12 hectare-area, economically disadvantaged and marginalized, became the fourth major pole in the central perimeter of the metropolis. With various funding sources from the local authorities and a partnership public/private, an international program (7) was launched. It regards the cultural transformation of the industrial structures to energize the urban renewal, the creation of new territories for art, the improvement of the quality of social and environmental life, the requalification of social housing and public spaces. The project, composed on three main parts, concerns the old industrial site (8), with heritage, media, spectacle and a public cultural and sports facilities poles (9). It treats the housing situation in the Belle de Mai old neighbourhood with the rehabilitation of 6.000 units and the construction of 4.000 units, with a great part of social. The railways infrastructures and the surrounding public spaces are re-qualified; they connect the neighbourhood with the city centre and the Euroméditerranée areas using public transportation.
This project contributed to qualify and restore the urban and industrial fabric offering a combination of new social and cultural uses and traditional habitat, playing a role at the local scale of the neighbourhood and at the larger scale of the metropolis.

Vieux-Port (2012-2016)

Based on multi-actors partnership, this project completes the dynamic of Euroméditerranée, caring the ancient historical port of Marseille. Classified since 1932, the site includes in its surroundings number of Historical monuments (10). It is a symbolic part of the city, place of the foundation of the ancient Greek Massalia (6th century B.C.), including 15th and 17th century docks. Since the modernization of the entire port area of Marseille, despite its historical national protections, the Vieux-Port has been strongly threatened by the conditions of traffic, tourism, commercial and real estate. On a global surface of around 31 hectares, the projects regard the docks (8,81 ha) and the water surfaces (19,5 ha). The site has been entirely restored and renovated since 2012, in two phases, with a total cost of 80 M €. The contracting authority is "Marseille Provence Métropole" with funding from Municipality, Department and Region and a large team (11) of project designers managers (12).
Reducing the traffic around the port, facilitating alternative behaviours and public transportation, creating a new public space, favouring events and new social exchanges, valorising the water surfaces and their surroundings, reinforcing the green systems were the goals. The port is released with bypass ways to facilitate the entirely recomposed traffic to maintain inter - districts links and local access. The parking system is reorganized. The public spaces around the basin are free and offer viewpoints on it. The projects include various scales of intervention: from the restoration of public spaces and parks system, to the micro-architectures, devices for the port activities and the beautiful "Ombrière" of Norman Foster, true architectural and urban landmark for social and cultural life.

An Urban "laboratory"

The ambition was to respond to the different skills of the difficult and 'in crisis" development of Marseille with a positive and creative vision: giving the identity of a "Mediterranean and littoral metropolis of tomorrow, sustainable and innovating" (13) for its development.
The Euroméditerranée project is one of the most ambitious examples in Europe of urban restructuration with a complexity of scales and stakes. Its belongs to the ensemble of metropolitan modern and contemporary mutating territories which have been regenerated since the sixties (14) and with its more then twenty years governance, it offers today a true "laboratory" for new articulated, inter-disciplinary methods and actions within the contemporary environmental, social and economical skills. Its temporal dimension reflects also the complexity of governance aspects through the multiple public and private actors, the articulation of local and national institutions, the evolution of urban rules and laws.

NOTES

(1) Here we can refer to the works for the Grand Paris of Bernardo Secchi and Paola Vigano, (2011), La ville poreuse, Un projet pour le Grand Paris et la métropole de l'après-Kyoto, Genève, Métis Presses, p. 294.

(2) The French national program for urban renewal– PNRU- launched in 2004, update NPNRU 2014-2024 regards action to re-build the city over itself, to recycle build and land resources.

(3) Denmark, May 27, 1994.

(4) At the same time (1991-1992), near the Saint Charles central station, the Belle de Mai area was abandoned: its factories buildings were occupied by artists and the neighbourhood became an example of re-occupation, social and cultural new uses. The French Grands Projets Urbains (GPU) were experimented in 1993 in the North districts to resolve difficult social and housing problems.

(5) cf. Etablissement Public d'Aménagement Marseille Euro-Méditerranée (EPAEM), https://www.euromediterranée.fr

(6) The label EcoCité gives a network of sustainable cities, 31 in France (cf. Actu-Environnement, actu-environnement.com). They are settled and managed according principles and practices of sustainable development for air, energy, water, waste, mobility and soft transportations ways, social and economic aspects.

(7) Municipality 22% (28,5 Mio EUR), French State 33% (44,1 Mio EUR), Region 15% (20 Mio EUR), Métropole Provence Marseille 15% (20 Mio EUR).

(8) SEITA (Tobacco French State Company) and matches factories opened in 1868 and closed in 1990; the closure left a wasteland and reinforced the breaking up with the centre of the city.

(9) A 35.000 mq heritage pole (Marseille Museum, Inter regional Centre for restoration of works of art) a 27.000 mq media pole (audio-visual studios, offices, Marseille movies infrastructures), a 25.000 mq spectacle pole (alternative place for cultural creation, and artistic teaching), a public cultural and sports facilities pole distributed on ten elements realized progressively in five interventions from 2003 to 2015.

(10) Classified site Hill of Notre Dame de la Garde: 1917, 1920 ; Chapel of the Baptistry of the Church St Laurent : 1921, Maison Diamantée and Hôtel de Cabre : 1925, ancient Roman Docks; Hôtel Dieu ; Clocher des Accoules ; Fortres St Jean and St Nicolas ; old arsenal Galères 1948 à 1978 ; City Hall : 1948.

(11) MDP Michel Desvigne (Landscape architect), Foster + Partners Architects, Tangram (Urban designers), Ingérop (Engineering) and Yann Kersalé (Lighting and materials).

(12) The project received the awards of the Prix de l'Aménagement Urbain Le Moniteur 2013, Territoires métropolitains and the Prix Européen de l'Aménagement de l'Espace Public Urbain, 2014.

(13) Cf. EPAEM, https://www.euromediterranée.fr

(14) Roult R., Lefèvre S., 'Le grand projet urbain comme élément interprétatif des transformations métropolitaines : évolutions conceptuelles et liens analytiques avec la notion de régénération urbaine', Document Chaire Invanhoé Cambridge, ESG, UQAM, http://www.ivanhoecambridge.uqam.ca/

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BIOGRAPHY

ROBERTO A. CHERUBINI

Cherubini established in 1999 and he is ever since directing CSIAA, a think tank for architecture, urban and landscape design, able to work out of the common highline, accompanying its design activity with individually structured public debates, research and publications.
Director of CSIAA series of books CSIAA International after having been editor-in-chief of the urban design magazine AU Arredo Urbano and columnist of the review Costruire in Laterizio in the 80s and 90s. Currently director of the scientific magazine A&A Architettura e Ambiente since 2016.
Focus of his scientific and design interests is the riverfront, coastal and harbour design and in general the quality and sustainability of the architectural project in urban areas in transformation (Roberto A. Cherubini. CSIAA_Docks Reloaded. Palombi Editori, Roma 2007).
Professor of Architectural and Urban Design in Sapienza since 1993. His main books: Mediterraneo Contemporaneo, Franco Angeli, Roma 2019; Never_ending_city. Orienta, Roma 2011; Landmarks/Lakemarks, Palombi, Roma 2007; Cinque progetti sul futuro dell'Expo, Artefatto, Roma 2001; Sull'orlo del precipizio, Diagonale, Roma 1999)
Director of LabMed, Research laboratory for Mediterranean design modeling of Sapienza University of Rome since its establishment in 2010. Member of the Scientific Board of Sapienza PhD program Architecture Theories and Project in the period 2006-2014 and currently again since 2018. Member of the Scientific Board of the Sapienza PhD program Architecture and Construction 2014-2017. Foreign member of the Scientific Board of the PhD program of ENA – Ecole Nationale d'Architecture in Rabat.

JOÃO NUNES

Graduated in Landscape Architecture from the Higher Institute of Agronomy of the Technical University of Lisbon, where he has been teaching since 1992. He holds a Master's Degree in Landscape Architecture from the Superior Technical School of Architecture of Barcelona, Polytechnic University of Catalonia.
João Nunes is a Landscape Architect, with a great passion for drawing and understanding the processes of the world. In 1985 he founded the PROAP Studio which, in accordance with his philosophy, deals with landscape issues in a broad sense, intervening with the project within the processes that the project itself interprets and integrates, using the contribution of various disciplines and considering the landscape as a process in continuous transformation. His professional and teaching activities intertwine and enrich each other, contributing to the development of new lines of research and experimentation.
Visiting Professor at various international universities (Harvard, GSD, UPenn, OSU, Pamplona, Versailles among others), he is Full Professor at the Academy of Architecture in Mendrisio and member of various scientific committees. In 2013 he was awarded the 1st "Adalberto Libera" Chair of Excellence. In 2010 he published the monograph "PROAP - Arquitectura Paisagista" (Notes), which summarizes the first 25 years of the studio, and in 2011 he co-authored "Lost Compoetitions" (Proap Edições).

GEORG PENDL

Pendl served as the president of the Architects' Council of Europe 2018-2021. Since 1984 he works as a freelancing architect in Innsbruck, Tyrol. In 2019 he received the Honorary Membership of AIA. He is the principal of the architecture office pendlarchitects, which works in the fields of social housing, private buildings, industrial buildings, supermarkets and passive house standards.

LUCA ZEVI

Architect, Deputy President of the National Institute of Architecture (InArch). Curator of the Italian Pavilion at the XIII International Architecture Exhibition - Venice Biennale - in 2012.
In relation to the renovation of historic centers, the following are to be considered:Planning process of old towns such as Benevento, Galatone (Lecce) Venafro (Isernia).
Director of Laboratories for the renovation of the ex-Ghetto in Rome and the historic center in Cosenza.
Design of I Ottobre Square and the new access to the archeological area of the Roman Amphitheater in S. Maria Capua Vetere (Caserta).
Design of the renovation of Palazzo Rospigliosi in Zagarolo (Rome) and the Civic Museum of the XV century convent of St. Antonio in Nardò (Lecce). Design of Freedom Square in Avellino.
Urban planning: Planning the General Variantions of the

Benevento and Cosenza City Plans.
Transformation of the FIAT area into a directional center in Novoli (Firenze). Design Master Plan of Belfiore Macelli area in Firenze for the integration of the new high speed train station.
Chief architect for the design of development projects in Albania and Salvador for the Foreign Minister
Architectures of Memory: Design Museum of the Memory and Immigration in Nardò (Lecce) and the Memorial to the Slain by the St. Lorenzo Bombings in Rome.
Chief designer of National Museum of the Shoah in Rome.
Design of "Boulevard for Kids" in the V Municipality of the City of Rome. Integration of renewable energy sources into architecture: Coordination of the exhibition "Enarch '83", curated by ENEA and the National Institute of Architecture (InArch) on bioclimatic architectures. Project for transformation of big infrastructures for the mobility into "Tree-lined Avenues for the Third Millennium", composed of photovoltaic and eolic systems developed in the shape of trees and bushes. Theory and methods of architectural design: Editor of Italian "Newest Handbook for the Architect) and "Handbook of the Architectural Restoration", published by the Mancosu Press. Editorial coordinator of Italian magazine journal "The Architecture. Reports and Histories").
Author of the Italian volume "Preservation of the Future", published by Quodlibet Press.

ALESSANDRA DE CESARIS

Architect, Associate Professor, Ph. D in Architectural Design and Theory, she is member of PDTA Department of
Planning, Design and Technology of Architecture, Sapienza University of Rome and she is in the committee of the PhD Program in Architecture Design and Theory of Architecture. From 2012 to 2019 she has been director and head of research of HousingLab, centre that provides services for public institutions, business people, designers, academics and students. She is member of the International Unit of PDTA and she is the scientific responsible of several agreements with Iranian universities.
Her research – developed mainly through projects and experimental design solutions – is mainly focused on:
- Project of ground and underground as a sustainable element for the regeneration of the peripheral urban areas.
-The design of an innovative infrastructure network able to redefine a new relation between public space and technical infrastructure.
- The rehabilitation of public housing neighbourhoods and social housing in contemporary urban transformation.
- The research of low cost, flexible and sustainable housing typologies for new social needs.
She collaborates with the magazine "l'industria delle costruzioni" for which she has edited several monographic issues. She is author of many projects, articles and essays among these: Il progetto del suolo/sottosuolo. Gangemi editore, (2012); Rigenerare le aree periferiche. Ricerche e progetti per la città contemporanea, Quodlibet with D. Mandolesi (2015), Attraverso Tehran. Spazi, luoghi architetture, FrancoAngeli (2022).

MOSÈ RICCI

Emeritus of Italian Republic for Art and Culture since 2003- is Full Professor of Urbanism and of Architectural Design at the University of Trento.
Fulbright Scholar and visiting professor at GSD, Harvard (1997). Visiting Professor at: UM Lisboa (2006-7), TU Munich (2008-9), IAAC, BCN (2015) and MAUD Ahens, (2018). Among his books: Custom Made (ListLab, 2021), Habitat 5.0 (Skira, 2019), New Paradigms (List, 2012), UniverCity (List 2010), RISCHIOPAESAGGIO (Meltemi, 2003). His projects have got prizes in several international competitions and participated in the Venice Biennale in 1996, in 2012 and in 2021. Member of the International Jury of the XX Biennal of Arquitectura y Urbanismo de Chile (2017) and of the Montenegro Pavillon for the Venice Biennale 2018.
Since 2020 he is Member of the Advisory Board of the Italian Pavilion of the 2021 Venice Architecture Biennale. Since 2021 he is Member of the editorial board of the A class journal class Abitare la Terra.
In the period 2019-2022 he is scientific coordinator of the MedWays awarded research project for the Centro Linceo Interdisciplinare Beniamino Segre of the Accademia dei Lincei.
Since 2021 he has been nominated coordinator of the Planning cv of the Doctorate Course in Planning, Design and Technology of Architecture of the Sapienza University of Rome.

FRANÇOISE BLANC

Architect, Doctor/PhD of History of Art, Professor Emeritus of History of Architecture, at the ENSA of Toulouse (France), French Rome Prize (1984). She contributed to works with the Municipal Office for Historical Centre of Rome under the direction of Carlo Aymonino (1983-1985) and collaborated to the atlas of Rome with Enrico Guidoni, Department of 'Analisi e Architettura della Città" of the University of La Sapienza.
After a two-years stay in New York working at the I.M. PEI and Partners Office, she worked with Denise Scott Brown and Robert Venturi (VSBA) on the construction of the Hôtel du département building in Toulouse (1990-1999). She collaborated to several European studies, including on sacred places in Europe, the Lucus project with the Professor Paola Falini of La Sapienza. With the same university and its Department PDTA, Françoise Blanc participated to the Italian-French Galileo Program 'Ricostruire la città pubblica" with the case study of Marseille.
As a Professor of Architecture in France, she pursued design teaching with the responsibility of a Master cycle 'Heritage in Progress" and the direction of PhD. For over twenty years she followed university and research programs in Asia: Wuhan and X'ian, China, directing a French delocalised Post Master program of urban design, heritage and sustainable development in Hanoi, Vietnam. She took part in a triennial international university exchange with the Swiss Braillard Foundation in Jaipur Rajasthan, India, on design for urban and architectural heritage and water systems.