



**année 1  
2020-2021**

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**métropoles du  
littoral  
méditerranéen,  
enjeux climatiques et  
solutions de résilience**

**livret projets  
tanger-tétouan**





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# introduction



## IUAV

### The New Mediterranean System

Benno Albrecht, Lorenzo Fabian, Jacopo Galli, Luca Iuorio

**T**he Mediterranean is a «geopolitical paradox» (Spadaro, 2020), a shared space that has increasingly enlarged and fragmented at the center of the geographical area that will witness greatest transformations due to climate change, profound and tragic social and economic trends, and the impetuosity of demographic development. We know that the planet is transforming: the dynamics linked to climate change draw new unexpected geographies; furthermore, the scarcity of fossil and natural resources causes lands to be abandoned and others to be extremely plundered and exploited. The crisis that characterizes *the great sea between the lands*, today, reflects this worrying climatic picture. The Mediterranean has also become the epicentre of violence and urbicides (Albrecht et al., 2017). It is necessary to have a broad horizon of reference to solve specific and local problems.

The design studio *The New Mediterranean System* of the master's degree in architecture of Università IUAV di Venezia aims at building an experimental design framework for the Mediterranean space: a new image, a far-reaching proposal, a big urban project, towards a future of peace for 500 million people who will be facing environmental, energetic and geopolitical challenges. The unitary project of the Mediterranean re-conceptualizes the original idea of «le système de la Méditerranée» introduced at the beginning of the

nineteenth century by Michel Chevalier; he was the first to conceive the sea between the lands as a *unicum* (Chevalier, 1832).

The workshop involves 66 students organised in groups of three, working for three months on 22 case studies within territorial frameworks of 20x20km located in the Mediterranean basin. The adopted time horizon is the year 2100. The adopted technique derives from the scenario planning methodology and, in particular, from *backcasting* approach, in which the desired forecast becomes normative in order to establish a path that proceeds from the future to the present (Fabian et al., 2008).

Students are asked to look at the Mediterranean space of the future from 4 different perspectives: geopolitics, urban growth, energy and climate.

From the geopolitical point of view, the Mediterranean continues to be the geographical field described by Fernand Braudel: a «fissure in the earth's crust» which has become a crossroads of cultures and trade of goods, it both is united around and unites, often in a conflicting way, three civilisations: that of the Christian West, which had in its center Rome and from which Europe was born; that of Islam, projected from Morocco to the Indian Ocean; and finally the Greek-Byzantine one, a bridge between Asia and the Balkans (Braudel et al., 1977).

According to Henri Lefebvre, historically the cultural unity between the Mediterranean countries has been organised around multiple forms of exchange based on «tacit or explicit forms of alliances» (Lefebvre, 1992). Today, with 5,000 migrants dead or missing in 2015 alone, the geographical space of the Mediterranean is, according to the United Nations High Commissioner for Refugees, the most dangerous destination in the world for irregular migration (UNCHR, 2015). These deaths are the most evident consequence of wars, economic crises



and geopolitical instabilities. At the same time, according to the World Tourism Organization, the Mediterranean Sea represents the first tourist destination in the world and one of the most important trade routes, namely a fundamental connection between the Indian and Atlantic oceans (UNTWO, 2018). Looking at these flows, the Mediterranean appears to be the space where the rich world and the poor world clash; indeed, the geographies of mass tourism, traffic of goods and migrants often overlap and collide in the same places. In the case of Ceuta and Melilla, Spanish enclaves in the Moroccan territory, this collision materialises in physical devices. In Riace in Calabria, it becomes an opportunity to test possible synergies between shrinking territories and migrant populations.

The second perspective places the Mediterranean at the center of opposing paradigms of the urban growth: on one hand, the southern Europe and on the other hand, the northern Africa. As in the case of Marbella, Spain, the image of a saturated – almost completely and extensively urbanised – world emerges; the new design paradigm deals with internal growth reclaiming the need of urban projects able to re-structure, re-use, re-cycle and re-generate without soil sealing. In contrast, the cases of Cairo and Istanbul, show the impetuosity of metropolitan growth that highlights the discrepancy between the times of designing the urban project and those of the technical transformation of the city.

The third gaze interprets the energy system of the Mediterranean as a modern long-lasting outcome stratifications of infrastructures in the aim to exploit fossil fuels. Today, climate change and the scarcity of resources build the foundations to rethink a new unified project for the Mediterranean, starting from the energy issue (Fabian and Iuorio, 2019).

The fourth and last image is linked to water; in this case, the environmental issue assumes a pivotal role in the de-



sign process. Desertification, sea level rise, salt wedge increase, and extreme meteorological phenomena define water as one of the main challenges for architects and urban designers (Fabian and Viganò, 2010; Albrecht and Magrin, 2011). Due to sea level rise, heavy rainfall, extreme water discharge, coastal areas as well as the internal floodplains will increasingly face problems of floods. On the contrary, the south of Italy, Turkey, Greece and Spain, and the northern Africa will face water scarcity, opening questions on how to defend from desertification and drought, heat stress and fires.

Within these four perspectives, the design of students fit in four wider conceptual framework.

The first framework - The Rising Rivers - converges into the projects that have explored the theme of water scarcity. These are the case studies of Benghazi in Libya, Oran and Annaba in Algeria, Tartus in Syria and Biserta in Tunisia, located on the southern coast of the Mediterranean. For these territories, strongly threatened by desertification, the only possible solution seems to be the widespread development of small desalination plants; they represent the starting points of new networks - from the sea to the hinterland - of overturned rivers in the aim to support existing settlements and new agricultural areas.

The second framework - New Development Models - has placed social and geopolitical issues at the center of the designs for the territories of Crotona, whose development is strongly influenced by the presence of the Ndrangheta; Melilla, a Spanish enclave in Moroccan territory; Varosha a no-man's land in Cyprus.

The third framework - The New Lagoons - identifies projects that will face the challenges posed by sea level rise. Several designs are investigated in the Camargue and the nearby production area of Martigues, Marseille; in Kavaje, Albania; in Elche, Spain; and Rosetta, the terminal development of the metropolis of Cairo on the



Nile Delta. These all are territories that, like Venice, will see their existence threatened by sea level rise, the only possibility is to explore the adaptive capacity. Indeed, the designs propose the construction of new inhabited lagoons, where fish farming, aquaculture can develop; in such a vision, it is also envisioned energy production from algae and wave movement.

The fourth framework – The Valley Section – concerns the projects of students that have proposed a systemic vision of the territory. It covers the case studies of Gargano in Puglia and Alghero in Sardinia; of Marbella in Spain; of Chania, Crete; of Tetouan in Morocco. These are territories that, in the recent decades, have experienced a growing coastal urban development exacerbating mass tourism pressure: in this case, the original idea of Patrick Geddes (1915, 1905) is taken to propose the organization of the urban growth around a new valley section.

The didactic approach and the designs conducted by the students cultivate a new-realism which shuns any demagogic idea and which deplores any form of sentimentality; a realism where the relations with different experiences is founded on the purpose of «adhering to reality, of interpreting places, situations, objective and verifiable needs»(Jovine, 1934). This approach overcomes the idea of doing architecture as a stylistic and verbal exercises and pushes us towards a new form of «social construction», which must face the «longue durée», the large and the small scale, and must give collective value to the long time (Braudel, 1958).

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