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Floating strategies for Adriatic-Ionian tourism development: the Observatory of Mediterranean Basin as platform for joining academic research and private actors

1. *The Observatory of Mediterranean Basin*

The Observatory of Mediterranean Basin (OMB) is a research unit that belongs to the Applied Research Department of the IKZH, at POLIS University, in Tirana (Albania). The main objective of this unit is to observe and investigate on relevant issues concerning the preservation and development of Albania's land and water landscape within the Mediterranean environment. In the Architecture and Planning Applied Research field the topic of preservation as well as development of the coastal area is currently the main research focus, and the OMB is interested in joining public and private interest trough research activities and applied projects. Within this frame of interest one of the main objectives of the OMB is to include within the geographic limit of investigation – between land and water – not only the sea, but also river basins[17].

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[17] In Albania the topic of water as a resource is of crucial importance, especially in relation to hydroelectric power and energy production.

In the last two years the OMB started investing on the above mentioned topic, through the promotion of macro and micro investigations along the Albanian coast. Moreover, to better address the need for a direct connection between public and private interest, the research unit develops research and applied projects as a tool to answer specific problems and to preserve Albania's coastal landscape trough tourism development. These objectives are concretized through the international PhD POLIS University (Tirana) – IDAUP (Department of Architecture at Ferrara Unife), the Graduate Research Design Studio and the Professional Master in Landscape and Urban Design (LUD) at POLIS University.

After intensive design workshops and speculative research projects developed through architectural and planning competitions or commissioned projects[18], one of the main questions the OMB wishes to answer is: "Which could be the reaction of the Albanian coastline to a well posed problem like the one of tourism? And how can the OMB act as an intermediation platform between academic research and private actors?".

To better understand the theoretical framework of this research, it's important to clarify that the word tourism must be associated to the concept of migration, which in turn is understood also as *pacific invasion*[19], just like the famous author Fernand Braudel expressed:

> È davvero una invasione pacifica, dunque, ma non innocente. Distrugge infatti siti e paesaggi, sfigurati dal lusso un pò falso degli alberghi, degli immobili – fronte mare – e delle seconde case: per l'archeologo di domani, la sua traccia avrà tutte le caratteristiche di una conquista (Braudel, 2014: 220).

Braudel's quotation underlines how the touristic phenomenon can be seen as a kind of invasion, even if gentle and pacific, that

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[18] Within the concept of applied research, the OMB develops design projects in cooperation with Metropolis l.t.d. architecture office and the NGO Co-Plan.

[19] The concept of *gentle migration* becomes extremely relevant to our topic, especially if we associate it to all the migratory events that the Mediterranean basin has witnessed in the last years. This is without doubt a related field of interest for the OMB, which will be addressed in the near future.

calls for the need to define specific tool capable of preserving the beauty and the resources of the Mediterranean coastal landscape.

Following this logic, *"floating strategies" are micro interventions along the Albanian coastline that can be used as flexible devices able to respond to the new needs indicted by tourism, while preventing the impression of indissoluble signs on the coastal landscape.* For the first time the concept of coastline preservation is not seen only from a land prospective, but also considering the water landscape, a source of biodiversity and renewable energy. The floating strategies must be considered *ephemeral* because they are impermanent and flexible like the activities related to tourism that ought to inhabit them.

2. *Floating strategies / land and water archipelago*

To better understand why this research could be relevant in terms of applicative project and research, we have to highlight some aspects that lie behind the general concept of "floating structure".

In the last three years the Albanian government has launched several Architecture competitions focusing on the objective to collect ideas for the landscape valorization and the touristic redevelopment of the South Albanian coastline. The projects selected by the juries proposed numerous solutions: in most of the cases the Albania Riviera Road was used as a system to showcase alternative design experiments; in others instances the road was preserved and the existing slow itinerary connecting the different villages and beaches was improved with low impact interventions (Aliaj, Rossi, 2016).

The common thread of all the competing projects was to concentrate on finding strategies to build an operative network from a series of isolated points in the existing Albania Riviera. This strategy reminds us of a very relevant reference by Oswald Mathias Ungers and Rem Koolhaas in the famous 1977 book, "*The City in the City. Berlin: A Green Archipelago*": Archipelago city (Ungers, Koolhaas, Reimann, Kollhoff, Ovaska, 2013).

Figure 1. Peter Riemann with Oswald Mathias Ungers, "The City in the City" (1977) from "Pictures at an Exhibition" *The City in the City: Berlin: A Green Archipelago.* (Source: <http://plmosley. tumblr.com/post/115798107429/peter-riemann-with-oswald-mathias-ungers-the>)

In the book, talking about the future planning of Berlin, Ungers and Koolhaas propose a solution without compromising the entire layout of the city. The proposed strategy focalizes the intervention in a series of islands, or neighborhoods, connected by a "green glue", imagining a city of isolated flouting elements within a green ocean.

If we assume for a moment that the meaning of the "green glue" is equivalent to the meaning of the "green ocean" mentioned by Ungers and Koolhaas, our topic can be seen from a different perspective. The whole green strip facing the Adriatic/Ionian Sea along the south Albanian coastline is essentially like an archipelago, where all the villages spread in the landscape are connected by a hypothetical "green glue", shaped by slow paths and winding roads.

The metaphor of the "green archipelago" provides us with a new key to interpret the relationship between seascape and landscape: the domain of the mainland can establish a creative contradiction with the domain of the waterscape. In this contrasted relationship the coastline can be treated as flexible device, capable of recovering and reactivating tourism along the Albanian coast.

As a result, floating strategies can be considered as the continuation of an existing land/island network, which can respond dynamically to generate different configurations, in response to different needs that originate from tourism and migration.

If the domain of the mainland acquires the characteristics of a static archipelago, with its road and building systems, the floating elements can produce a renewed version of the floating archipelago in which, for the first time, the functions reach people and not vice versa. Just like on the mainland, the paradox of a static building can be turned upside down in the domain of water; functions and volumes can shift creating new configurations and hybrid systems on the waterscape.

Following this hypothesis, the line dividing the sea from the land can have different configurations: it can have a linear distribution, following the natural seascape until it reaches the condition of 'network archipelago, composed by several flouting points in combination with the existing land network.
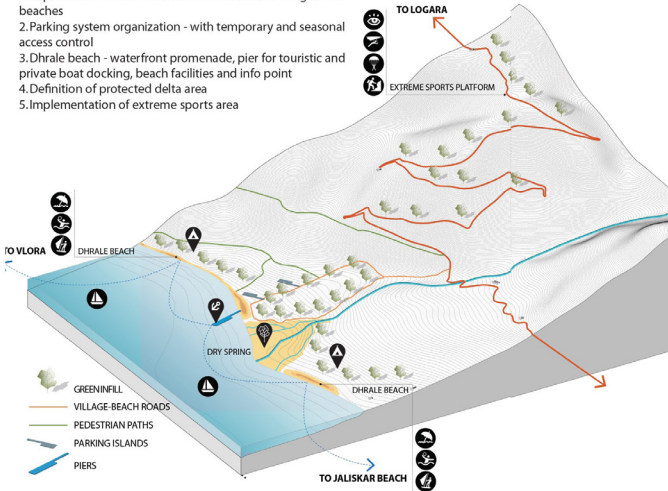
From another prospective the new water devices constitute a perfect tool for recovering and monitoring the entire Albanian seascape, possibly stimulating new interest in sea navigation maps and in tracing new touristic itineraries. Just like the road infrastructures already present on the land, movement

Figure 2. Example of archipelago network in the South Albania coastline. (Source: Aliaj, Rossi, 2016)
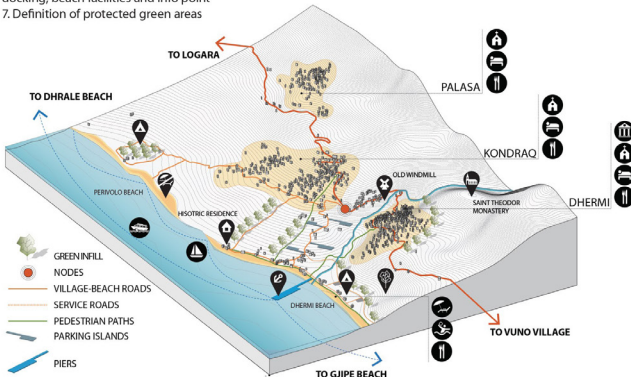
PALASA

Key actions:
1. Implementation of road connections between villages and beaches
2. Parking system organization - with temporary and seasonal access control
3. Dhrale beach - waterfront promenade, pier for touristic and private boat docking, beach facilities and info point
4. Definition of protected delta area
5. Implementation of extreme sports area

TO LOGARA

EXTREME SPORTS PLATFORM

TO VLORA   DHRALE BEACH

DRY SPRING

DHRALE BEACH

GREEN INFILL
VILLAGE-BEACH ROADS
PEDESTRIAN PATHS
PARKING ISLANDS
PIERS

TO JALISKAR BEACH

PALASA-DHERMI

Key actions:
1. Implementation of road connections between villages and beaches; restricted (service) access to the road along Dhermi beach
2. Revitalization of pedestrian historical paths connecting the historical centres and the beach
3. Paving and renewal of the facades in the main plaza of Dhërmi
4. Definition of intermodal nodes
5. Parking system organization - with temporary and seasonal access control
6. Dhërmi beach - waterfront promenade, new public plaza and belvedere, pier for touristic and private boat docking, beach facilities and info point
7. Definition of protected green areas

TO LOGARA

TO DHRALE BEACH

PALASA

KONDRAQ

DHERMI

PERIVOLO BEACH

HISOTRIC RESIDENCE

OLD WINDMILL

SAINT THEODOR MONASTERY

GREEN INFILL
NODES
VILLAGE-BEACH ROADS
SERVICE ROADS
PEDESTRIAN PATHS
PARKING ISLANDS
PIERS

DHERMI BEACH

TO VUNO VILLAGE

TO GJIPE BEACH

VUNO-JALE

Key actions:
1. Bypass around Vuno village to limit nonresident traffic in the centre of the village
2. Parking system organization - with temporary and seasonal access control
3. Jale beach - pier for touristic and private boat docking, beach facilities and info point
4. Conversion of the old water basin into a theatre arena for concerts and plays and annex facilities
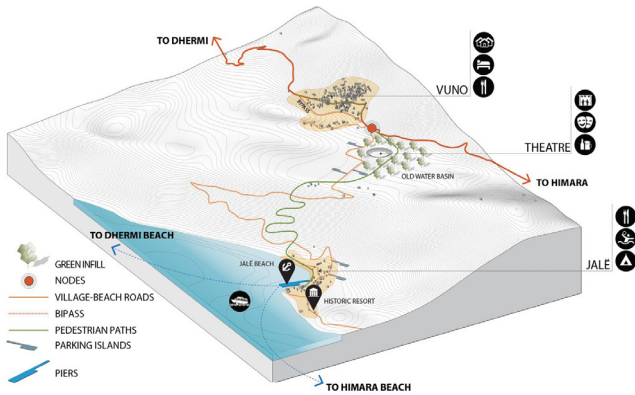
HIMARA

Key actions:
1. Renovation of waterfront promenade to connect all the beaches
2. Linear pine tree park along the promenade
3. Development of urban park and steps
4. Addition of a pier at the end of the main road
5. Reconstruction and extension of the harbour, new harbour terminal, lighthouse, mooring buoys
6. Introduction of new facilities around the stadium
7. Restoration of the pedestrian path to the historic castle of old Himara
8. Reconstruction of the historical square in the old city
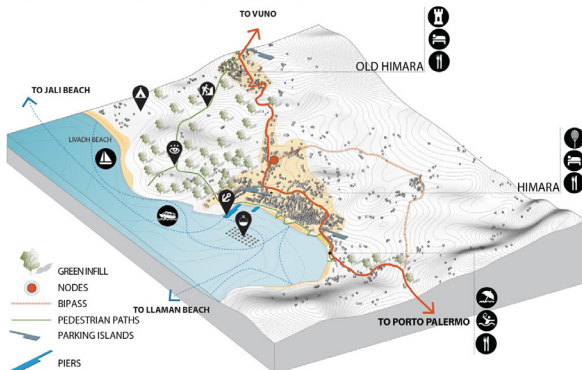
and transportation on water can establish a different point of observation, a new perspective to rediscover natural resources and water landscapes. Moreover, following this logic for new Adriatic and Ionian tourism development strategies, mapping the coastline with flexible and ephemeral waterborne devices can contribute to the discovery of a new way to experience the Albania green strip facing the sea.

In this frame of investigation the role of the OMB becomes even more relevant, not solely as an academic and research platform but, through applicative design projects, also as an answer to, and in combination with, the needs of private actors. Floating strategies are ephemeral and hybrid: ephemeral because they can adapt their shape in functions to the seascape and the mainland, and hybrid because they are capable of offering different solutions and services based on the needs of the public and the private actors.

3. *Floating strategies / Reterritorializing the sea*

In planning sea space as human habitat, unique terms and conditions may arise. First is the point that this is new space and so far we are inexperienced with it. Secondly, the conditions are three dimensional and it is necessary to understand that the space is not only on the water, at the same time it is in the water, and moreover, basically movement is immanent in the space, and due to buoyancy there are special characteristics of the built environment. The sea is horizontal planed space, it is continuous space, it is the largest space on Earth, larger in the southern hemisphere than in the northern hemisphere (Kikutake Kiyonori [1977], *Kaiyō wo ningenkyojū kūkan to shite toraeru hitsuyōsei* [The necessity of taking the sea as human habitat] Kenchiku Zasshi, Vol. 92, No. 1126, p. 35).

3.1 *Background*

The desire to colonize the *apparent tabula rasa* (Bhatia, Casper, 2016) – the sea – has been there for centuries. It is quite interesting to notice how the first achievement in colonizing the sea with manmade floating structures was motivated either by

military purposes[20] – which led to the construction of aircraft carriers – or by the need to harvest (nonrenewable[21]) energy – which resulted in the multiplication of oil tankers over the seas and oceans. Resource extraction led to the generation of logistical landscapes dedicated to oil and gas extraction which were never really designed using long-term, holistic planning, and are now object of studies[22] also in light of the acknowledgement that the resources which generated them are doomed to run out.

There are of course instances when the reclamation of land from the sea was motivated nor by resource extraction nor by war. In the Netherlands for example, Polders were a necessity dictated first by the need to prevent flooding, which then became a way to obtain arable land and later, due to the fast growth of cities, became an answer to the need for buildable land and new housing developments. Nothing to do of course with the phenomena taking place since 2005 in the UAE, where manmade islands are multiplying along the southern shores of the Persian Gulf coast[23]. The real motivation behind their construction is only apparently a need to get away from the harsh climatic conditions of the Rub al Khali (the Empty Quarter) desert, but rather a *disneyfication* (Relph, 1976) of the world. These new islands are visible from the sky and the satellites, they define a *new geography* that consecrates the *Anthropocene* era, "substituting the world with its image"[24] (Jakob, 2009: 118).

[20] Even Odaiba artificial island in Tokyo bay was initially built for defensive purposes in the 1850s.

[21] Non renewable energy sources are Fossil fuels (oil, natural gas, coal), which are causing depletion of natural resources and CO2 emissions and pollution. Nuclear fission and fusion, which are renewable, are still not considered sustainable because of safely issues and the production of dangerous toxic waste.

[22] See: *The Petropolis of Tomorrow*, a multidisciplinary project undertaken in collaboration with The South American Project (SAP), Harvard's Graduate School of Design, California College of the Art's Urban Works Agency, Rice University's School of Architecture, Cornell University's Department of Architecture. Its aim is to provide new templates for architecture, urbanism and infrastructural design tied to resource extraction that privileges a systemic symbiosis between economic, political, environmental and social systems (Bhatia, Casper, 2013).

[23] The Palm Jumeirah, The Palm Jebel Ali, The Palm Deira, Marina City, The World, The Universe – Dubai, United Arab Emirates, 2001 – ongoing/suspended.

[24] Reference is made to the artificial archipelago *The World*, an artificial settlement in the UAE reserved for the rich: an island shaped like the world, which trans-

Figure 3a. Fossil Fuel Drilling Platform – Piattaforma Paguro, Ravenna, IT, construction 1962-3- sunk in 1965. EU protected site 1995 (Source: internet)

Figure 3b. Image form the Petropolis of Tomorrow design-research project website. (Source: <http://www.petropia.org/info/>)
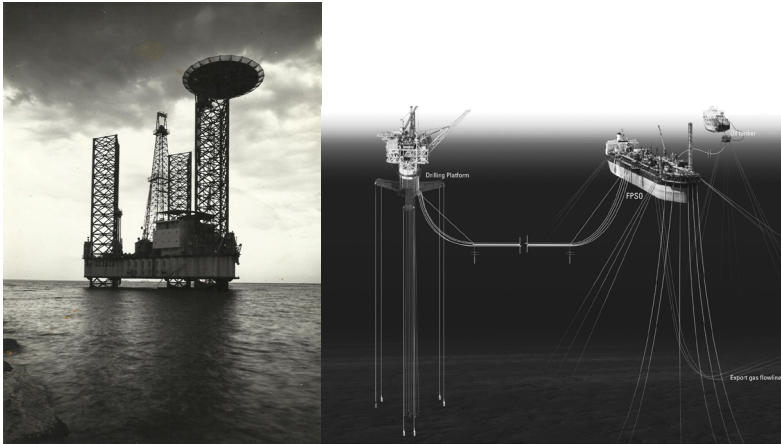

A very significant precedent where the possibility to artificially expand civilization on the water meets with the technological advancement which makes it possible can be found in Japan. Japan was a precursor in dealing with the possibility to "territorialize" the sea and build floating cities. The architect Kikutake Kiyonori[25] started working on the concept of floating city since the 1960's, when the government of Tokyo called for plans to cope with the city's growth and the "postwar dilemma of living space". In his designs for floating cities Kikutake "moved human habitat from land, striated space, to sea, smooth space, and in that movement *deterritorialized* human habitat and r*eterritorialized* the sea". The Architect was able to

forms the physical world into an inhabited image.

[25] Kikutake, was a Metabolist Architect, who found a creative space in the inter-section of Metabolist architectural principles with marine cities and his vision was so visionary, his grasp of the engineering challenges so thorough, that along with Buck-minster Fuller and Paul Maymont, he became a leading figure in what Peter Raisbeck calls "one of the more curious minor architectural traditions of the 1960's": floating cities (Blaxell, 2010, p. 13).

Figure 4a. Sketch for floating city, Kikutake Kiyonori 1960 (Source: internet)
Figure 4b. Aquapolis at Expo 75 (Source: internet)
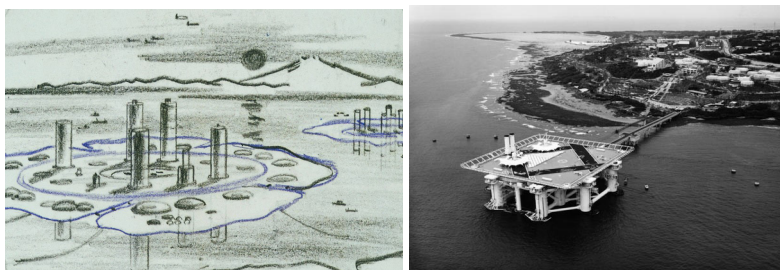
materialize his floating city concepts when he was contracted the Expo 75 centerpiece: a floating habitat, a city on the sea (kaijōtoshi) called *Aquapolis*. The floating city was designed to be self sufficient in terms of energy (one of the world's first waste water recycling processes was tested in *Aquapolis*), movable and, at the end of its useful life, it was supposed to be sunk to the ocean floor, "where it would be reterritorialized as a reef for marine life" (Blaxell, 2010: 13). After Expo 75 closed, in 1976, the floating structure was not sunken, but before being turned into scrap metal and sold off to China in 2000, it was active for 25 more years as a touristic destination, "metabolized" into the "Ocean Expo Park", and featuring attractions such as Arboretums, Beaches and Aquariums[26].

3.2 *Floating strategies as an answer to environmental challenges: social, cultural, ecological concerns*

If movable and adaptable, floating structures could indeed respond flexibly to unpredictable future events, be them ecological disasters or social and political phenomena that constitute a global challenge. For instance, a part from offering a strategy for territorial promotion through sustainable tourism

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[26] The Architect Kikutake himself wanted it to be used as a research base for an offshore oilfield or as a Black Current research station.

development, floating hybrid systems on the sea could also simultaneously offer solution to the global phenomenon of mass migration that is growing in scope, complexity and impact, by serving as immigration reception platforms. These platforms could primarily be used as touristic facilities and, in emergency situations, become immigration check points equipped with first aid facilities, frontier police offices and general services for people before they reach the mainland.

But one of the most relevant characteristics of such structures would certainly be their capacity to answer to ecological concerns: floating platforms are naturally resilient to the rising sea levels. In fact, the floating strategies proposed could actually address an imminent issue related to our actual survival as a species on this planet. Climate change is actually happening; global warming and the consequent desertification and water withdrawal are already affecting our food productive capacity. The indelible sign of men on earth – pollution, waste, morphological and biological alterations – are activating a set of chain reactions which are leading toward natural disasters like flooding and increasing biodiversity loss. In such scenario, strategies of *mitigation* (such as the policies on energy consumption and CO_2 emissions adopted so far in the EU) are not enough to reverse the trend. The future events that concern the planet are in fact unknown to us, it's not possible to fully predict the complex and dynamic interactions between the causes that trigger global challenges, because of the feedback mechanisms that are activated by each single event. Therefore the answer might lie in systemic solutions and *adaptation* strategies, rather than mitigation ones. This means that to address such complex and intricate combination of causes and effects, we need to improve resilience of social and ecological infrastructure, and prevent disasters instead of simply offering a solution after they have occurred.

Last, but not least, from the perspective of Global Footprint[27], considering the earth's limited biocapacity[28] and the overwhelming predictions on population and growth[29], the possibilities offered by artificial floating structures, acting as appendixes of the mainland, could complement the productive land and offer an answer to the possible lack of food in the overpopulated future that awaits us.

3.3 *Energy, food, water and waste*

Arrays of wind turbines for hydro-mechanical storage of wind energy can already be spotted offshore in the outer Thames Estuary in the United Kingdom (20 km off the Kent coast), off the coast of southern Sweden (Lillgrund Wind Farm) and in the eastern North Sea (off the westernmost point of Denmark). Meanwhile new self-sustainable *energy landscapes* that include flora and fauna and support collective forms of human inhabitation are designed: *Green power islands*[30], artificial islands and lagoons with enormous floating photovoltaic disks surrounded by wind turbines could be soon spotted on the west coast of Florida, off the bay of Copenhagen, in the bay of Maninama (Bahrain), in the Palk strait in India and in the East China Sea, off shore Shanghai. Can such structures be sustainable from an energetic point of view without impacting the environment? Can they be completely autonomous and harvest energy, food and water without relying on the finite resources of the mainland? Can they do more than simply

[27] Global Footprint: earth productive area/world population = global ha per capita (1.8 global ha is ideal).

[28] Earth's Biocapacity: carrying capacity of earth; supply of productive area.

[29] Projections on world total population estimate that the population will increase to almost 10 billion in 2050 and 11 billion in 2100. Source: "2015 Revision of World Population Prospects", Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. Available at <https://esa.un.org/unpd/wpp/> (accessed 16-07-2016).

[30] Green Power Islands are located around the globe and they all adopt a common scheme deploying enclosed lagoons for hydro-mechanical storage of wind energy. For more information see: "Green power islands Project" (<http://www.green-poweriland.dk/>).

saving energy, but rather give something back, complementing the needs of the mainland?

Renewable energy sources that could be harvested on and around floating structures are Solar, Wind, Hydroelectric and Kinetic energy and the related renewable energy generation technologies that can be implemented independently or in combination are solar thermal, photovoltaic, offshore wind turbines, ocean tidal and ocean wave (Ferry, Monoian, 2012). Possible problems of introducing floating structure are the impact on marine life and, in some cases, the need to introduce infrastructures for power transmission, where distance becomes an important aspect in the evaluation of environmental impact. The available technologies and the possible negative impacts on the environment are listed in the table that follows.

Energy source	Energy generation tegnology	Negative impacts/ limitations
SUN	Solar Thermal (heat stored fluid or air)	-
	Solar Pond (heat stored by saltwater)	-
	Photovoltaics	-
WIND	Wind turbines offshore on pylons on shallow water (HAWT)	Possible impact on marine life
	Wind turbines offshore floating in deep water	Possible impact on marine life, distance (length of power transmission lines)
	Windbelt (aerostatic flutter effect)	-
WATER	Ocean Tidal[1] (Hydrokinetic) - Tidal Stream Generator (TSG): Axial, Vertical and horizontal cross flow, Flow augmented, Oscillating and Venturi	-
	Ocean Marine Current[2] (Hydrokinetic) – sea bed mounted systems, floating moored systems and hybrid combinations of the two.	Difficulties for engineering systems in deep ocean water
	Ocean wave (Hydrokinetic) – Wave Energy Converters (WEC) that harness the local surface energy of large bodies of water	-

Table 1. Information extracted from Ferry, Monoian, 2012

In order to operate independently from outside services, a part from harvesting energy, these floating structures should also be able to harvest food and water from their local environment, manage waist independently and offer sustainable means of transportation, both locally and to connect them to the mainland.

Water harvesting and conservation on such floating platforms along the coast is possible through water desalination processes that respond to the fresh water needs for drinking and for irrigation (there are already existing and proven environmental technologies, such as the evaporation of saltwater to create cooling and distilled fresh water-saltwater cooled greenhouse[31]). Food production can be guaranteed through traditional crops, fish farming, hydroponics and aquaponics, which also contribute to Biodiversity preservation, allowing for the thriving of flora and fauna. As an example, in the "Aquaculture seascape park" by Moira Wilson (Wilson, 2010), "a park between land and sea, that changes with the rise and fall of the tides", Aquaculture seascape becomes an extension of the terrestrial park along the coast of Vancouver Island (Canada). The hybrid floating system is organized in three levels that are progressively flooded according to seawater level. In the 'Deep water gardens', 'Intertidal gardens' and 'Tidepool gardens' different marine plant and animal species thrive and can become organic waste that, in turn, is used as fertilizer, defining a closed productive cycle. The park is at the same time a touristic attraction, a forum for education, information, research and training, where flexible mobile Modular add-ons are used to map and monitor the coastal oceanic territory.

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[31] Saltwater-cooled greenhouses are greenhouses that use saltwater to provide suitable growing conditions that enable year-round cultivation of high-value vegetable crops even in desert conditions. By using seawater to provide evaporative cooling and humidification, the crops' water requirements are minimized and yields maximized with a minimal carbon footprint. See also "Sahara Forest Project" where they experiment energy and water-efficient saltwater-cooled greenhouses for growing high value crops in the desert, produce freshwater for irrigation or drinking, safely manage brine and harvest useful compounds from the resulting salt, grow biomass for energy purposes without competing with food cultivation, whilst revegetating desert lands (http://saharaforestproject.com/).

In terms of transportation on and from the floating structures, interesting Sustainable Transportation strategies can originate if we rely on natural climatic phenomena. Sailing boats that take advantage of wind are certainly a good example, but also taking advantage of natural sea and ocean currents is a valid option. The transportation concept of the "Drift + Drive" research project is based on this principle: "the stationary *Agricultural Island* and the mobile *Drift Boat* develop a symbiotic relationship – The *Drift Boat* provides water for crop irrigation and labor while the harvest from the stationary island is loaded onto the vessel. Moreover the project foresees also a series of stationary *Energy Islands* along the route, which are reserved for solar energy, tidal and wind energy harvesting, which is then distributed to the other islands along the drift trip (Bhatia, Casper, 2016).

Moreover these hybrid floating systems could contribute to the regeneration of the natural environment through Restorative strategies, complementing the natural world as opposed to simply maintaining it. In the speculative project "Microcosmic Aquaculture" by Antonio Torres, Michael Loverich, giant spheres made of a permeable gelatinous wall section have a double function: they act as reef on the exterior, nourishing, sheltering and therefore attracting marine life; while the interior works as a low maintenance fish farm. These "Floating gelatinous reefs" follow currents and attract life, but as the gelatinous skin gradually dissolves and the embedded food is released, they disappear leaving behind a new ecology (Torres, Loverich, 2010).

4. *Floating strategies / tourism as opportunity for economic growth*

The touristic impact on a territory is not always positive, especially if uncontrolled and left to private speculators. The interaction public-private acquires a fundamental role in a territorial regeneration process. In a country like Albania, where tourism has an important development role, it is necessary to monitor this phenomena and to raise awareness among the locals to encourage respecting the territory. "Tourism for

Figure 5a-b. Images from the Drift + Drive Project proposal, The Petropolis of Tomorrow design-research project (Source: <http://www.petropia.org/projects/project-floating-frontiers/drift-drive-2/>)
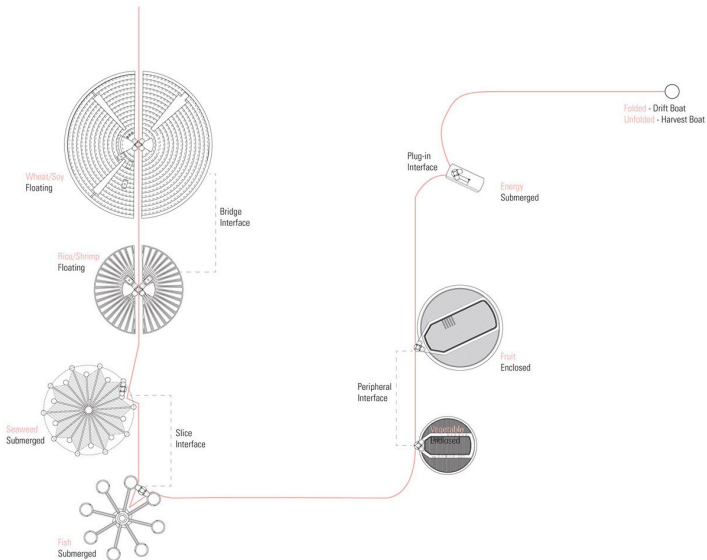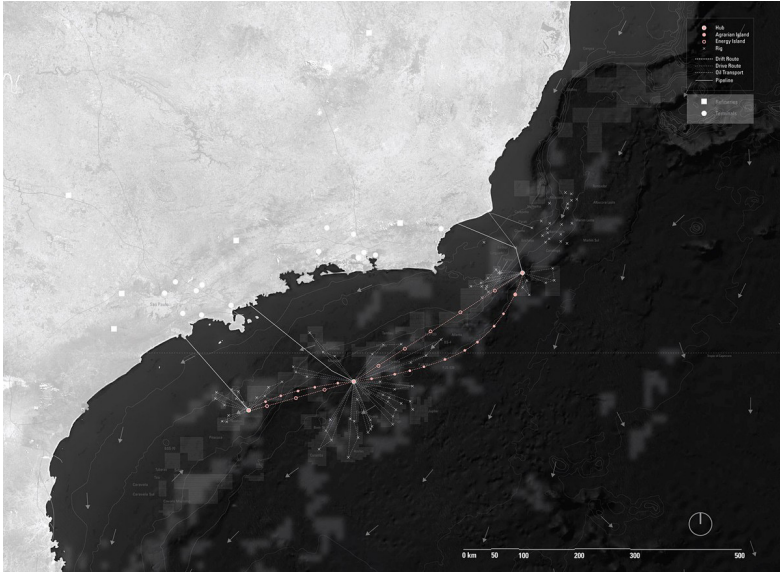
landscape" is a tool for activating transformation processes in which tourism is the main economic resource and the territory benefits from it in terms of heritage regeneration, protection and valorization.

The water-landscapes represent one of the main resources for territorial development and cross-bordering cooperation. The Adriatic countries face a common courtyard characterized by the water element. In terms of economic resources, the Adriatic-Ionian Sea is a mobility resource, a space for sharing identities and cultures.

The main goal of the floating strategies is to define thematic networks in the crossway of multiple activities and interests in which Adriatic-Ionian Cities can be observed as crossing points of different identities. The design of floating platforms is an opportunity for exploring the relationship between land and sea, considering nature as connecting tool. Such objects are structured and functional to the promotion strategies adopted. They can be platforms for thematic events, or waste storage facilities, technological hubs, etc., as long as they provide activities throughout the year.

According to the Brazilian urbanist Jaime Lerner (2003), the principle of recovering energy of a sick – or just tired – point with a simple pinch is related to the revitalization of the point itself and the immediately adjacent area. The idea of intervening with flexible and temporary platforms can affect the whole coast line with punctual, reduced size projects, disclosing the energy of the territory and re-distributing it in the surroundings. The floating structures are tools for revitalizing punctual areas that, in turn, can initiate territorial development processes and affect positively a wider region.

Similarly to the medical discipline, where it's not possible to ignore the doctor-patient relationship, in the planning process it's necessary to involve citizens in order to induce a reaction in the city. A possible strategy is giving a pinch to an area in order to induce positive reactions (Lerner, 2003). As a consequence we can deduce that each strategy/structure necessarily has to involve locals, who provide territorial knowledge and awareness.

4.1 *Tourism in Albania / Floating strategies as a possible answer*

According to the World Travel and Tourism Council, the number of foreigner tourist arrivals in Albania will increase from 3.8mn in 2015 to circa 5mn in 2025 (WTTC, 2015). Due to this consistent increase, touristic development strategies are an urgent need for the Albanian territory in terms of carrying capacity, service and infrastructure construction and management and business development.

In terms of touristic purpose, floating structures work as activity catalysts and provide the missing services, infrastructures and tools for coastal tourism development. Their flexibility in terms of structure and functions perfectly fits the needs of contemporary tourists and also creates new opportunities for the whole territory, from the coast to the mainland.

The idea of floating strategies, as mentioned before, generates from the necessity to act in the most reversible way possible, while reducing the use of land. The main goal is to answer to both the tourists' and the locals' needs with flexible and ephemeral structures.

Sustainability[32] and feasibility are guaranteed by four main features:

1) *functional combination*/complementary features for answering different needs are the basic requirement for each structure, which should not be focused only on tourism development. The choice of function is related to the specific territorial features that ought to be promoted;

2) *territorial branding and all-year long activities' calendar*/ segmentation of the touristic product to avoid limited seasonal use and to create a brand for the promotion of local territorial features;

3) structures which can be *assembled*/structures are designed in modules in order to facilitate their dismantling and re-assembly;

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[32] About sustainability, please refer above to paragraph 3.3.

4) *public-private partnership*/promotion of private sponsor-
   ship following public guidelines.

4.2 *Floating strategies and structures / examples*

The examples presented in the following paragraphs are the
results of the "Ephemeral Landscape" course, organized in the
frame of the Professional Master in Landscape and Urban Design
led by PhD Loris Rossi, Arch. Enrico Porfido and Arch. Caterina
Spadoni. The design concepts and descriptions developed by the
students Alba Zoto, Nelson Hasmema and Silvana Saqe, have
been re-elaborated by the author for this paper.

4.2.1 *Saranda Aqua Farm / Enhancing the blue growth and sea-culture*

Saranda is one of main touristic cities of the Albanian Riviera
and it has a long tradition of mussel cultivation which represents
one of the main economic resources of the area. The fish farming
platform works with the idea of *valorizing a territory through
local products' promotion.*

The core of the structure is the mussel cultivation, which also
gives shape to the circular shape platform. The complementary
activities include a market and a restaurant. The same spaces
can be used also for educational and leisure purposes, both for
students and tourists, with opportunities for diving and leisure
events.

This proposal could be interesting for both public and
private sponsors. From the 'Blue Growth guidelines' provided
in the EUSAIR[33] strategy, to specific tourism development
national programs, the fish culture thematic platform fosters
the interaction of many different actors.

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[33] European Strategy for Adriatic-Ionian Region.

Figure 6. Saranda Aqua Farm (source: Alba Zoto)

4.2.2 *Solar theater / Energy and culture for disclosing the hidden landscapes*

The Karaburun Peninsula, close to Vlora, in Albania, is a popular location in the history of piracy. The whole perimeter is rich of caves, which were used as secret hiding places by the pirates in the past. The Peninsula hosts the Haxhi Cave, the largest marine cave of the country, and Grama Cave, where many drawings and inscriptions made by sailors for celebrating Poseidon have been found. Other caves are spread all over the southern Riviera, such as the Cave of Omer in Himara, where, according to the legend, Odyssey faced the Cyclopes. The idea behind this platform is to *disclose hidden landscapes through thematic marine itineraries*, with complementary activities such as historical reenactment events. Those activities stimulate the industry of creative tourism, using cultural events to promote the territory.

This seasonal activity is complemented by an energy harvesting function. Due to the small distance from Saranda – which is the city with the highest average of sunny days in

Figure 7a-b. Historical reen-
actment in the Brijuni National
Park, Croatia (source: brijuni.hr)

Europe (over 270 days) – the platform is designed to host solar panels and store enough energy to meet the energy needs of the floating platform and to sell the excess energy to the mainland.

4.2.3 *Food market and Masterchef Albania headquarter / When taste meets the show business*

This last example is strongly related to the idea of territorial branding, promoting local gastronomic products and the territory. The concept of linking the worldwide famous Masterchef brand to a platform *promotes the products on site and the site itself* at the same time, highlighting the relationship between territory and products. The floating structure includes a food market that travels weekly along the main spots of the Riviera and exchanges local products. The show business, represented by the TV brand, works as an interest catalyst and as a showcase for the touristic market.

4.3 *Between public and private touristic initiatives / the role OMB*

How can all these strategies be implemented with little public economic resources? The balance between public and private actors can guarantee a sustainable touristic development, where public actors work to preserve the territory and private actors make investments for both economic return and – only philanthropists – territorial development. According to Montanari (2015), *the natural heritage belongs to everyone and everyone should do everything they can to protect it and benefit from it*. The Observatory of Mediterranean Basin works as a filter between the public interest of heritage conservation and the private interests of touristic investments. Hence, its main goal is to combine scientific production – dissemination and research activities – and applied research projects. Albania presents a unique case in Europe because it is witnessing a rapid transformation process, and while tourism represents the main tool for development, it needs to be monitored to avoid compromising the existing heritage.

5. *Attributions*

The paragraphs entitled "The Observatory of Mediterranean Basin" and "Floating strategies / land and water archipelago" have been mainly edited by Loris Rossi. The paragraph entitled "Floating strategies / *Reterritorializing* the sea" has been edited by Laura Pedata, while the one entitled "Floating strategies / tourism as opportunity for economic growth" has been edited by Enrico Porfido.

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