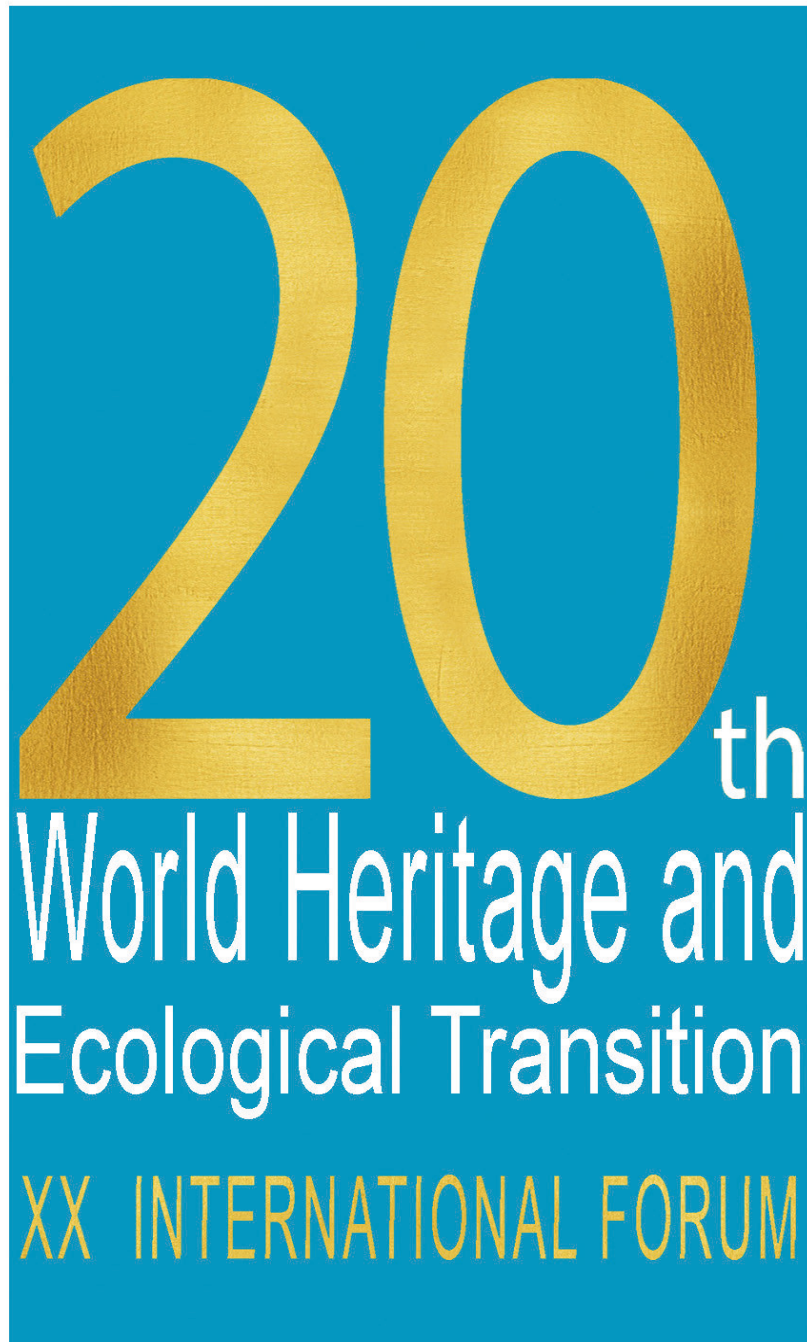


ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella

XX INTERNATIONAL FORUM

Le Vie dei  
Mercanti



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Le Vie dei Mercanti  
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# WORLD HERITAGE and ECOLOGICAL TRANSITION

**Le Vie dei Mercanti**

**XX International Forum**

Naples | Capri

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### **Peer review**

Scholars has been invited to submit researches on theoretical and methodological aspects related to Smart Design, Planning and Technologies, and show real applications and experiences carried out on this themes. Based on blind peer review, abstracts has been accepted, conditionally accepted, or rejected. Authors of accepted and conditionally accepted papers has been invited to submit full papers. These has been again peer-reviewed and selected for the oral session and publication, or only for the publication in the conference proceedings.

### **Conference report**

300 abstracts and 550 authors from 40 countries:

Albania, Arizona, Australia, Belgium, Bosnia and Herzegovina, Brasil, Bulgaria, California, Chile, China, Cipro, Cuba, Egypt, France, Germany, Greece, India, Italy, Japan, Jordan, Lebanon, Malta, Massachusetts, Michigan, Montenegro, Montserrat, New Jersey, New York, New Zealand, Poland, Portugal, Russian Federation, Serbia, Slovakia, Spain, Switzerland, Texas, Tunisia, Turkey, United Kingdom.

## **From the XIX FORUM WORLD HERITAGE and DESIGN for HEALTH to the XX FORUM WORLD HERITAGE and ECOLOGICAL TRANSITION**

In 2022 the Capri International Forum 'Le Vie dei Mercanti' will reach its 20th edition.

A Story of love for the Earth and its Inhabitants, Landscapes, Architecture, Cultural and Archaeological Heritage told by over 7000 Scholars and Academics from all over the World in an interdisciplinary way, by integrating skills, experiences, good practices in order to train talented people who care about the destiny of our Planet.

If the Future is an Eternal Present, the renewal of the Forum in these twenty years has produced a wealth of knowledge to guide those who govern and administer the Public Good, and citizens in their daily activities. A future that must be prepared in this era, that cannot ignore the ongoing climate change and that should not catch future generations unprepared.

A Present that transmits to the future the values that Humanity has passed on to us and that must be protected and transmitted as regenerative sources of Humanity itself.

Not coincidentally, the First International Forum assigned the topic 'From Luca Pacioli to the Eco-geometry of the Territory' to the participants.

An invitation to submit scientific contributions and good practices based on double-entry, legitimized by the measurement of tangible and intangible assets, in order to integrate knowledge and state it like entries in an income statement.

Therefore, if Luca Pacioli, tutor of the Rompiasi Venetian merchants family, suggested the method to legitimize the results of the activities undertaken, that is, through the measurement he indicated the survey activity as managing a heritage, which as such must not only be geometrically definable but must be also discretized into batches, noted in its multidimensionality, in order to produce a result whose added value can always be quantified and is given by the difference between the value of the asset, as we have received it, and the value reached for the activity of knowledge and management of the potentialities which are identified and stated as in an income statement; Eco-geometry, intended as a technological echo of reality, feasible through the use of digital and artificial intelligence to create forecasting scenarios, a model in which it is possible to measure all the components and relationships between the parts and to restore the matter, no longer as an instrumental covering to be described only in the geometric matrices generating the forms.

Once again Leonardo point us the way, conceptually anticipating the transition from analogue to digital and to the management of big data: "io vò pigliare quella licenza ch'è comune ai matematici, cioè siccome loro, dividono il tempo a gradi e di quantità continua la fanno discontinua, ancora io farò il simile, dando col miglio o renella nella comparazione all'acqua" (Codice Atlantico, f. 126, t.a.).

Through the topic of the next XX Forum World Heritage and Ecological Transition, I want to provide some interesting food for thought, to identify a lived place, a life

environment, as an integral of forms of organization of the elements that surround us, examined through the prism of a civilization; we will deal with an innovative project of measurement and representation of the natural and built environment that is no longer an expression of the relationships between society and the natural environment but a construction of the relationships between the future as an eternal present and the legacy of the past as an economic value. A vital commitment that binds people to the environment; an educational revolution that match skills to the new way of managing what is learned and measured; the ecological transition with the use of technological innovation shall have the aim of entering the body of the territory, of the buildings and of the objects, it analyzes all its components through a multi-criteria analysis in order to establish a rating which in itinere defines the added of the results.

Just as the rulers and merchants in the mid-15th century, on the margins of international trade, in an economy contracted for mercantile life, combined research and training in new paths, taking refuge in agricultural operations, in favour of the reclamation of uncultivated lands in relation to the search for energy and its distribution and established the reasons of the earth compared to those of the sea in a perspective of systemic response.

Prof. Carmine Gambardella  
General Chair XX Forum 'World Heritage and Ecological Transition'  
President and CEO of the Benecon University Consortium  
UNESCO Chair on Landscape, Cultural Heritage  
and Territorial Governance

## **Dal XIX FORUM WORLD HERITAGE and DESIGN for HEALTH AI XX FORUM WORLD HERITAGE and ECOLOGICAL TRANSITION**

Nel 2022 il Forum Internazionale di Capri, Le Vie dei Mercanti, raggiungerà la sua XX edizione. Una storia d'Amore per la Terra e i suoi Abitanti, i Paesaggi, l'Architettura, i Beni Culturali e Archeologici raccontata da oltre 7000 Studiosi e Docenti provenienti da tutto il Mondo in modo interdisciplinare, integrando competenze, esperienze, buone pratiche per formare Persone di Talento che abbiano a cuore il destino del nostro Pianeta.

Se il Futuro è un Eterno Presente, il rinnovarsi del Forum in questi venti anni ha prodotto un patrimonio di conoscenze per orientare coloro che governano e amministrano il bene pubblico e i cittadini nelle loro pratiche quotidiane. Un Futuro che va preparato in questa epoca che non può prescindere dal cambiamento climatico in atto e che non colga le generazioni future impreparate.

Un Presente che trasmetta al futuro valori che l'Umanità ci ha consegnato e che devono essere tutelati e trasmessi come fonti rigeneratrici della stessa Umanità. Non a caso, il Primo Forum Internazionale affidò ai partecipanti il Tema "Da Luca Pacioli all'Ecogeometria del Territorio". Un invito a presentare contributi scientifici e buone pratiche fondati sulla partita doppia, legittimati dalla misura dei beni materiali e immateriali per integrare conoscenze e per declinarle come partite di un conto economico.

Pertanto, se la figura di Luca Pacioli, l'Istitutore della famiglia dei Mercanti veneziani Rompiasi indicava il metodo per legittimare i risultati delle attività intraprese, e cioè attraverso la misura indicava l'attività di rilievo nel senso di gestire un patrimonio, che in quanto tale non solo deve essere geometricamente definibile ma deve essere discretizzato in partite, rilevato nella sua multidimensionalità, al fine di produrre un risultato il cui valore aggiunto sia sempre quantificabile e dato dalla differenza tra il valore del bene, così come ci è pervenuto, e il valore raggiunto per l'attività di conoscenza e di gestione delle potenzialità individuate e declinate come in un conto economico; l'Ecogeometria, intesa come un'eco tecnologica della realtà, attuabile con l'utilizzo del digitale, dell'intelligenza artificiale per creare scenari previsionali, un modello dove è possibile misurare tutte le componenti e le relazioni tra le parti e restituire la materia non più come strumentale involucro da descrivere nelle sole matrici geometriche generatrici delle forme. Ancora una volta Leonardo ci indica la strada, anticipando concettualmente il passaggio dall'analogico al digitale e alla gestione dei big data: "io vò pigliare quella licenza ch'è comune ai matematici, cioè siccome loro, dividono il tempo a gradi e di quantità continua la fanno discontinua, ancora io farò il simile, dando col miglio o renella nella comparazione all'acqua" (Codice Atlantico, f. 126, t.a.).

Con il Tema del prossimo XX Forum World Heritage and Ecological Transition intendo proporre spunti di riflessioni per identificare un luogo vissuto, un quadro di vita, come integrale di forme di organizzazione degli elementi che ci circondano esaminato attraverso il prisma di una civiltà; ci si dovrà confrontare con un progetto innovativo di misura e di rappresentazione dell'ambiente naturale e costruito

non più espressione delle relazioni tra la società e l'ambiente naturale ma costruzione delle relazioni tra il futuro come eterno presente e l'eredità del passato come valore economico. Un impegno imprescindibile che lega le Persone all'Ambiente; una rivoluzione formativa che omologhi le competenze al nuovo modo di gestire ciò che si apprende e si misura; la transizione ecologica con l'utilizzo dell'innovazione tecnologica deve avere il fine di entrare nel corpo del territorio, del costruito e degli oggetti, ne analizza attraverso un'analisi multicriteria tutte le componenti per stabilirne un rating che ne definisca in itinere il valore aggiunto dei risultati.

Così come i governanti e i mercanti, verso la metà del quattrocento, al margine del commercio internazionale, in un'economia contratta per la vita mercantile, saldarono ricerca e formazione in Nuove Vie, trovando rifugio in operazioni agricole, in favore delle bonifiche dei terreni incolti in rapporto alla ricerca di energia e di distribuzione della stessa e instaurarono le ragioni della terra rispetto alle ragioni del mare in una prospettiva di risposta sistemica.

Prof. Carmine Gambardella  
General Chair XX Forum 'World Heritage and Ecological Transition'  
President and CEO of the Benecon University Consortium  
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## **The Ecological Transition Role in the Sustainable Development of Historic Urban Ports. *The case of the old urban Port of Lattakia in Syria.***

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### **Abstract:**

Most of the historic Port City has undergone urban development and changes in use, often damaging and interrupting the historic urban path of the Port City, losing the relationship with the original morphology of the Port City, and the authenticity and integrity of the maritime and terrestrial urban heritage. In recent years, with the development of society, the awareness of environmental protection for people has been increasing. While port promote the economic development and employment levels of port cities, they also have a negative impact on the environment of Port City.

In this paper we present the situation of the old urban port of Lattakia in Syria that has developed, not respecting its historical lines and those of its City, reflecting three trends: the first one is the major changes and ongoing challenges that the old port of Lattakia faces today in relation to the City; the second concerns the valorize and historical-critical analysis of the urban fabric of the Port-City to identify the values present in the place to be recovered; the last one is the ecological transition role in the sustainable development of Lattakia Port, to recover the relationship with the historical fabric of the port city in a way that respects the environment and in favor of the society that uses it, safeguarding the original identity of the heritage port city, offering more social spaces of relationship and less transport traffic within the connected area between the sea and the city.

**Keywords:** Heritage Port-City, Sustainable & Ecological Port, Identity & Integrity.

### **Introduction**

The historic urban port is a part of the historic urban fabric of the city and the constructive development of the historic urban port is a very complicated operation, because it is linked to many naval, maritime

and terrestrial historical factors. These factors should be studied all together, analyzing the problems of each factor in detail, trying to solve them without damaging the other factor.

The main problem that is defined with the phrase "the relationship between the port and the city". It is a very complicated situation in most cases it is not well studied, for reasons of lack of direct administrative and scientific relations between the port authority and the municipality of the port city. Therefore, the Port- City topic highlights the need to understand and evaluate the consequences of port developments with respect to the more general infrastructural system that must be supported by the municipal authority. The port master plan is often studied by itself, instead of being related to the city master plan and taking into consideration the social and cultural side of the local inhabitants.

The Ecological Transition role in the sustainable development of Historical Urban Port offer us a perfect solution to recover the relationship with the historical fabric of the port city in a way that respects the environment and in favor of the society that uses it, safeguarding the original identity of the heritage port city, offering more social spaces of relationship and less transport traffic within the connected area between the sea and the City, and turn it into decarbonized traffic.

The situation of the old urban port of Lattakia in Syria that has developed, not respecting its historical lines and those of its City, is an example through which we would try to find a solution to recover the lost relationship between the ancient urban port and the City itself, using some elements of the ecological transition. *This article briefly presents the result of Dr. Hanan KAFFOURA's doctoral research completed in 2015 at the University of Rome "Tor Vergata".*

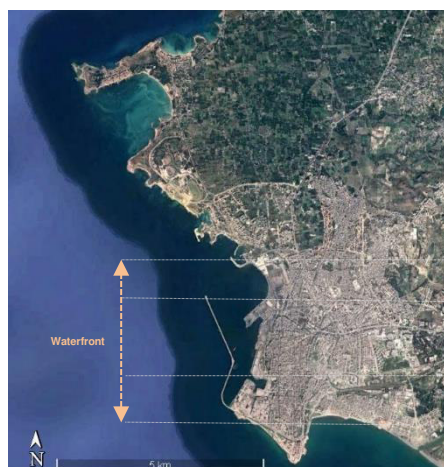
## 1. The major changes and ongoing challenges that the old port of Lattakia faces today in relation to the City.

The city of Lattakia has gone from a coastal city with a natural port, to a port city with a modern port that has invaded and transformed everything. The increase in container traffic has put the port in the need to develop rapidly, without taking into account the relationship of the city with the sea. The port of Lattakia has developed parallel to the city itself, but each in a different direction, without bearing in mind that the port has always been part and must be part of the identity of the city. Unfortunately, the Municipal Administration and the Port Administration have always made decisions according to their own interests, without thinking about the urban, architectural, economic and social context as a whole. The City master plan has always been designed and built with reasons that do not take the port into consideration as a vitally important space that connects the city to the sea. Even the Port master plan has always been designed and implemented with reasons that do not take into consideration the city and the surrounding area as the original context in which it was born; the function of the port was thought exclusively with the aim of increasing its space to respond to the increased container traffic, as if it were independent of the City.

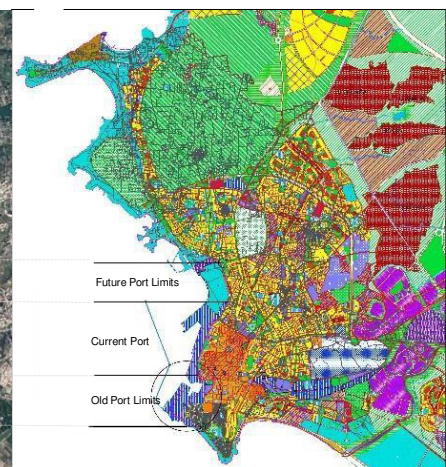
Lattakia developed in three directions: south, east and north, forming an arc-shaped development from south to north. To the west, the pointed-shaped coast is very rocky in the south, less rocky in the central part and 80% sandy in the north. The port developed starting from the first construction towards the south and then towards the north. At the southern edge of the port there is a popular tourist area with housing around it, while at the northern edge the area is of an international tourist character.



**Fig. 1:** Syrian Map, the position of Lattakia. it is the fourth most important City in Syria and the first coastal City.



**Fig. 2:** Lattakia Waterfront, Google Map.



**Fig. 3:** Lattakia Municipal Master Plan.

## 1.1. Lattakia Port in relation to the historic, cultural and commercial center of the city.

Lattakia is the only city in Syria that has almost lost the identity of its historic center with a chaotic development that has failed to respect neither the urban set-up nor the character of its architecture. The historic urban fabric has been gutted and its ancient and historic architecture has also often been demolished; all this has transformed it into a contemporary city, depriving it of its historical value as well as its urban and architectural identity. This happened especially after the eighties with the complete construction of the port which cut the relationship between the city and the sea and after the nineties with the closure of the port area. Therefore, the use of the center of Lattakia has been transformed into a mixed residential, commercial and cultural use and there are still some places and buildings that still have their history, especially regarding the French and Ottoman rule. The Roman remains, on the other hand, are rare, but important, such as the square triumphal arch and some columns. With the construction of the commercial port, the traces of the Phoenician civilization have been lost, of the city of Ramita which was located south of the ancient port and south-west of the city of Laodicea. With this complicated situation, what can be done for Lattakia? I do not think that a reconstruction project that brings the city back to how it was in ancient times could be useful because, apart from the complete loss of its original historical evidence, this would be difficult from an economic point of view because it would mean demolishing the contemporary and reconstructing the fake ancient.

Lattakia needs a philological redevelopment project of the area of the ancient port in favor of the city to recover the relationship between the city, the port and the sea, thus recovering the memory of the people. Such a project should be refined, modern and meaningful and with fewer "fort" interventions ie with lots of spaces that allow people to find an open meeting place that can connect the city and its remaining historical symbols with the sea through area of the ancient port. For these reasons, there is a need to understand the position of the ancient port with the virtual limits of the historic center of Lattakia, with the historic buildings and archaeological remains remaining through the current road network that does not respect the historical road system.

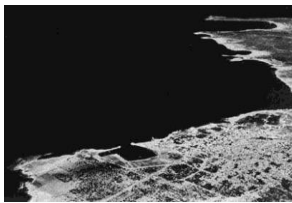


Fig. 4: Lattakia Old Port, aerial view, 1935.

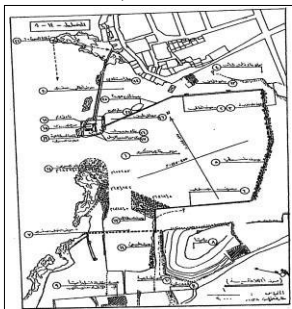


Fig. 5: Lattakia Old Port, Plan, 1935.



Fig. 6: Lattakia Plan, 1935.



Fig. 7: Lattakia Current Plan, Port- City.

## 1.2. Lattakia Port in relation to the Waterfront of the city.

As the Port expanded northward, the City's Waterfront was completely covered by the expanded commercial port. With this realization the movement of the people has moved towards the south promenade in a completely modern urban context, instead the north promenade has been slowly abandoned, remaining only in the memory of the people due to the loss of its main function. The general society of the port of Lattakia since 1996s has always proposed to develop its port, risking to lose more and more its relationship with the sea. Because the required development included the entire north area up to the marina, indeed it proposed to take the entire area of the marina as well. I believe that it is possible to revive the city and its waterfront, redeveloping the old port and the southern part of the port for the recovery of the relationship with the sea, with which the northern part could be connected through the redeveloped old port (with a new tourist destination appropriate to the character and original identity of the city) to the southern part of the coast. In this way the redeveloped ancient port will become an



important lung for the city, trying to open a new view towards its waterfront. This would save the marina, leaving the commercial port between the north marina and the old port area in the south, developing the port in this space in a correct and functional way and protecting the north part of the Waterfront open to the sea. But If a commission or a management composed of expert specialists from both the Municipality and the Port Authority is not formed, the port and the city itself will find themselves in serious development difficulties, with the risk of losing their original identity for both. So, with this situation, the redevelopment project for the recovery of the original identity becomes difficult and theoretical and there is a risk that it will remain on paper due to the absence of coherent programs for its implementation.



Fig. 8: The direct relationship City- Sea, 1935s.



Fig. 9: The current indirect relationship City- Sea.

## 2. The historical development of the Old Urban Port of Lattakia in relation to the urban development of Lattakia.

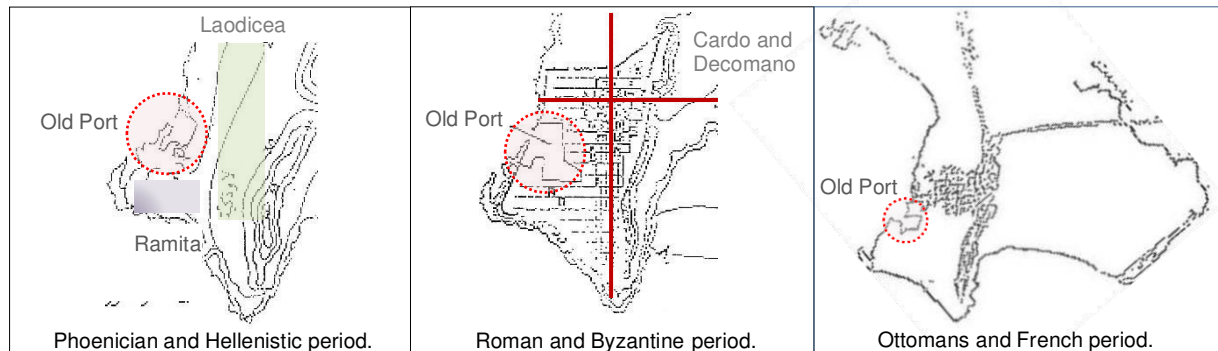
The old urban port of Lattakia has been developed in parallel with the urban development of the city itself during their historical path starting from the Phoenician period and up to now, but passing through two important phases relating to the margins of development and functionality of the Port of Lattakia:

### 2.1. The pre-industrial development of the Port respecting its natural limits, inside:

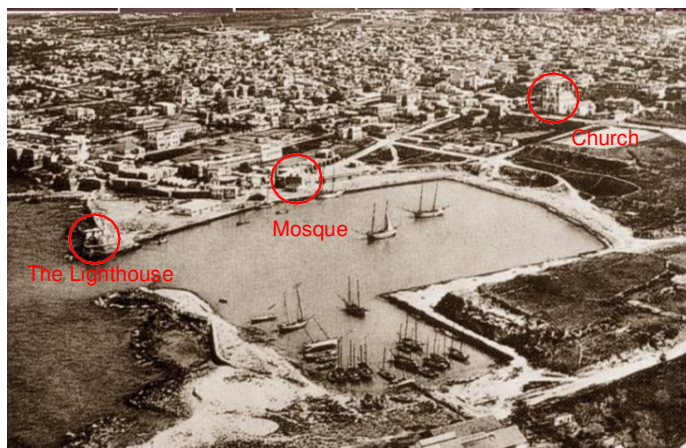
During this phase Lattakia has undergone many changes which in some way have drawn and given the natural urban form of the city including its port, going through the following periods: Phoenician (1600-1200 BC); Hellenistic (333-64 BC); Roman (64 BC-395 AD); Byzantine (395-637 AD); Christianity (First century AD); Islamic (638 -1097 AD); Crusades (1097 – 1188 AD); Ayoubi (1188 – 1250 AD); Mamluks (1250 – 1516 AD); Ottomans (1516 – 1916 AD) and French (1916 -1946 AD). During all these periods, the following five important events are particularly noticeable who built the history of Lattakia:

- **Birth of the city in the Phoenician period (1600-1200 BC)**, Lattakia was a small village built on a rocky hill with an area of about one and a half hectares. It was called Ramita, the oldest name of today's Lattakia. Ramita belonged to the Kingdom of Ugarit founded by the Phoenicians on a hill 16 km north of Lattakia. Ramita used its natural Port which was well connected to the Port of Ugarit, the main port on the coast of the Near East.
- **Foundation of the city in the Hellenistic period (333-64 BC)**, It was Seleucus I Nicator who refounded Lattakia and called it Laodicea (in honor of his mother). The city became an important Port especially for the export of oil, wine, tobacco and fabrics that were produced in the hills of the hinterland. Laodicea formed the north central part of Syria with Antaquié, Seleucia and Aphamea. The Hellenistic civilization spread to Lattakia.
- **Freedom and the urban and architectural growth of the city in Roman period (64 BC-395 AD)**, Freedom was granted to Lattakia and built a triumphal arch and several buildings. In 193 AC, several privileges were granted. In that period the two main streets (Cardo and Decomano) decorated with two rows of columns were built and the Arc de Triomphe, which still exists today.
- **First steps in the development of the city in the Byzantine period (395-637 AD)**, It was a period of great development for Lattakia, in fact an important port was built that served the City of Aphamia and all of central Syria. And there were two terrible earthquakes, in 484 and 555 AD, which demolished a large part of the city which, however, was restored, the civil and religious buildings were rebuilt and the city passed under the direct rule of the Byzantine emperor.
- **The birth of trade through the sea routes in the Period of the Crusades (1097 – 1188 AD)**, In 1097 A.D. Lattakia fell to the Crusaders and in 1106 AD. they killed most of its inhabitants. In their place came many Venetian and Genoese merchants, so much so that Lattakia took the name of "City of merchants". At that time the market, the Suq, was born and again in 1157 AC. Lattakia was destroyed by another terrible earthquake. In 1188 AC. And then it was restored in subsequent periods.

- **The presence of new methods of developments in the French period (1916 -1946 AD)**, Urban and architectural development with European methods, and the end of the pre-industrial era and the beginning of the industrial era.



**Fig. 10:** Historical Development of the relationship Lattakia- Old Port.



**Fig. 11:** Original form of the Old Port of Lattakia, 1930s.



**Fig. 12:** Anchorage, Northeast Border.



**Fig. 13:** Anchorage Area, North Border.

## 2.2. The industrial development of the Port not respecting its natural limits, outside.

Until 1930s, the old natural port of Lattakia did not have a real extension with major construction works and had remained within its natural limits. The real port construction began in 1931s with the installation of a quay and, later, in 1950s it acquired the first and significant port form, still leaving the city a close relationship with the sea. With the last construction phase in 1980s the city, however, completely lost this relationship. In 1996s the construction of the port was required in response to the development of container traffic. The port was studied by many international companies, but no proposal was applied. However, the construction of the current Port went through the following phases:

- **First construction built after 1930s**, the port of Lattakia during the Ottoman rule was not important because all commercial ships disembarked in the port of Beirut. When the French entered Syria in 1920s, with the Balfour Declaration (known as the Balfour Pact of 1917s), Syria was divided into four states Syria, Lebanon, Jordan and Palestine. Therefore, Syria needed its own commercial port, for this reason that of Lattakia was developed by building a quay in the northern part of the ancient port.

- **Second construction built after 1950s**, the Syrian government, after independence from the French, decided to establish, in 1950s, the port of Lattakia managed by the public sector with the aim of building a modern port capable of receiving merchant ships. For this purpose, it established the General Society of the Port of Lattakia, under the supervision of the Ministry of Transport, to which was added the Maritime Transport Agency, the General Directorate of Ports and the public institution for maritime transport. In 1953s, the general company of the port of Lattakia was commissioned to build the port from the previous situation. Then, in 1954s the official construction project of the port was approved, through which all the infrastructures and port buildings in the surrounding area were built, leaving out the north face of the city. The breakwaters were built from 1953s to 1956s with a length of 1432 m, to protect the 55 hectares of the built port. In 1958 the port was completed with the construction of the grain silos with a capacity of 35-40 thousand tons 22. The city of Lattakia really became a commercial port city, without losing its relationship with the sea, restaurants and other structures were built north of the port that allowed it to continue to feed a certain vitality on the seafront, independently of its appearance. commercial transport.



- **Third construction built after 1980s**, after the eighties the port was no longer able to respond to the demands of the increased container traffic, therefore the Syrian government took the decision to expand the port by developing it towards the north. This decision was configured as a strategy of total separation, the consequence of which was the loss of the relationship between the city and the sea. The port was extended twice, the first in 1981s and the second in 1984s by increasing the embarkations to 14 and the quays to 11 with the length of 2190 meters, at the end of this phase of expansion the capacity of the port became 15 million tons.

- **Fourth construction after 1996s**, this phase is still open and in a state of debate, it has been studied and analyzed by interested companies, but they have not yet found an adequate response. No decision could be taken because the area north of the current port up to the marina represents an area "suspended" between different objectives and positions, in constant discussion between the port authority of Lattakia and the City Council. According to the City Council, there would be a risk of completely ruining the relationship between the city and the sea, if the marina were taken. Instead, the Port Authority, to respond to the increase in traffic, would like to develop the port including the marina. The dispute is therefore centered on the navy: demolish it or not.

Solutions should be sought to develop the port according to the needs and the vision of an expansion strategy, structured for traffic and tourism, but at the same time, keeping anyway, a visual space in the north. A project is therefore envisaged for the redevelopment of the ancient port area including the southern area of the port which leaves all the urban and architectural symbols of historical value.



Fig. 14: Lattakia Port Development.

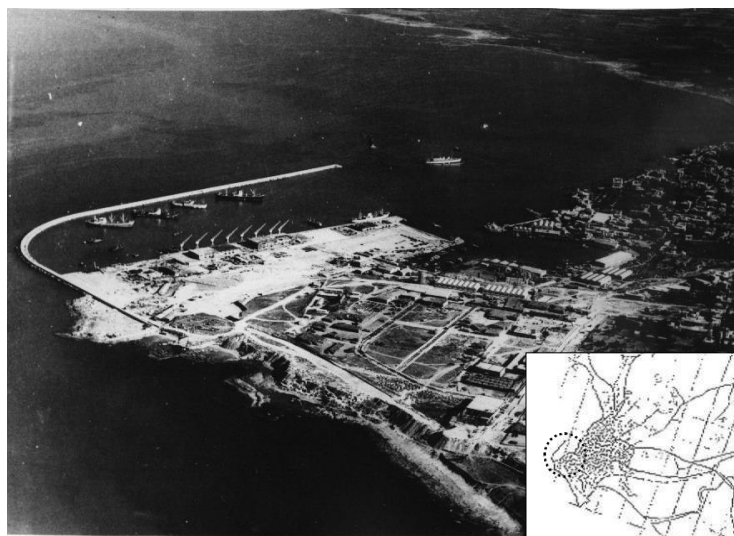


Fig. 15: Second construction, 1958s.

### 3- The ecological transition role in the sustainable integrated development of Lattakia Port.

The port area of Lattakia would need a new requalification project to recover the relationship with the historical fabric of the port city in a way that respects the environment and in favor of the society that uses it, safeguarding the original identity of the heritage port city, offering more social spaces of relationship and less transport traffic within the connected area between the sea and the city.

#### 3.1. The international proposals for the new Masterplan of the Lattakia port area.

The Syrian government and the authorities responsible for the port of Lattakia have received many proposals for the development of the Port of Lattakia and they are the following:

- In 1996s, Japan International Cooperation agency (JICA), 3 proposals;
- In 2003s the Russian Institute "Suezmonne Project", 8 proposals;
- In 2005s, the UNDP Experts, 1 proposal;
- In 2007s, the Russian Institute "Suezmonne Project", 1 proposal;
- In 2010s, the Russian institute "Suezmonne Project", 1 proposal;
- In 2012s, the Russian institute "Suezmonne project", 2 proposals.

All the solutions chosen by the international institutions for the port of Lattakia followed the requests of the Port Authority of Lattakia. Therefore, they found themselves in a difficult situation to solve the following problems: Expanding container terminals; Expanding the General Cargo terminals; Move the

Grain terminal and the passenger terminal. But it was not easy because the port area is limited from a geographical and urbanistic point of view. So, the differences were few, so their decision was limited and changed following these problems: To save the navy or not, due to the fact of development towards the north for geographical reasons; The shape of the inlet channel and the shape of the terminals orthogonal or parallel to the coastline.

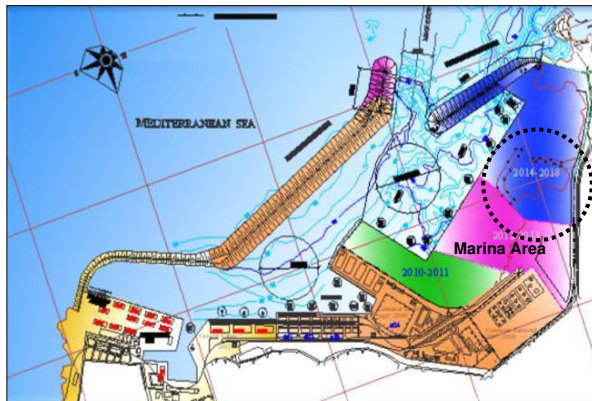


Fig. 16: Suezzone Project Proposal, 2007s.

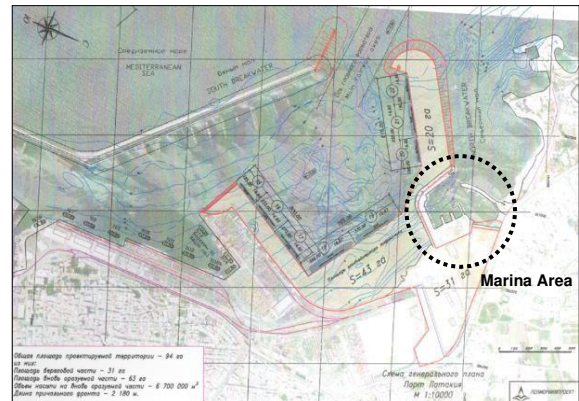


Fig. 17: Suezzone Project modification, 2012s.

For this reason, similar solutions have been proposed, but the most important argument which is the relationship between port and city has been abandoned. Hence, the recovery of the relationship between the Port and the City and how it would be possible. The historical factor of the ancient Port of Lattakia has been forgotten or abandoned, which presents the memory of all the people of Lattakia as a place that is part of the City, indeed it is a place that has grown in parallel with the development of the City itself.

### 3.2. New strategic Zoning Masterplan of the Port of Lattakia, in relation to the City Master plan.

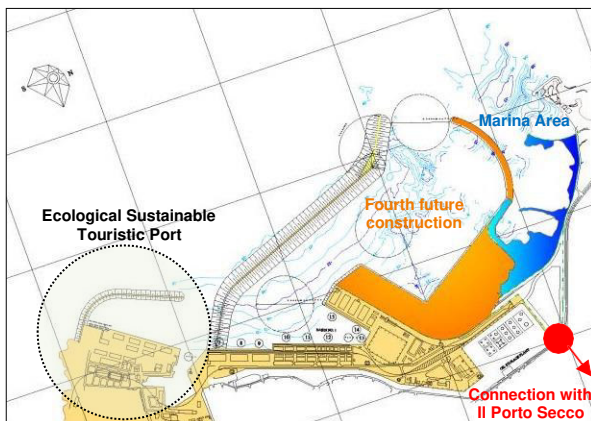


Fig. 18: First new proposal.

Referring to the international proposals of the Master Plan of the Port of Lattakia, considering the purposes of each individual proposal, the requests of the Port Authority of Lattakia and the municipal council of Lattakia and with particular attention to the relationship with the city itself, it is possible to define the principles of a new Strategic Zoning Masterplan of the Port of Lattakia which are the following:

- Expand container terminals, and connect the container terminals with internal dry ports, based on Eco-innovation transportation systems.
- Expansion of the General Cargo terminals;
- Move to the Grand Terminal;
- Create an independent area of the passenger terminal;
- Respect the location of the marina;
- The location of the freight terminal near the road exit;
- The shape of the new terminals should be orthogonal or parallel to the coastline;
- Newly built areas must be neither seismic nor expensive;
- Do not occupy the facade of the City;
- Recover the relationship between people and the sea, then the relationship between the port and the city through the maintenance of the Marina function and a redevelopment project of the old port, offering more ecological spaces.

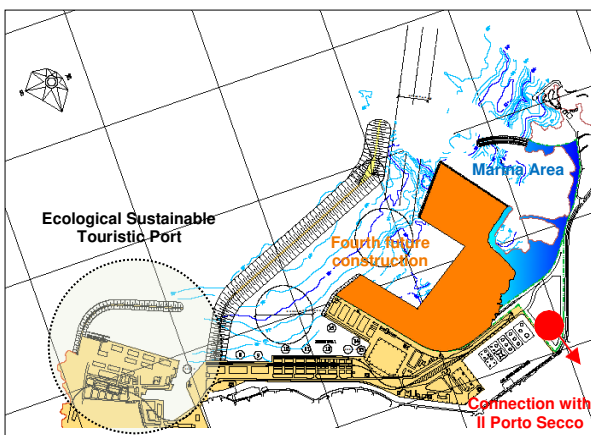


Fig. 19: Second new proposal.

It is a new solution in which the two important factors have been respected:

- The needs of the commercial Port;
- The relationship between the Port and the City, based on some elements of the ecological transition.

For the needs of the commercial port, a new port area was created up to the border of the marina. And three forms of the new port area have been chosen, in which not much changes for the capacity of the containers, but what changes is the construction costs which depend on the shape of the quays between orthogonal or parallel to the coast line in relation to the depth. of the water below. Furthermore, by creating a railway and road connection with dry port, it is possible to build it in regional areas outside the urban area to increase the capacity of the containers. (All layouts of the new proposals are made by Dr. KAFFOURA Hanan and documented in her PhD thesis).

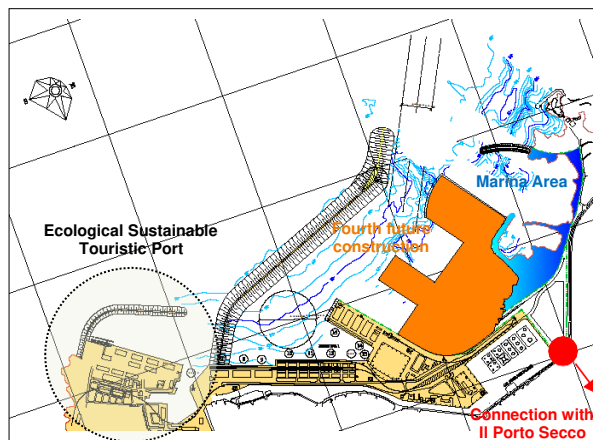


Fig. 20: Third new proposal.

For the relationship with the City two areas of connection with the city have been created: The first is the area of the historic old Port, trying to hope for it from the commercial port and redevelop it, opening it again to the city as a historical tourist area, it presents all the identity of the City of Lattakia. In addition, make this area in connection with the southern part of the coast which has the popular tourist features; The second area is that of the marina, although it has no historical value, but it has an ancient, social and economic value for most of the families in the north of Lattakia. Hence, save the north facade of the City from the expansion of the commercial port and save the internationally valuable tourist features of the north coast of Lattakia.

### 3.3. Transforming the area of the ancient port of Lattakia into an environmental, ecological, social and cultural center.

Lattakia should have its own social tourist port area separated from its commercial port and inserted into the urban and environmental context of the city itself in relation to the surrounding urban area through the current use of the architectural, urban and environmental elements present on site. In order to mend the relationship between the port area studied and the urban area of the city. Based on the following principles and guidelines:

- Historical and symbolic, saving the buildings of historical and symbolic value in the old port area and around, and transforming the ancient deposits into a photographic exhibition presenting the history of the birth of the port;
- Environmental, ecological and social sustainability, recreate significant connecting open spaces between the saved and transformed buildings and the urban area around, bringing people to the ancient story of the birth of the port of Lattakia in a philological way, saving the traces of the place, creating more meaningful ecological green urban spaces, using the original names of the places (such as Ramita and Laodicea) which are the original roots of the city of Lattakia.
- Improve the Marine Environmental fact, decreasing the mass of container traffic and limit this type of traffic in a maritime area under control and monitoring;
- Touristic at local, regional and international level; transform some buildings in and around the ancient port area into maritime tourist structures and Planning tourist sea routes that connect the ancient port of Lattakia with the cultural heritage sites of Syrian positioned along the Syrian coast and other routes maritime connections with other Mediterranean countries;
- Economical and commercial; Transforming some buildings in the old port area and around it into commercial services, markets and restaurants, and creating an area for outdoor maritime games in the southern part of the port;
- The using of Sustainable Energy, using solar energy (green energy) for all buildings and open spaces. Furthermore, improve the Eco- innovation transportation system and decarbonisation policy for maritime and land traffic, reducing pollution in the area.
- Maritime, railway, vehicular and pedestrian Viability:
  - a- Naval Station: Transforming the current passenger lounge into a naval station suitable for the new project, expanding it in space and adding a space for temporary naval maintenance;
  - b- Railway station: it is proposed to build it in the southern area at the entrance;



- c- Car station: for buses and coaches, it is proposed to build it in the south area at the entrance;
- d- Create parking lots in suitable places close to the pedestrian entrances of the old port area;
- e- Create pedestrian paths that connect all the buildings and spaces present in the area of the old Port. the general purpose is to recreate an urban tourist port for Lattakia, that is an open relationship between the people of the city and the sea through a tourist, social and ecological port space that has an urban form well inserted in the general urban context of the city itself and making it open in all senses to the sea on one side and the city on the other.

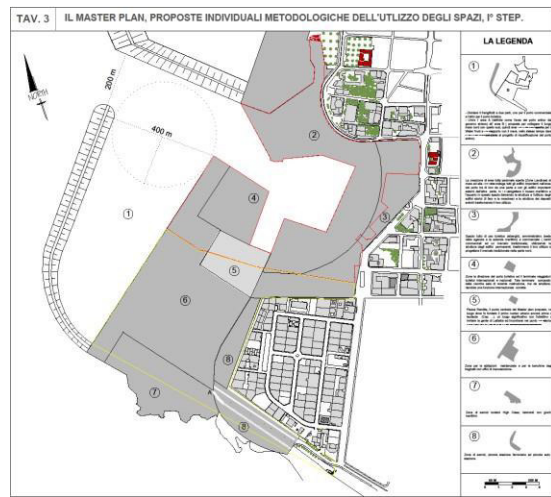
The design hypothesis of the "Master Plan of the ancient port" redevelopment starts from the general idea of the general Master Plan of the port of Lattakia proposed in the previous part, suggesting dividing the current port of Lattakia into two separate parts with two different uses:

- Creating an ecological and cultural environmental area, transforming the area of the ancient port into an ecological tourist, social and cultural port. Then, connect the city with the sea through the new proposed reuse in the tourist port area, thinking of attracting the attention of the citizens of Lattakia and transforming this area into an ecological healthy lung, bringing a new clean area to its body of the city of Lattakia;
- Less commercial shipping traffic and reducing total water logging, through a limited commercial port between the old port area and the marina and connecting it with internal dry ports outside the urban area. Then, connect the north seafront with the south one through the new use of the ancient port, creating a single seafront that surrounds the coast of Lattakia from south to north and, in the middle, the tourist port square is presented as an ecological and social meeting point tourist.

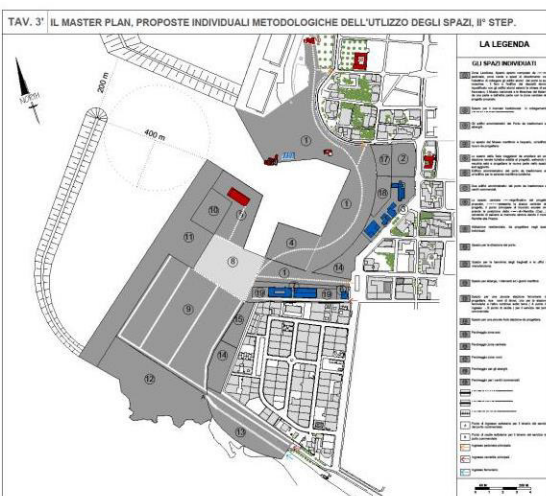
The process of Transforming the area of the ancient port of Lattakia into an environmental, ecological, social and cultural Center, uniting it to the urban area of Lattakia. (All layouts of the new Master Plan are made by Dr. KAFFOURA Hanan and documented in her PhD Thesis).



**Fig. 21:** Buildings to be saved, transformed and demolished.



**Fig. 22:** Zoning Urban Guidelines, first step.



**Fig. 23:** Zoning Urban Guidelines, second step.



**Fig. 24:** Final Urban Use Proposal.

## Conclusion

If we could read the history of the place well, the character of the port city, it could be planned on a stable and significant basis, using the appropriate principles of the ecological transition to recover the identity and the historic and cultural value of the place in a philological and significant way. Through the proposed final Master plan, a new vision could be created for the citizens of Lattakia, for Lattakia itself and for its Port. The sensibility of the designer comes from his competence to know the elements of value to consider, in order to be able to build the guidelines of his project, adding a touch of modernity but at the same time increasing the historical value and with the aim of saving the environment and culture of the place, respecting the international guidelines of the United Nation Development Program UNDP; UNESCO; ICOMOS and the International Maritime Organization IMO. This article offers my country Syria a philosophy and a methodology that has never been proposed for the City of Lattakia and its Port. We hope to transmit it to Syria in the future.

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- General Company of Studies in Lattakia;  
- Directorate of Tourism Projects at the Ministry of Tourism in Lattakia;  
- Directorate General of Ports - Hydrographic office in Lattakia.

## INDICE

- 17 ID 003\_Cristiana CARLETTI, Mariella PAGLIUCA  
*ESG criteria to monitor and assess women's empowerment in development processes: basic framework and proposal for a preliminary theoretical analysis*
- 27 ID 004\_Emanuele NAVARRA  
*The recovery of Miseno and its untold architectures*
- 33 ID 006\_Caterina GATTUSO, Domenico GATTUSO  
*Via Pompilia in Calabria. Potential of a tourist-cultural itinerary*
- 44 ID 008\_Piero BARLOZZINI, Rossella NOCERA  
*Research notes on safeguarding architectural heritage: a proposed mode of operation for defining territorial buffer zones*
- 53 ID 009\_Maria Carolina CAMPONE  
*The oldest ecological Law and the "Ecological Transition" in Athens*
- 63 ID 010\_Saverio CARILLO  
*From rural design ideas for the ecological transition. Conservation as a technology transfer*
- 73 ID 012\_Maria MARTONE  
*Architecture and territory. The former convent of the Maddalena in Castel di Sangro*
- 83 ID 015\_Piero BARLOZZINI, Fabio LANFRANCHI  
*Analysis of an ancient fresco expression of mediation and transition between action and contemplation*
- 91 ID 016\_Stefania GRUOSSO, Andrea DI CINZIO  
*Kaleidoscopic ecologies. New scenarios, from ecological utopia to probiotic architecture*
- 97 ID 017\_Pedro António JANEIRO, Dulce LOUÇÃO, Gisele Melo de CARVALHO  
*The drawing of the natural landscape in the housing. Jacques-François Blondel's 18th century recommendations*
- 107 ID 018\_Nicola ORLACCHIO  
*Digitalisation and ecological transition through digital twins. An added value for society*
- 114 ID 019\_Adriana ESPOSITO  
*Fengshui theories for a harmonious and sustainable environment*
- 122 ID 020\_Takeyuki OKUBO, Riku SUNADA, and Dowon KIM  
*An effectiveness of Spreading Fire Mitigation by the Traditional Knowledge Using Group of Trees in Japanese Historic Districts*

## INDICE

- 132** ID 021\_Angelo TORRICELLI, Giuseppe DI BENEDETTO  
*“Sub specie æternitatis”*: the role of the ruin and the ancient in the process of architectural renewal between metamorphosis and resurgence
- 141** ID 022\_Gigliola AUSIELLO, Luca DI GIROLAMO  
*The rural architecture enhancement through the sustainability search in the ecological transition era*
- 150** ID 023\_Anna Marie FISKER, Daniele SEPE, Jeppe Heden CHRISTENSEN  
*Towards a Sustainability of Cultural Heritage*
- 158** ID 024\_Bernardino CHIAIA, Giulia MARASCO, Salvatore AIELLO  
*Innovative strategies to preserve the Italian engineering heritage: the historical tunnels*
- 166** ID 026\_Diana CARTA  
*Architecture as a in fieri work. Ecological transition to ensure the resilience of a community*
- 175** ID 027\_Violeta BAKALCEV, Sasha TASIC, Minas BAKALCEV  
*The Seven Maples as Spatial and Social Places in Veles*
- 186** ID 029\_Hanan KAFFOURA, Nicola SANTOPUOLI, Ossama KHALIL  
*The Ecological Transition Role in the Sustainable Development of Historic Urban Ports. The case of the old urban Port of Lattakia in Syria*
- 196** ID 031\_Chiera INGROSSO  
*Renato Avolio De Martino architect of the SME*
- 205** ID 032\_Laura RICCI, Carmela MARIANO  
*Urban regeneration, climate adaptation, and territorial governance. Experimentation and innovation in the Plan for an integrated strategy between urban planning and ecology*
- 214** ID 034\_Alessandra BADAMI  
*Restoration of the Østerå river system as an ecosystem service for the ecological transition of Aalborg*
- 224** ID 035\_Andreia GARCIA  
*Ecological Redevelopment, A territorial (re)generation of the interior region of Portugal*
- 233** ID 036\_Tiziana CAMPISI, Simona COLAJANNI, Manfredi SAELI, consultant: Luisa LOMBARDO  
*Material and immaterial culture of the internal minor centres. Studies and researches for the ecological transition of the Madonie inner mountain area in Sicily*
- 243** ID 039\_Fernanda CANTONE, Francesca CASTAGNETO, Rita VALENTI  
*For ecological transition: analysis and projects in “sciclitato” landscape (RG)*
- 253** ID 040\_Valeria MINUCCIANI, Nilufer SAGLAR ONAY  
*The Valorization of Cultural Heritage to Preserve “Biodiversity” in Lifestyles*
- 262** ID 041\_Francesca MUZZILLO, Fosca TORTORELLI  
*Food Design: Art and Food Culture*

- 266** ID 042\_ Antonella SALUCCI, Francesca LIBERATORE  
*Lens on Landscape. Atlas of the coastal villages of Lake Bolsena (Central Italy)*
- 275** ID 043\_ Massimiliano CERCIELLO, Maria Carmela GAROFALO, Sabina MARTUSCIELLO  
*Urban Gardens as Drivers of the Ecological Transition in Italy*
- 281** ID 046\_ Serena VIOLA, Anna Rita VILLANO, Francesca CIAMPA  
*Towards long-term sustainability: design priorities for outdoor green spaces*
- 291** ID 047\_ Massimiliano AGOVINO, Antonio GAROFALO, Maria Carmela GAROFALO  
*Is Transition Design an alternative way to create sustainable futures? Starting from the differences between recycling and overcycling*
- 296** ID 048\_ Andrea ROLANDO, Alessandro SCANDIFFIO  
*The Grand Tour UNESCO in the Piedmont region. A slow travel route across "in between" territories, to improve the accessibility of places in cultural landscapes*
- 303** ID 049\_ Marco RUSSO  
*Experiencing places of worship*
- 313** ID050\_ Ana VASCONCELOS  
*The interactive condition of the wall: between world heritage and ecological transition. The Storefront Gallery in New York by Steven Holl and Vito Acconci*
- 318** ID 051\_ Antonio BIXIO, Giuseppe D'ANGIULLI  
*The transformation of the contemporary city. Exercises of retrofit and improvement of architectural and urban heritage*
- 326** ID 052\_ Maria Rita PINTO, Maria Giovanna PACIFICO, Francesca CIAMPA  
*Heritage performance realignment for contemporary community: a maintenance strategy for the historical built environment*
- 335** ID 053\_ Teresa CILONA  
*Living in future cities: from overbuilding to ecological transition*
- 345** ID 054\_ Soheyl SAZEDJ, Jorge CRUZ PINTO, Ljiljana CAVIC  
*Stone facades and curtain walls*
- 356** ID 055\_ Valentina SANTORO, Lucia DEL CORE  
*Digital manufacturing systems and smart materials for a sustainable anastylosis process*
- 366** ID 057\_ Sara ERICHE, Francesca SALVETTI, Michela SCAGLIONE  
*The visual identity of wine landscapes through the Piedimont wine posters*
- 376** ID 058\_ Alexandra AL QUINTAS  
*The wild garden inside: The universal everlasting dream of capturing nature and bringing in into our lives*
- 384** ID 060\_ Giovanni MONGIELLO  
*Metaverse: The architectural speech of digital representation*



## INDICE

- 390** ID 061\_ Alessandro SCANDIFFIO  
*Exploring representation tools for mapping landscape evolution. From historical maps to satellite multispectral imagery*
- 398** ID 062\_ Carla GIORDANO, Davide BARBATO, Barbara MESSINA  
*Safety begins knowledge: a BIM approach for monitoring built heritage*
- 405** ID 063\_ Elisabetta BENELLI, Francesca FILIPPI, Jurji FILERI  
*Sustainability in Eyewear Design*
- 415** ID 064\_ Hyunguk RYU  
*Historical Transition of North Korean Commercial Art (1945-2019)*
- 425** ID 065\_ Cesare VERDOSCIA, Michele BULDO, Riccardo TAVOLARE, Antonella MUSICCO  
*Integrated 3D survey techniques for historical architecture. The Church of S. Maria Veterana in Triggiano (Italy)*
- 434** ID 066\_ Giancarlo BILOTTI, Domenico BRUNO, Renato S.OLIVITO  
*Preservation and enhancement of masonry arch bridges: restoration strategies*
- 444** ID 067\_ Anna CATANIA  
*A new sustainable food delivery platform*
- 452** ID 069\_ Francesca COLOSI, Roberto ORAZI  
*Chan Chan Archaeological Park: looming threats and suggested remedies*
- 461** ID 070\_ Mariacarla PANARIELLO  
*The experience of the limit*
- 467** ID 071\_ Daniela PITTALUGA, Giacomo CALVI  
*A possible sustainability in the conservation of the material heritage: examples in the port of Genoa*
- 477** ID 072\_ Simona CALVAGNA, Fabio Agatino REALE, Andrea TORNABENE  
*On the Margins of the Anthropocene. Landscape, architecture and sustainability*
- 487** ID 073\_ Francesco MAGLIOCCOLA  
*Best drawing for best conservation of Dawan Chinese Village*
- 497** ID 074\_ Efisio PITZALIS, Marco RUSSO, Noemi SCAGLIARINI  
*The talking garden. Distant dialogue with San Lorenzo ad Septimum*
- 507** ID 075\_ Federico BUCCI, Elena FIORETTO, Nora LOMBARDINI  
*The role of the UNESCO Chair in the strategies for the enhancement of Cultural Heritage. An overview between Garda Lake and Mincio river*
- 514** ID 082\_ Massimo MALAGUGINI  
*From "villa" landscape to industrial landscape. And now?*

- 525** ID 085\_Ferdinando VERARDI  
*New urban communities and the strategic value of knowledge. How networks are changing the urban future by offering an emergency way out*
- 532** ID 087\_ António MORAIS, A. BASTO DIOGO, Svetlana IVANOVA MORAIS, J.CARMO FIALHO  
*A Theoretical Contribution To Improve The Formation In The Historical Lisbon School Of Architecture – The Forgotten Dimension of the Technological Perspective*
- 538** ID 088\_Dominik LENGYEL, Catherine TOULOUSE  
*The amphitheatre of Dyrrachium*
- 543** ID 089\_Riccardo RENZI  
*Mosul UNESCO heritage site. Rebuilding the Al Nouri complex and cultural center*
- 550** ID 090\_Salvatore LOSCO, Claudia DE BIASE  
*Urban heat Island phenomenon and ecological indicators: The case study of the historical town center of Aversa (CE)*
- 559** ID 091\_Giuseppe D'ANGELO, Rosaria SAVASTANO  
*Philosophy physics and math in architecture*
- 566** ID 092\_Domenico PASSARELLI  
*Energy as a paradigm of urban planning. Towards an ecological transition*
- 574** ID 093\_Michele D'OSTUNI, Leonard ZAFFI  
*From horizontal to vertical. Advanced food production in urban areas through vertical farming projects*
- 583** ID 095\_Andrey VASILYEV  
*New Result of Industrial Noise Monitoring and Reduction on the Example of Samara Region of Russia*
- 589** ID 096\_Andrey VASILYEV  
*Environmental Control of Toxicity of Water Reservoirs During Pollution by Toxic Substances*
- 594** ID 111\_Alessandro CIAMBRONE  
*Design and murals for public and private spaces*
- 604** Nicola PARISI, Giosmary TINA, Angelo Vito GRAZIANO  
*Raw earth & additive manufacturing: two case studies*
- 613** Rosaria PARENTE  
*The drawing of "already done": surveys experiences on the Monumental Complex of Santa Patrizia in Naples*



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