

BUILDING IN MEDITERRANEAN REGION. SUSTAINABLE TECHNOLOGIES AND MATERIALS FOR INHABITING. ITALY, MOROCCO, PORTUGAL, TUNISIA NOVEMBER THE 16TH, 2018

The attempt of this book is mainly to deal the relevance of our common heritage in Mediterranean basin from different points of view and by different scholars with the aim of investigating how to combine the valorization of cultural and material resources together with the exploitation changing of needs of inhabiting. Such a work does not want to be exhaustive but only points out some aspects of exploiting Mediterranean resources through centuries in building. Raw materials, climate, geography, shape of lands, relations through people affected the Mediterranean culture and mirror the development of techniques in building and in modeling territory.

Fani Vavili Tsnika* and Giancarlo Priori**with their wide experience in technology and design for a sustainable architecture trace a profile of this book pointing out different key of lecture.

Main themes that emerge from this drawing are the ancient, and always strong and felt, network of knowledge as result of continuous exchange of culture the constitutes our common roots and, on the other side, the matter as spring of feeling and thinking and is at the base of a common identity, the idea which brings culturally jointed so many different countries.

Paola De Joanna

*Aristotle University of Thessaloniki - Faculty of Technology

**Federico II University of Naples - Architecture Department

Fani Vavili Speech

Before I start discussing the book "Building in Mediterranean Region. Sustainable technologies and materials for inhabiting. Italy, Morocco, Portugal, Tunisia" I would like to highlight important issues in the architectural area of activity in the Mediterranean. In our area there are collaborations and networks that try to endorse excellence and cooperation in the Mediterranean area and determined persons who have supported Mediterranean joint actions in heterogeneous domains as human sciences, economics, engineering, fine arts and of course architecture.

Too many people - engineers, architects etc., have marked the history of the Mediterranean construction fields, sharing the discussions of the past, the present and the future dreams and goals from the origins (the past) to new directions (the future), searching of influences in the current era characterized by new design and building technologies and also of

increasing inequalities (refugees, poverty, etc.).

Through this book, architecture and engineering in general are served. It arouses the growing interest of researchers and scholars in diverse fields of building in our region and acts as a source of inspiration for architects. It pays tribute to architecture since architecture and architects have a key role in the construction of our "existing side by side" especially in the troubled area of Mediterranean.

It is common ground that culture and architecture are always attached.

What is ARCHITECTURE?

Through this book, and the investigation of four countries, the authors are trying to serve the architectural and urbanistic, as well as the construction techniques, creation and formulation of the built environment in the Mediterranean.

Some main themes are explored:

RESILIENCE, was the sub-theme for UIA 2014 Durban congress which was explored through several focus areas: Resilience is defined as developed life strategies by communities, critical interventions that contribute to poverty alleviation and the important role of government, and government investment towards the re-configuring of the spatial

economy to the benefit of all globally in order to find voice and solutions to problems within all forms of architecture and development practices.

ECOLOGY - time, evolution, systems, processes and environment, are intrinsically linked to the concept of time in terms of diachronicity, timelessness, preservation, energy control, climate change, as it considers processes of architectural production that acknowledges people and place and an understanding of cities as ecosystems

VALUES - with focus areas on architectural practice and education, in order to re-assess professional values, to interrogate the ethics associated to architectural and design practice, establish a sense of respect through diversity and humility,...

The book is multinational (Italy, Portugal, Tunisia, Morocco) presenting:

- a history of the area (environmental, cultural, etc. aspects);
- common designs factors;
- the role of the materials in the morphology of the places we live in the Mediterranean region

The multidisciplinary (trans-disciplinary) approach of the thyme is a unique opportunity for the scholar, the researcher, the student... or the reader to understand and be familiar of

ARCHITECTURE

is a visual art in the sense that it can only be fully understood and appreciated through the eye (what makes a good building, pp.7, criteria 69-71)

but also

ARCHITECTURE

is defined as "the art or science of building or constructing edifices of any kind for human use".

Architecture has changed over the years.

From the time of Vitruvius and the ten Books on architecture, (Marcus Vitruvius Pollio 1 bc. Written at the 9th ac cent,

firmitas, utilitas & venustas)

The Seven Lamps of Architecture is an extended essay, first published in May 1849 and written by the English art critic and theorist John Ruskin -towards the period of Modern Movement in the 20th century that was

linked to the expression of **honesty** in the construction, the interpenetration and **continuity of interior and**

exterior spaces, characterized more and more of the openness and the use of glass on large surfaces, architectural **form and space**, as well as natural resources etc.

1. Sacrifice – dedication of man's craft to God, as visible proofs of man's love and obedience

2. Truth – handcrafted and honest display of materials and structure. Truth to materials and honest display of construction were bywords since the serious Gothic Revival had distanced itself from

the whimsical "Gothick" of the 18th century, it had been often elaborated by Pugin and others.

3. Power – buildings should be thought of in terms of their massing and reach towards

the **sublimity** of nature by the action of the human mind upon them and the organization of physical effort in constructing buildings.

4. Beauty – aspiration towards God expressed in ornamentation drawn from nature, his creation

5. Life – buildings should be made by human hands, so that the joy of masons and stonemasons is associated with the expressive freedom given them

6. Memory – buildings should respect the culture from which they have developed

7. Obedience – no originality for its own sake, but conforming to the finest among existing English values, in particular expressed through the "English Early Decorated" Gothic as the safest choice of style

the many aspects of the Mediterranean built environment

So Many specialists, professors, testify analytically the experience, methods, approaches, projects.... a life achievement for all of them.

The book opens also new horizons for knowledge, further research and most important, it can influence the design process. It can act as a source of imagination, a starting Point for Design...

It reminds to the designer and the multidisciplinary team the importance of unlimited factors that are present and included, for centuries, in the design and building in the area

This is our common past. With some specific features, those are resulting from the climate, the desert or the mountains, the sea or the continent etc.

Case studies offer important information connecting the past (heritage) with modern architecture and the future, a source for imagination, a background support to the current agonies of the architects and the current trends e.g. algorithms in architectural design (Algorithm solutions for ancient materials)

I believe that opportunities like this can be creative enough to generate a discussion and introduce an architectural vocabulary that will take into consideration the unique Mediterranean world aiming at:

- recalling the architectural elements that characterize one place;
- not imitating traditional forms;
- exploiting the strengths of the Mediterranean archetypes;
- preservation of the original spirit.

It is obvious, reading the book, that any architect, engineer, historian, researcher in other fields also can find valuable information. The information / knowledge is presenting in neutral and scientific way.

In reading the introduction written by the editors Dora Francese & Antonio Passaro I thought that I had nothing to say. It is a unique summary where each word has its deepest meaning.

Out of my experience something like this is difficult to be achieved. Usually we discuss for a long time saying a few things. Here the opposite happens. The development of the introduction / summary is so minimalistic and at the same time too meaningful!!

I want to underline again the importance of the book for the future of the architecture and our cities, villages, the entire built environment.

The root of the materials and the act of constructing them

Giancarlo Piori Speech

Reading the book *Building in the Mediterranean region. Sustainable technologies and materials for inhabiting Italy, Morocco, Portugal, Tunisia*, by D. Francese and A.

Passaro, and in particular the introduction, which traces its palingenesis, written with critical intelligence, I made two reflections. The first concerns the importance and usefulness of this publication which contains numerous essays by different scholars. The proximity of the topics dealt with in different places is then linked by a *red thread* that leads back to the general themes of the discipline. The second concerns the written words and terms that are used in the book and which are recurrent and important in the study of Architecture.

We come briefly to the first:

Building in the Mediterranean area, significant for climate, geography and positive presence of the *mare nostrum*, refers to an area with strong traditions linked, even in diversity, by great similarities for the use of materials and construction techniques. Not secondary is the presence of a distinguished anthropic inheritance, which has given that character and identity to the places. Identity and character are found by definition, in that different repetition of which G. Deleuze has spoken so often, since the seventies, and which has helped our discipline to grow.

The second reflection concerns the terms found in the ecumenical and precious introduction of the authors, which are: Place and form; spatial and formal Configurations; Anthropization, inhabiting and time; Context and environment;

I tried then to make an overall reasoning on the used words and terms, abstracting from the context and then interpreting the message in an inclusive way as R. Venturi says. Then what are the materials and construction techniques. Speaking of materials, I began to be interested in it since I was very young, even though I was not a specialist in this field, driven by the curiosity to know them in substance and form.

Ancient Rome with its ruins, with the contrast between the bricks and the stone and the marble allowed me to question myself, about their existence, their origin and their use. The ruins were, with their undoubted charm of the ruin and patina of the time, those that have most ignited my curiosity.

Of course in the eyes of an adolescent not everything was clear, but when I started the Faculty and the first confrontations with the teachers I tried to find more convincing answers.

After so many years, I have come to the conclusion of understanding their diversity also in terms of weight and size, and the value of their combinations as well as their individual beauty and use in architecture. I therefore think of materials as musical notes, according to how they are composed, they play. In architecture we could say they light up.

Some want, to give the best, direct light, others oblique or grazing, others hide it because they seem created to take away the source from sight.

Matter is that instrument that communicates messages to us and consequently a thought. In architecture it is fundamental, because without a thought, an idea, one can not design and for this reason the materials are in direct relation with the creative act.

But matter does not possess only an extraordinary materiality that derives from the physical characteristics we weigh and observe, but also from the fact that we can touch it or shape it with our hands.

The matter converses in depth with our senses, lets itself be watched, heard, touched, in a word "to feel".

However, matter also possesses a hidden, spiritual materiality that we could say that indirectly refers us back to the culture of places, to memory and, if we want, to the events that accompanied it along with man's path.

In the architectural project there is an abstract value, not measurable with the meter but measurable through a suggestion that is in direct contact with time.

And time, as we know, gives remarkable values to the architectural work, including environmental and historical ones.

Time introduces the notion of memory while materials are that of place. Together, place, memory and materials, found architecture which is outside fashions and leaves permanent signs traceable in urban spaces and in architecture.

E. N. Rogers and M. Yourcenar, in terms of memory and space and time, summarize these concepts in the best possible way.

E. N. Rogers writes:

Memory confers on the things of space the measure of time that is before us. (...).

An artist is not such if he does not have the memory of the experience of others.

M. Yourcenar on the concept of building and reconstructing writes:

Building, means collaborating with the earth, imprinting the sign of man on a landscape that will remain forever modified; contribute also to the slow transformation that is the life of the city itself. (...).

Reconstructing means collaborating with time in its aspect of "past", grasping the spirit or modifying it, ... means discovering the secret of the springs under the stones. (...).

Hands that do not exist yet will caress the stems of these columns.

Tuff and stone are materials that "arise" from the earth, present in the earth.

They are construction materials quarried and shaped through the work and the magisterium of man.

A. de Saint-Exupery writes:

The earth provides us with more teachings of all books on our behalf. Because it opposes us resistance. By measuring himself with the obstacle, the man discovers himself. But to measure himself he needs an instrument. He needs a plane, or a plow. The peasant in plowing snatches some secrets from nature, and the truth that he catches is universal.

On the subject of land and roots, it is also important to remember Giò Ponti:

Architecture is a crystal: like crystal is a pure thing, but fixed to the earth, immersed a little in it, springing from it. It has roots. (...). The car is not, the car is bolted on a base: you can change: even if huge, any car is portable.

Also Paul Valéry talks about offering the materials to the place in his memorable Eupalino and they strike the reflections on that bone found by the sea.

On its form and on matter, generations of architects were formed, I would say also of masters of architecture, since the book was written in 1921.

Valéry writes:

I was a friend of the temple builder who was from Mégara and was called Eupalino. He willingly told me about his art, every care and every necessary experience, making me understand the things we saw together on the construction site. I saw above all his marvelous spirit and I recognized the power of Orpheus, because to the informal masses of stone and beams lying around us he preached a monumental future. His voice seemed to offer the materials to the place that, the destinies propitious to the goddess would have assigned. And in the wonderful speeches to the workers there was no trace of the difficult night meditations: he spoke by orders and numbers. (...).

And these are the precepts:

Among all the act of building is the most complete. (...).

In performing nothing, it is negligible.

With regard to materials, stone and passion, the definition of Le Corbusier's architecture that he wrote at the time of Ronchamp is extraordinary:

Architecture is building relationships with raw materials. Architecture is beyond usefulness. Architecture is a plastic fact. Spirit of order, unity of intention, sense of relationships. Architecture involves quantities. Passion makes inert stones a drama.

To conclude, in reading the book you will discover the interest, the actuality, the motivations of so much and qualified participation of scholars invited and coordinated by Dora Francese and her group.

The aspect that mostly struck me is the agreement of the plurality of discourses, all consistent in detecting the continuity and dependence between materials and construction techniques and then entering the specific field of architecture that is ordered through the theory and the practice.

This is why I finish by reading a memorable passage from G. C. Argan taken from *Progetto e Destino*

It is about the distinction between matter and form.

Let's take the simplest case: is brick a material or is it already a principle of form? When we look at a very simple brick curtain, we must immediately recognize that it possesses certain formal qualities, resulting from the mesh or the lattice of the masonry, ie from the size, shape and combination of the elements. Ask if a brick curtain may or may not be a work of art, it is idle: it can be a work of art, it can be the

fragment of a work of art, it can be the most trivial of the artifacts. But, in any case, there is a structural difference between the walls of different historical periods or different civilizations: the difference does not depend on a different degree of progress of the masonry technique, but on the different conception of the architectural form. It is therefore clear that the bricks are not material, but it is already a form value: using the bricks that came to him, mass-produced by the furnace, the architect took as a matter of his own construction, types elaborated through a long constructive experience. And his own work will contribute, in some way, to developing or modifying that formal type.