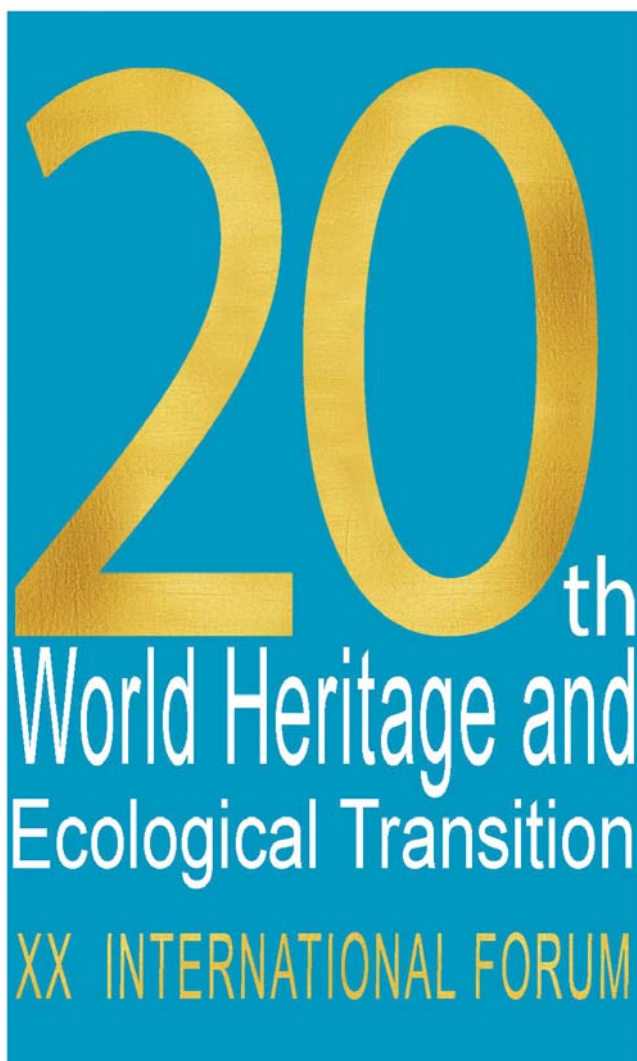


ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella

XX INTERNATIONAL FORUM

Le Vie dei  
Mercanti



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INTERNATIONAL

Carmine Gambardella  
WORLD HERITAGE and ECOLOGICAL TRANSITION  
Le Vie dei Mercanti  
XX International Forum

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# WORLD HERITAGE and ECOLOGICAL TRANSITION

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**XX International Forum**

Naples | Capri

8 - 9 - 10 September 2022

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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 Ecogeometry 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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and Territorial Governance



**ID 090** *Urban heat island phenomenon and ecological indicators: the case study of the historical town center of Aversa (CE)*

**Salvatore LOSCO**

**Claudia de BIASE**

*University of Campania  
'Luigi Vanvitelli', Italy*

Climate change has reinforced the importance of the green component, especially in its thermal mitigation functions. The theme of the renaturalization of the city, through initiatives of structural integration of greenery with the anthropized environment, represents an important objective of urban and territorial planning. It is necessary to assign to green, functions capable of satisfying real needs; in fact, if the Grey Infrastructures constitute the built capital of our cities and are necessary for the economic development of a territory, the Green Infrastructures, represent its natural capital and are necessary to guarantee environmental sustainability. In the case of the compact city, where the urban form is largely established, it is difficult to create significant green spaces. Green infrastructure represents a new approach to the problem: street trees, green construction along railway lines, green roofs and facades are seen as solutions that are easy to implement and suitable for building links with nearest green spaces. There is therefore a need in the drafting of urban planning instruments to plan actions aimed at counteracting the effects of climate change. To this end, it is important to analyze the experiences of cities that, through the introduction of regulations and planning indications, have succeeded in limiting effects of overbuilding and the urban heat island, and the urban heat island, identifying shared solutions between public administrations and citizens, who, synergically, contribute to the reintroduction, management and maintenance of new green areas within the city.

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- BENECON Research Centre of Competence of the Campania Region for Cultural Heritage, Ecology and Economy, Naples, Italy



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