

Fabbrica della Conoscenza

Carmine Gambardella

XI Forum Internazionale di Studi



Le Vie dei.
Mercanti



HERITAGE
ARCHITECTURE
LANDESIGN

focus on
CONSERVATION
REGENERATION
INNOVATION

Fabbrica della Conoscenza numero 39
Collana fondata e diretta da Carmine Gambardella

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focus on **CONSERVATION REGENERATION INNOVATION**

Le vie dei Mercanti _ XI Forum Internazionale di Studi

Carmine GAMBARDELLA



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Aversa | Capri
June 13th- 15th, 2013

Conference topics:

Heritage

Tangible and intangible dimensions,
Heritage management,
History,
Culture,
Collective identity,
Memory,
Archaeology,
Cultural landscapes.

Architecture

Survey,
Imaging,
3D modeling,
Techniques for analysis, diagnostics and monitoring,
Preservation,
Restoration,
Conservation,
Architecture Design,
Technologies,
Building materials.

LanDesign

Landscape design,
Sustainable design,
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Peer review Scholars has been invited to submit researches on theoretical and methodological aspects related to Heritage, Architecture and LanDesign, 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 200 abstracts received from:

Australia, Austria,
Brazil,
Canada, Chile, China, Cyprus,
Denmark,
France,
Germany, Greece,
India, Israel, Italy,
Jamaica, Jordan,
Kingdom of Bahrain, Kosovo,
Lebanon,
Malaysia, Malta, Morocco, Mexico,
New Zealand,
Poland, Portugal,
Russia,
Serbia, Slovak Republic, Spain,
Tunisia, Turkey,
Ukraine, United Kingdom, U.S.A.

About 300 authors involved.

157 papers published.

Preface The XI edition of the International Forum Le Vie dei Mercanti entitled Heritage, Architecture, LanDesign aims to promote an international debate on local experiences relating to the issues of conservation, regeneration and innovation in heritage, architecture, landscape and design.

In recent years, technological developments have revolutionized not only the forms that surround us but also our daily routines. However, this new global language often does not take into consideration the identity and vocation of the area, which require appropriate courses of action in relation to both the individual context and local traditions.

The historical memory of the characteristics of the identity, local materials, building traditions as well as the tangible and intangible cultural heritage is a repertoire of signs to draw from in order to operate within each historical context and consequently enhance its uniqueness.

The recovery of the authentic vocations of a place does not mean inaction, but rather regeneration through measures to enhance an area by increasing its natural strengths, transforming the weaknesses into opportunities for future development based on innovation.

The international comparison can be an opportunity to share good examples of conservation, regeneration and innovation related to the tangible and intangible heritage in its broadest sense; architecture intended as the identity of the places that shapes the landscape, from traditional to global forms; design at all scales, from the object to the territory, in a sustainable way to start a process of regeneration through a new relationship between man and the environment.

The conference is open to multidisciplinary experiences of one or more of the proposed themes. Scholars are invited to submit research on theoretical and methodological aspects as well as present experiences and practical applications carried out on these issues.

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Architecture, heritage, landscape, in time of crisis

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In this times of crisis, there has been a return to discussing the value of cultural, architectural and landscape heritage, with the use of quite worrying terms such as "consumption" of art or "offer" of culture, almost as if they were goods to be sold to "consumers" or sold off to the highest bidders. The problem of the commodification of cultural and environmental assets in Italy, launched more than 10 years ago, is still far from having found a solution. It was July 2002 when the most important German newspaper, the "Frankfurter Zeitung Allgemeine" broke the news of the Italian law which made the alienation of state assets possible, including the cultural ones, with an article entitled "The Taliban of Rome. End of season sales. Italy is going to sell out its cultural heritage."

The article referred to the Tremonti Decree with "Urgent provisions for the privatization and exploitation of public property and real estate development investment funds", which are still today the fundamental regulations for the dismissal of public assets. In conclusion, the journalist Ute Diehl commented: "Today the cultural heritage of Italy has been degraded to a mere economic value, as a resource that can be discarded at will. However, there is nothing that gives the measure of the state of health of a society as the relationships it is able to have with its monuments and its own landscape".[1]

Taking a stand with his 2002 book "Italy S.p.A., The assault on cultural heritage", Salvatore Settis explained that "What is being destroyed is neither the Coliseum nor a castle in Aosta, nor the Parco degli Abruzzi nor the smallest and most beautiful church in Tuscany, but a much larger monument, even more significant (because it is the safety of all others): the age-old culture of conservation developed by the Italians over generations, on an institutional level and in terms of social conscience".[2]

The desired institutional consideration and reversal of the trend, unfortunately, has not arrived, nor have investments been made in education in order to make citizens understand, and in particular young people, that the landscape, coast, mountains, cities with their churches and palaces, constitute our identity, our consciousness, our soul, and that commodifying them would mean selling ourselves, an identity built by generations of Italians who were the first in the world to create a culture of conservation that is now at risk of disappearing.

The results have not been slow to emerge, involving the most famous and valuable monuments: to give just one example, the area of the excavations of Pompeii, the most famous archaeological site in the world, a UNESCO World Heritage Site, has been hit by a series of collapses and upheavals, which began in November 6, 2010 with the collapse of the Schola Armaturarum, the gladiator school along Via Abundance, and has continued until today with relatively severe episodes.

Unfortunately, Pompeii is not an isolated case, but is the most emblematic example of the degradation that is eroding many monuments, in the absence of effective planning of interventions and adequate funding.

There seems to be the idea of making a profit from cultural heritage without investing. In an article last year, Sergio Rizzo reported the Court of Auditors' report on the reduction of public funds to artistic and cultural heritage, equal to 0.19% of public expenditure compared to the 0.34% of a few years ago, while the French state invested a budget five times higher than ours and Germany had increased its expenditure by 7%. [3]

In the same article, data from the Court of Auditors were also reported about the size of the Italian cultural heritage, amounting to 3,430 museums, 216 archaeological sites, 10,000 churches, 1,500 monasteries, 40,000 castles, towers and fortresses, 30,000 historic houses, 4,000 gardens, and 1,000 historical centres. It also drew attention to the responsibility of Italy compared to the rest of the world, as the guardian of the greatest number of assets protected by UNESCO: 45 out of 911.

A cultural heritage of this magnitude, widespread throughout the country and in addition to a natural heritage and landscape of great variety and beauty, is a special case within a global context, and as such, should be understood and protected with appropriate solutions. It seems that this heritage is mostly seen as a burden, to be freed of at the earliest opportunity by selling it off and with the only advantages being for the private buyer.

It is clear that the Italian heritage needs to be adequately managed, even if it may not be easy. In Italy, there is no sense in trying to apply the American model of sponsorship to isolated “emergency” cases as attractors of tourist and consumer flows: our museums, churches, works of art, are incardinated into the territory, the landscape and the city, being essential elements of continuity, not severable and not to be understood outside of their context. This was fully understood by the Italian legislators of the past. From the edicts of the pre-unification states to the Constitution of the Italian Republic, up to Law 1089 of 1939 on the “Protection of the things of artistic and historical interest”, it is possible to recognise the respect of two guiding principles that have now seem to be forgotten: the public artistic heritage is property of citizens as holders of popular sovereignty, and the State has a duty to protect the cultural heritage in its entirety, promoting knowledge through research.

The American museum-centric model, characterised by strongly attractive collections completely unrelated to the context of the host, is absolutely misleading and inapplicable to the Italian context.

Unfortunately, life in capitalist society in general has become a build-up of shows, and culture is no exception, as claimed by Mario Vargas Llosa in a paper recently published entitled “The civilization of the show”. The contents of literature, music and art are oversimplifying: everything has to entertain and amuse; artists does not have to justify their talent through their own works, but by becoming shows themselves; museums have to attract throngs of conformist admirers through major events, when “The number is not the quality. Culture was never justified statistically”. [4]

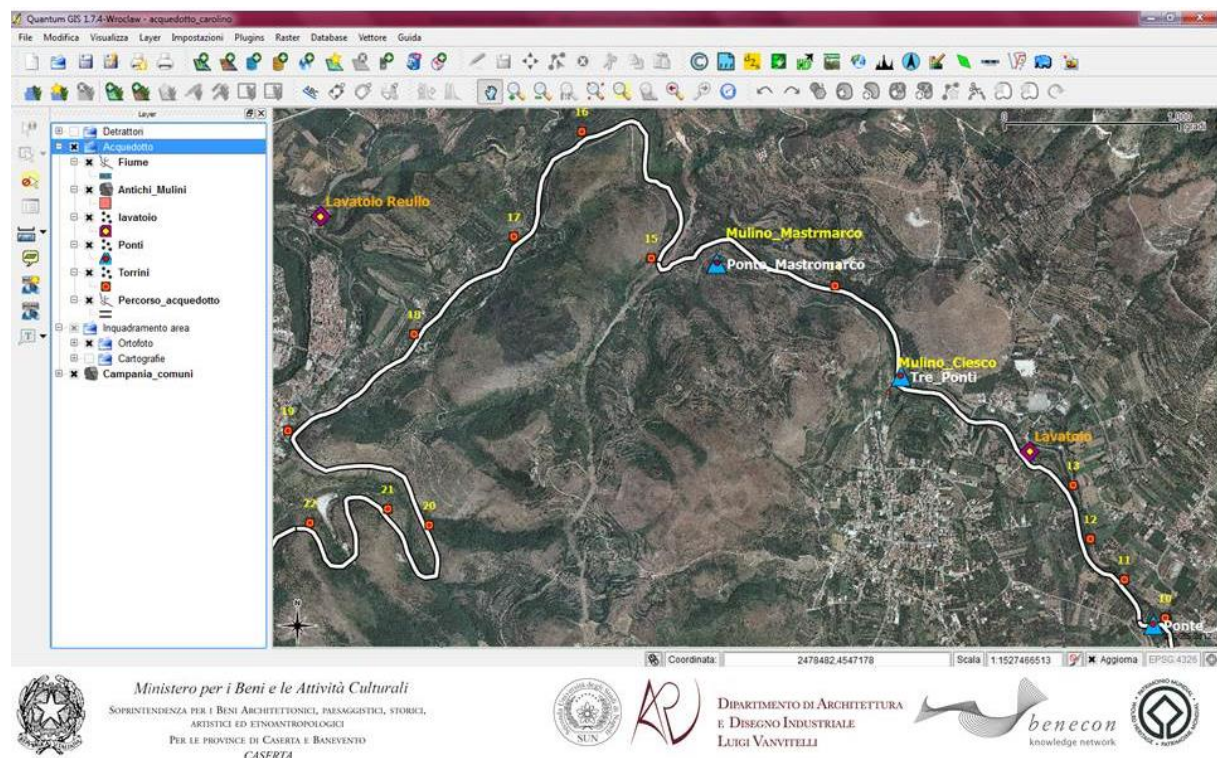


Fig. 1: Management Plan of the UNESCO site "Royal Palace of the eighteenth century in Caserta with the Park, the Aqueduct of Vanvitelli and the complex of S. Leucio." Geographic Information System.

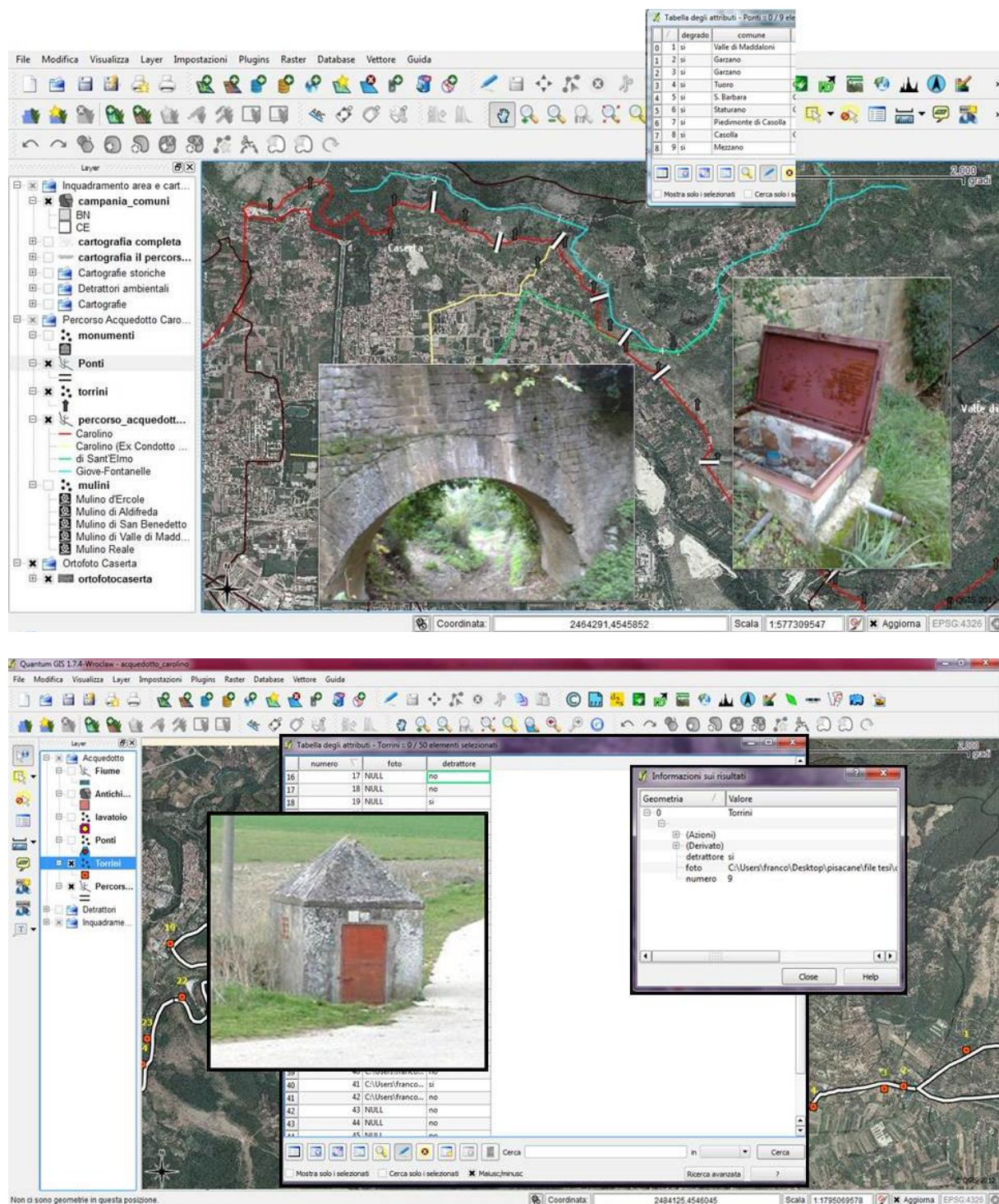


Fig. 2-3: Geographic Information System: analysis of the bridges (fig. 2) and the towers (fig.3).

In our country, the cultural heritage, both inside and outside museums, must be considered as a unicum (whole), within which it is a mistake to focus on ephemeral and spectacular events rather than on the knowledge and protection of the heritage itself as a structural and permanent objective. The idea of spectacularising culture is ruining the symbol of Italian art cities such as Florence and Venice, reduced to tourist fetishes, money making machines, a sort of amusement park or shopping centre in which citizens have lost the spaces of their everyday lives. This is what emerges from the words of Tommaso Montanari in "A Manifesto for our heritage", in which he reiterates the civil and constitutional function of heritage, which must be maintained with public money, but is the property of every citizen. "The Italian historical and artistic heritage is coextensive and fused with the environment and must be protected, understood and communicated in its organic and continuous aspects. It is unacceptable for any cultural policy that focuses on so-called "absolute" masterpieces (i.e., literally, "freed" from any network of signifiers), to explant and force them

into exhibition routes with a cognitive value of zero. In other words, the events in Italy are killing monuments and, therefore, there is a need for a drastic change of direction. The vast majority of ancient art exhibitions are also marketing operations which exploit the works, ignore research and promote a passive reception based on the television model". [5]

The same issue had been raised by Settis for whom "The concept of the exhibition as a tourist trap is not only culturally backward, but is a short-sighted economic calculation, likely to cause sudden ignitions of interest and increase in visits, followed by desert and silence [...] The only exhibitions encouraged should be those aimed not at the ephemeral but the permanent, opportunities for knowledge which lead to a reassessment of the lesser known parts of the heritage, and therefore forms of winning investment (in money and energy)". [6]

Against the mis-education produced by the dominant models, the only way out is to start from the educational role of art, culture and the landscape. Heritage is like school: it is a powerful tool for citizenship education and spiritual upliftment. It cannot be considered a luxury or entertainment, and especially not with an ultimate goal of producing an income.

Any consideration of privatization, hiring, contract management or disposal, gives citizens a distorted view of the assets as a "cultural bed", like Italian oil, to be extracted and put to use.

The same is true for the landscape, systematically destroyed for profit, with a short-sighted perspective that does not take into account the enormous damage arising from the hydrogeological instability that subsequently entails, in addition to the loss of environments in which national identity is no less reflected than in cultural heritage. Also in this case, the defence of the environment and landscape includes ethical values, the civil and social associated with them, to contribute to building a better future.

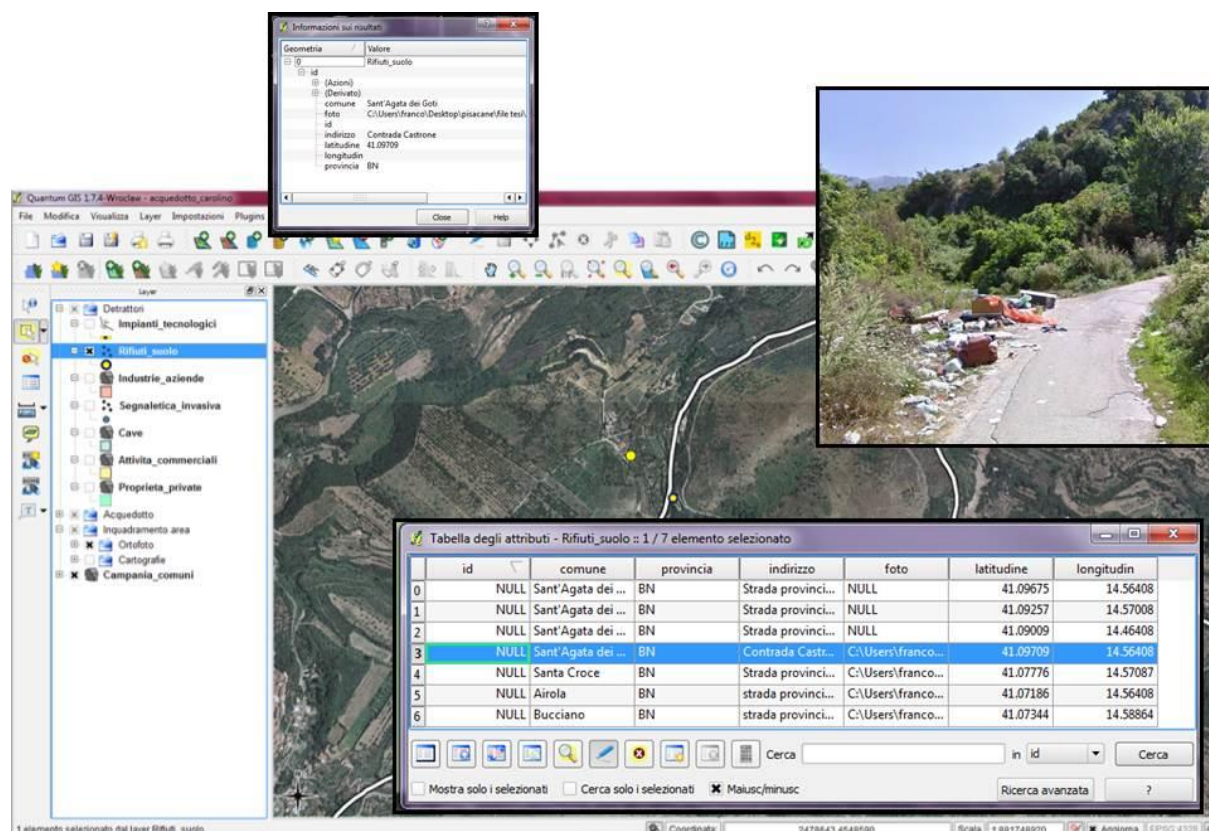


Fig. 4: Geographic Information System: survey on waste.

Starting from education means counteracting widespread figurative illiteracy, making the art, history and culture of the country, which are essential for full conscience of the nation to which one belongs, known and loved by children and young people within the Italian education system.

Young people, when at school, must be the first and most important recipients of the initiatives related to cultural heritage and landscape, in order to be able to understand the national identity understood as a connective tissue which includes monuments, language, literature, theatre, music and so on. The

investments made in this direction would certainly pay off in terms of wealth for the country itself, as is always the case for any investment in human capital, which should never be cut in times of crisis. The museums, instead of investing in ephemeral events, should be seen as places of research and education, to develop, in cooperation with other research institutions, strategies of knowledge and access to their heritage, differentiated by specialists, for the general public as well as for the younger members of society.

Regarding the role of specialists, who must be professionals with technical and cultural skills, or in other words art historians, archaeologists, architects and restorers, and in addition, they should have a civic and institutional sense that only education can give. One of the roles of universities today is to form young people from both a moral and intellectual point of view as well as a technical and professional one, so that they can act with due sensitivity in this area.

University also has a key role in research, assuming that the acquisition and dissemination of knowledge is a worthwhile investment for the protection (i.e. to preserve the value of assets) but also to increase its value through proper communication activities.

Also in this case, research should be specifically addressed to the peculiarities of Italian heritage. It has been said how this is a unique connective tissue. It is therefore important to create a network, a sort of virtual museum of the territory, in which the relationships between the artefacts stored in museums, the other works in the area, villas, churches, monuments, and so on are highlighted. The aim is to broaden knowledge and hence the widespread interest in the assets, creating alternative itineraries to major attractors, allowing less well-known sites to enter the virtuous circle of knowledge.

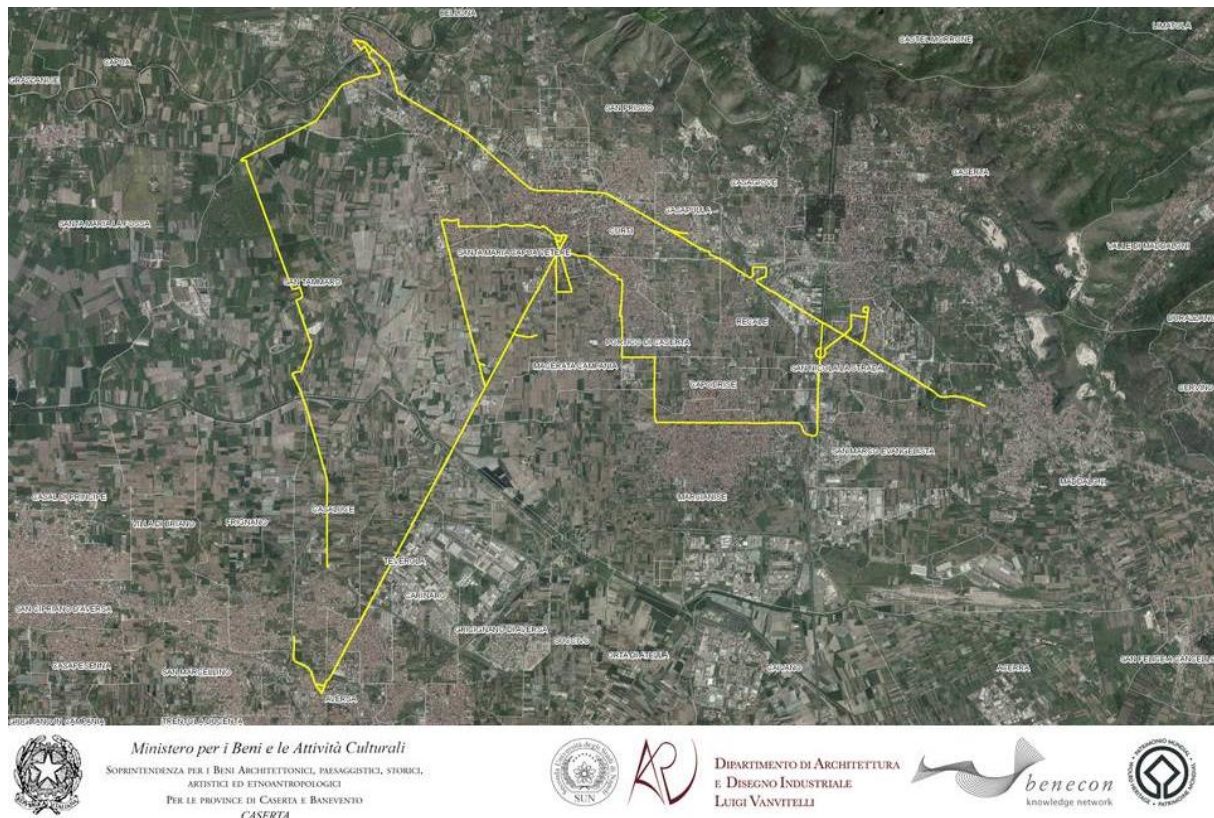


Fig. 5: Management Plan of the UNESCO site "Royal Palace of the eighteenth century in Caserta with the Park, the Aqueduct of Vanvitelli and the complex of S. Leucio." Path surveyed by platform Topcon IP-S2 Mobile Mapping installed on a dedicated vehicle.

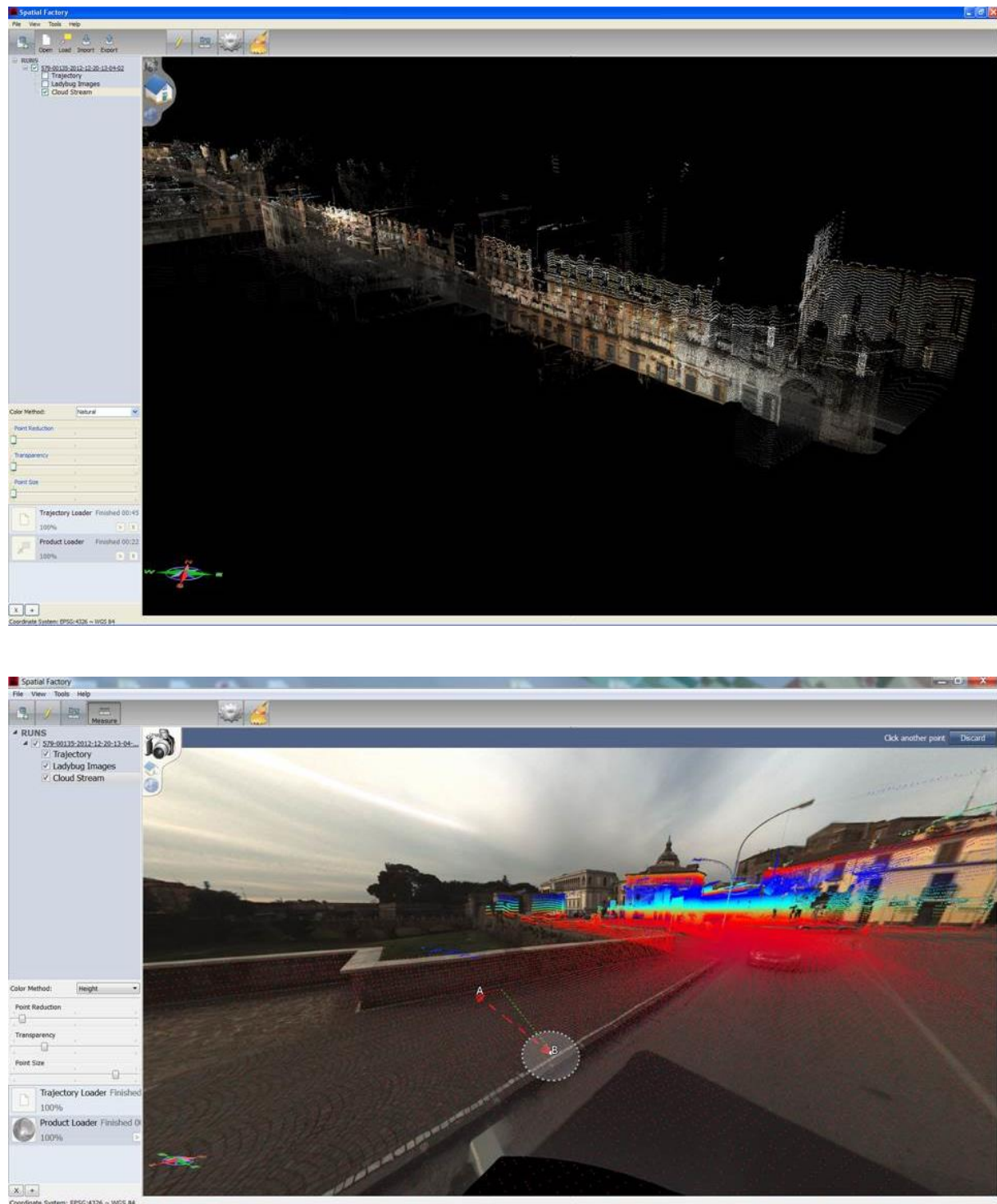


Fig. 6-7: Images captured by platform Topcon IP-S2 Mobile Mapping installed on a dedicated vehicle.

As stated by Settis, in his recent “Landscape. Constitution. Cement” when he wrote that “museums and monuments, so as not to die, must converse with the city and the world that surrounds them, re-positioning themselves through knowledge and communication mechanisms suitable to the times. To start from the museum, it must be an essential urban node that is grafted onto the heritage, civil and social fabric of the city, the distillation and showcase of the historical sedimentation and collective memory”. [7]

The network would have a key role in reconnecting the works to their tissue of belonging and reuniting lost contexts or geographically dispersed collections, for a better understanding of the work, the artist and the cultural context that produced it. Technology makes it possible to multiply indefinitely the connections, as well as display the logical, chronological, stylistic, geographical, genetic relationships

and so on between a given object and a variety of other items.

Thus, knowledge becomes alive, attractive, accessible. The route is not approved and imposed onto the visitor as exhibitions-event, but it is in progress, in the sense that it depends on the relationships that individual users prefer to view, creating their own specific cognitive approach.

In this direction, a collaboration between universities, research centres and institutions, against every self-referential mechanism, would be essential in order to develop strategies and objectives that maybe, without following the logic of income, could really generate wealth for our country.

To conclude with the words of Montanari, "We have to fight so that the historic fabric of our cities returns to being the instrument of cultural growth guaranteed by the Constitution, and escape the choice between destruction and transformation into an entertainment theme park".

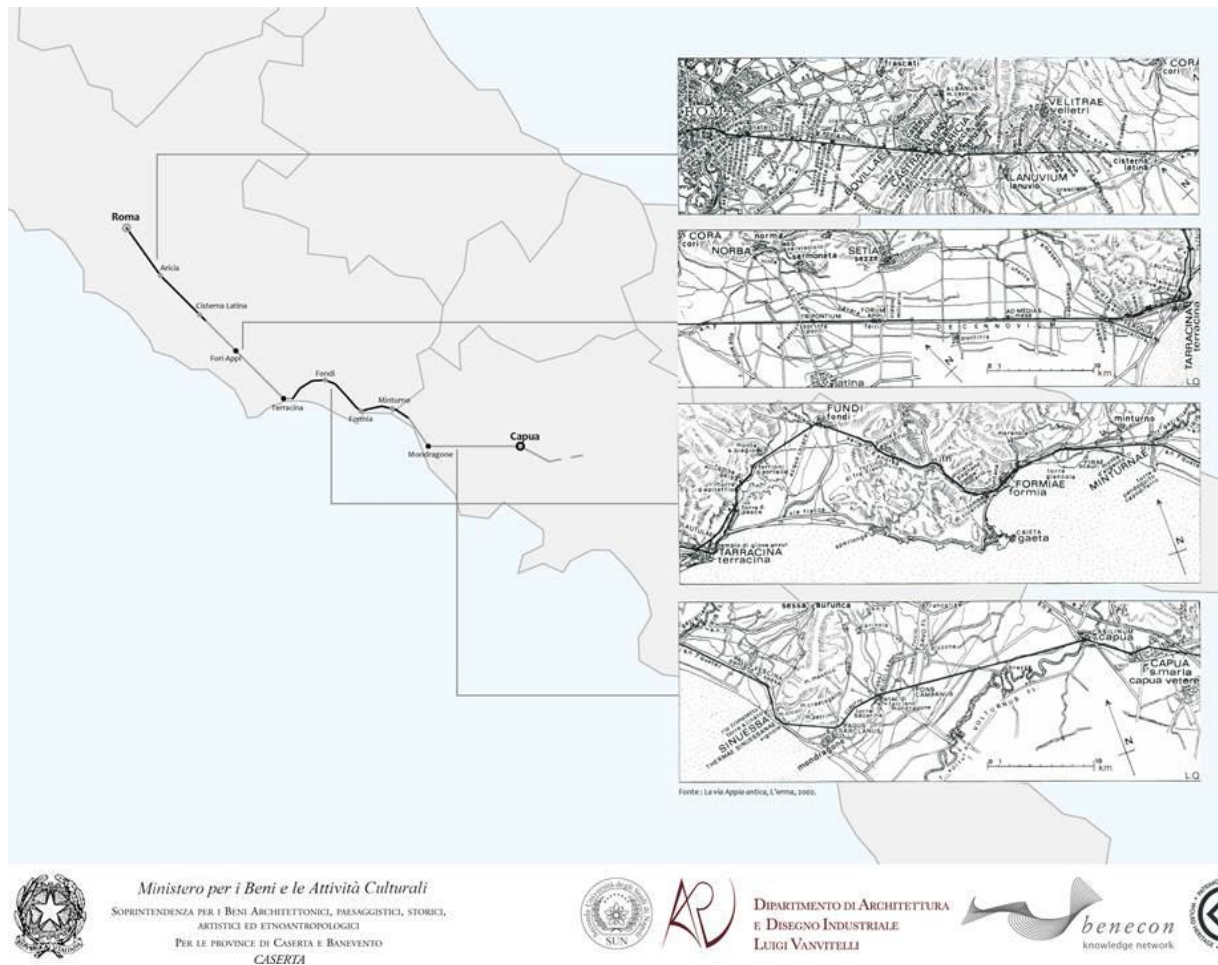


Fig. 8: Management Plan of the UNESCO site "Royal Palace of the eighteenth century in Caserta with the Park, the Aqueduct of Vanvitelli and the complex of S. Leucio. " Identification of the tracing of the Via Appia.



Fig. 9: The Via Appia between the town of Caserta and San Nicola La Strada.



Fig. 10: The Via Appia in the area to be redeveloped.



Fig. 11: Architectural and urban design on the part of the Via Appia within the buffer zone.

Bibliographical notes

[1] Ute DIEHL, *I talebani di Roma. Saldi di fine stagione. L'Italia sta per svendere i propri beni culturali*, in: *Frankfurter Allgemeine Zeitung*, 9 luglio 2002.

[2] Salvatore SETTIS, *Italia S.p.A. L'assalto al patrimonio culturale*, Einaudi, Torino 2002, p.6.

[3] Sergio RIZZO, *Beni fantasma, spese poco trasparenti . Così l'Italia non tutela i capolavori*, in: *Corriere della Sera*, 9 luglio 2012.

[4] Mario VARGAS LLOSA, *La civiltà dello spettacolo*, Einaudi , Torino 2013.

[5] Tommaso MONTANARI, *Un manifesto per il nostro patrimonio*, in: *Il Fatto quotidiano*, 5 aprile 2012.

[6] Salvatore SETTIS, *Italia S.p.A.*, cit. p. 94.

[7] Salvatore SETTIS, *Paesaggio. Costituzione. Cemento. La battaglia per l'ambiente contro il degrado civile*, Einaudi, Torino 2012, p. 135.



DIPARTIMENTO DI ARCHITETTURA
E DISEGNO INDUSTRIALE
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