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Can the architectural project offer new ways of interpreting, reading, and understanding heritage and the patrimonialization process?

What are the investigation tools and design actions useful for strengthening the relationships between heritage and context?

How can heritage sites best be valorized, while defining ways to sustainably use heritage and actions for its protection?

Starting from an idea of heritage seen as a *sense of time and a sense of place*, this book poses a hypothesis: that the perspective of the project, at architectural, urban and landscape scales, can be taken as an interpretative key through which to analyse potential and critical issues related to the tourist valorization of heritage.

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Between Sense of Time and Sense of Place

Between Sense of Time and Sense of Place

edited by
Mauro Marzo
Viviana Ferrario
Viola Bertini

Designing
Heritage
Tourism
Landscapes

The series brings together a number of studies dedicated to the phenomenon of heritage tourism. A driving force for territorial regeneration processes and, at the same time, a factor in the alteration of the nature of places, this particular form of tourism represents a field of investigation for a vast number of disciplines.
Open to dialogue with different fields of knowledge, the essays of the series present research focused on the relationship between heritage, landscape and architecture.
In this framework, the analysis of contexts and the project's cross-scale perspective are assumed as lenses through which to read the potentialities and the critical issues related to the touristic use of material and immaterial assets. Can architectural design offer new ways of knowledge and interpretation of heritage? What are the analytical tools and the design methodologies useful for establishing a dialogue with that sense of past and sense of place proper to the concept of heritage itself?
The series answers these questions by illustrating the results of research, teaching experimentations and design explorations which, in light of the complex problems posed by tourism, address the study of the relationship between architecture and the historical city, the transformation of landscapes, and the delicate balance between protection and the use of heritage.

Brazil, *Rio de Janeiro from the Corcovado viewing platform*, 1934. Fondazione Mazzotti photographic archive c/o FAST – Foto Archivio Storico Trevigiano della Provincia di Treviso

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BETWEEN SENSE OF TIME AND SENSE OF PLACE

DESIGNING HERITAGE TOURISM

edited by
Mauro Marzo
Viviana Ferrario
Viola Bertini

LetteraVentidue

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Matera, water and tourism

Heritage in balance

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Università degli Studi della Basilicata

Water and Matera

Guaranteeing the availability of water, protecting the ecosystem, contrasting climate change and making cities more inclusive are among the key objectives of the Agenda 2030 Sustainable Development Goals.

Promoting participatory commitment that favours the resilient capacity of the city and considering the value of the environment and urban quality are instead the principal indications of Habitat III for an analogous urban development.

Water, therefore, is always a vulnerable resource and continues to be conditioned by urban phenomena. The risks deriving from its incorrect management in cities, summed with phenomena of climate change, are elevated and known. In Southern Italy, moreover, development depends almost exclusively on correct water management; here it is strongly conditioned by the environment and its transformations, other than by the socio-economic phenomena of recent decades.

Matera is emblematic: the explosion of mass tourism witnessed in recent years has exposed not only an urban, but also an environmental problem, precisely in the *Sassi*, the paradigmatic example of how a community can organise settlement in harmony with nature. For millennia urban development in this area progressed together with the environmental infrastructure to guarantee an equilibrium; in other words, the inhabited spaces of the Sassi were adapted to the local geomorphology to better manage water, to the point that this resource has in fact *guided* its very form. We are speaking of a process of anthropisation that, prior to the advent of modernity, preserved a system for collecting and draining water. A system that left the surfaces of the *Piano* permeable, maintained drainage channels in their natural form (the *grabiglioni*), kept the *gravine* free and preserved an unaltered hydraulic equilibrium consisting of a network of *palombari* (large subterranean cisterns) above the city, and a vast number of wells, roughly equivalent to the number of dwellings and *vicinati*, in the Sassi below.

Modernity arrived in Matera in 1935 with the first *Piano regolatore e di ampliamento* (Master Plan and Expansion Plan) prepared by Vincenzo Corazza. This occasion was exploited to initiate a series of long-awaited works: the subdivision of rural lands; the realisation of infrastructures and institutions for a new province (1927); the hygienic rehabilitation of the Sassi (sewerage, paving, potable water). Streets were created inside the Sassi by carving into the geomorphological and historical fabric, and the

> cover of the […] *grabiglioni* […] that would modify the principles that regulated the drainage, control and distribution of water in the territory, aspects which have always impacted urbanisation, determining its types, forms and limits […]. The realisation of vehicular streets, entirely foreign to the traditional organisation of the urban fabric, made of stairs and subterranean passages travelled on foot or donkey back, would profoundly mark the urban ecosystem, cutting into and sectioning grottoes, cisterns, rupestrian homes and *vicinati* and interrupting paths linking up with the Murgic plateau.[1]

The evacuation [of the Sassi] and the construction of modern villages and quarters marked the beginning of the lengthy period of abandonment. Despite the issuance of *Law 771/'86*, this decline ended only between 1993 and 1994 with

Views of the *Sasso Barisano* valley showing the erosive surface morphologies of the streams.

the addition of the Park of the Rupestrian Churches of Matera to the UNESCO WHL (whose unique water system plays such an important role) and the beginning of rehabilitation works.
Matera is now a leading tourist destination. Over the past 25 years, though with an exponential growth during the past 7, the city has undergone a transformation that has placed local heritage and the equilibrium between man and nature in a state of crisis.

A geo-environmental background

Matera developed atop the south-west margin of the *Murge* plateau, an extensive Mesozoic calcareous platform delimited by steep sloping edges. In the south-west direction, these rocks lie below a thick succession of quaternary marine sediments, primarily clayey, deposited in a foreland basin system.[2] Framed between the Apennine mountains and the *Murge* plateau to the north-east, the basin splits into two physiographic sectors: a submarine area corresponding with the Ionian Sea and an emerging sector known as the Bradanic Trough. The area along the Murgian margin of this basin, at the base of the clayey terrains and in contact with Mesozoic carbonate rocks, features moderately cemented coarse-grained carbonate sandstone (Gravina Calcarenites). In the section between the cities of Matera and Taranto, a series of fluvial-karst watercourses known as *gravine* drop down (from 400 to 50 m a.s.l.) from the plateau toward the Ionian Sea. The sides of the gravine, for their elevated geographic position and the litho-technical characters of calcarenite – a soft rock – are lined with many caves excavated by human hands to create dwellings, shelters and churches. Among these settlements, the Sassi di Matera present the conformation of a city that developed in two small tributary

valleys, to the orographic right of the torrent of the Gravina di Matera – the *Sasso Barisano* and the *Sasso Caveoso* – with a hydrographic basin, which extends into the clayey sediments above, measuring respectively 1.14 square kilometres and 0.65 square kilometres.
The urbanisation of the modern city cancelled the natural hydrographic network of the two torrents: solely in the section crossing the Sassi local morphologies permit the identification of the principal channels in correspondence with two streets – Via Fiorentini and Via Buozzi – covering the ancient paths of the drainage channels known as *grabiglioni*. The valley floor of the Sasso Barisano once presented a U-shaped form devoid of sediment and a denudation surface modelled on the calcarenites and Mesozoic limestones at the point of confluence with the *gravina*, while the valley floor of the *Sasso Caveoso* presented a flat form, without a true and proper channel and modelled only on quaternary calcarenites.
Other hydraulic works, realised primarily to collect and conserve rainwater landing on building roofs for potable use, take the form of cisterns excavated into the calcarenite rock. The largest are located above the Sassi, in correspondence with the boundary of the upper clayey formation. They include the *Palombaro Lungo* cistern with a capacity of 5 million di litres of water, constructed in the late 1700s in correspondence with what is now Piazza Vittorio Veneto. Today, the city's large cisterns and *grabiglioni* have lost their important role as regulators of hydraulic flows: the cisterns were converted into other uses connected with tourism and the *grabiglioni* have become two streets. The surfaces of these two streets, protected by *chianche* of limestone rock, have become the new thalweg of the two torrents, while the streets have been lined by numerous activities catering to tourism and street furnishings, the latter washed downstream by runoff during recent flash floods.

Tourism in Matera

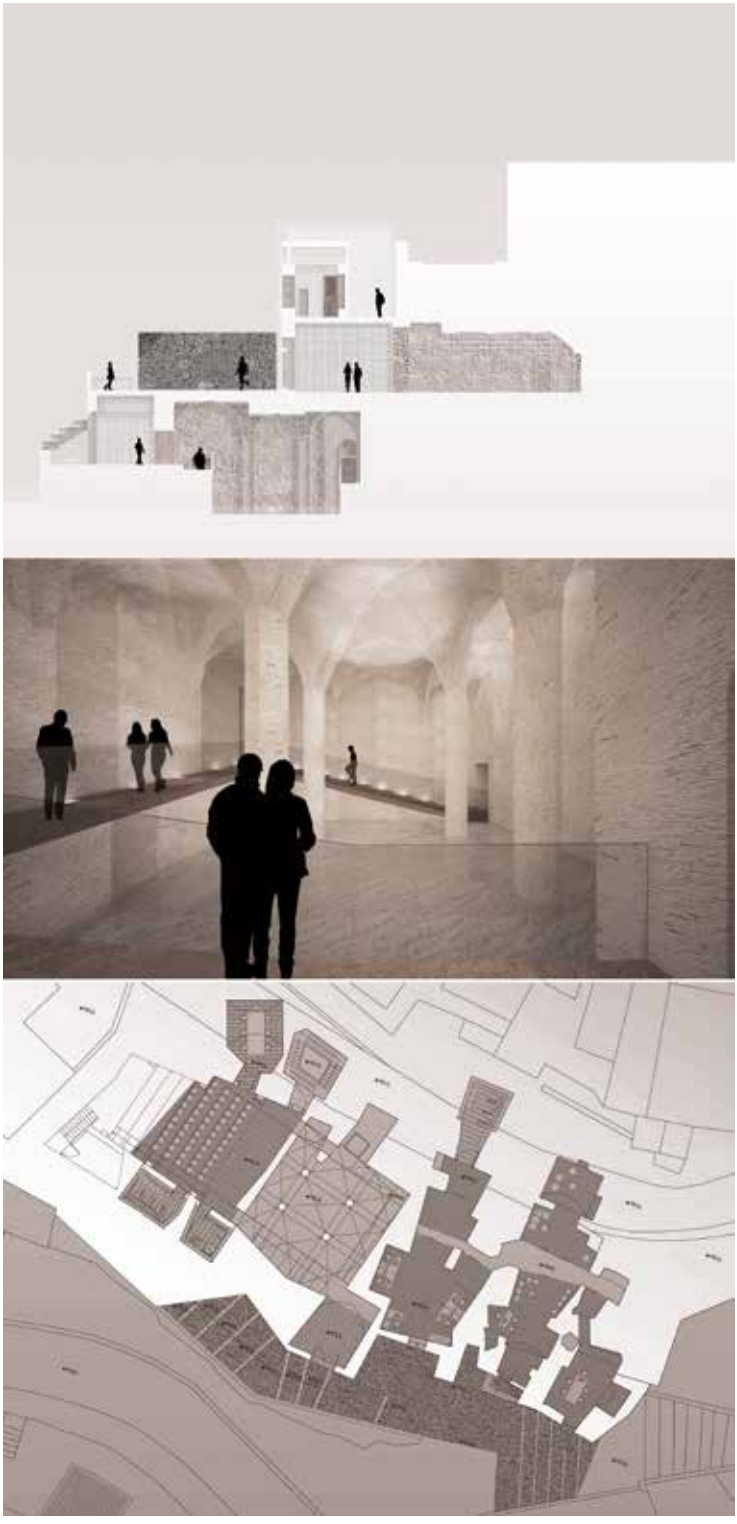
The potential of the *troglodytic* landscape of the Murgia and the Sassi di Matera to attract tourism was a hypothesis advanced during the 1930s when, following its promotion to provincial capital, there was an urgency to initiate reclamation works and the hygienic rehabilitation of inhabited areas.
Beginning in the 1950s and until the 1990s, this landscape, in a state of abandonment, offered arthouse cinema an ideal location for events sited in a remote time, for example the Palestine of Pasolini's *The Gospel According to St. Matthew*, or a generic and backward Southern Italy, an image the community in Matera was struggling to leave behind, together with rural poverty. Having set off down the road of modernisation, Matera no longer recognised itself in that landscape that years later would become its *significant image*, and a strategic factor for attracting tourism to the area. So long as mass tourism privileged the bathing facilities lining the Ionian coast, the *telero Lucania '61* painted by Carlo Levi and the visions of Matera photographed by Cartier-Bresson, Cresci and Pinna, were visited only by a niche of cultural travellers, both Italian and foreign, willing to make the journey to such an out-of-the-way location.
During this lengthy period, the city evolved socially, urbanistically and productively. Aside from attracting hikers, Matera is known above all as a destination

for business travel, dimensioned in relation to the activities of a small manufacturing city.

The recognition of the Sassi and the Park of the Rupestrian Churches of Matera as a UNESCO *cultural landscape* initiated a metamorphosis in Matera's profile as a destination for tourism. The offering of hospitality structures was expanded and differentiated, initially, in the field of business tourism and in response to demand from the congress sector. However, the numbers remained small: the city offered only 800 beds. The new century brought new hospitality structures, which led to a timid appearance of B&Bs and Vacation-Homes. In terms of tourist movements, between 1999 and 2003, Matera witnessed an annual average of 90 thousand presences, with foreigners accounting for 17% of the total.[3] The city was home to less than 60 thousand inhabitants, and the ratio between presences and residents was approximately 1.5, however, this period already manifested an *eat and run* approach to visiting Matera.

Tourism truly blasted off after 2004 when Mel Gibson outdid Pasolini at the box office with his film *The Passion of the Christ*. While the period between 2004 and 2008 registered an 80% increase in arrivals and presences of foreign visitors, the impact of the film, albeit brief, was sufficient to assign Matera a position in international tourism. These were also the years when the city began to concretely plan its candidature as European Capital of Culture 2019, with a Dossier pinned to two ideas: the tourist, as a temporary citizen, and an *open future* that elevated cultural and creative work to a lever for transforming Matera into a city of the world. This phase of lift-off ended in 2014, the year the city was designated Capital of Culture. During these 11 years the flow of tourists rose from 54,000 to 153,000 arrivals (+181%) and from 89,000 to 245,000 presences (+176%), split among Italians (75%) and foreigners (25%), with an average permanence of roughly 1.5 days. During the same interval of time the population of Matera reached 60 thousand inhabitants and, in 2014, the ratio between presences and inhabitants was 4 to 1. The offering of hospitality structures rose by 116% in terms of beds, divided almost equally among hotels and other accommodations.

In 2015 the scale of tourist flows in Matera changed. In just one year, arrivals leapt by 40% (from 153,000 to 215,000) and presences by 44% (from 245,000 to 354,000). Thanks to a dense agenda of events presented by the Fondazione Matera-Basilicata and the activities of communication by the Lucana Film Commission, during this five-year period tourist movements continued to grow at an average annual rate of 16% (arrivals) and 20% (presences), divided among Italians (72%) and foreigners (28%). The highest numbers were reached in 2019: over 730,000 presences. While there was also a slight improvement in the duration of time spent by *temporary citizens* with respect to the previous period, the Sassi and the Piano suffered under the high pressures exerted by tourism. Elementary data referred to the year 2019, the basis for an estimate of this phenomenon developed by the authors, highlight the maximum pressure of tourism precisely in the Sassi, in terms of the incidence of beds and presences, and thus a *tasso di turisticità* (tourism ratio) and *densità turistica* (tourism density). This pressure is also confirmed by the ISTAT (Italian National Institute of Statistics) indicator defined



A work by the Design Laboratory 4 (A.Y. 2017/2018 _ Students: Vincenzo Pace, Sara Porcari, Federica Salvia).

in 2020 to calibrate measures to respond to the Covid-19 emergency. Matera is one of the few Southern Italian settlements in the category *Comuni a vocazione culturale, storica, artistica e paesaggistica* (Cultural, Artistic and Landscape Destinations)[4] to reach the maximum threshold of tourism density.

Narratives and experimentations

After 1993 Matera began to experiment with a narrative that triggered a form of urban planning supporting the promotion of the Sassi as the pedal for kickstarting the tourism machine. However, tourism is 'communication before practice'.[5] By combining objective data about a geographic reality with subjective factors – rational, emotional and moral – the industry creates the *dream*. Tourism also serves itself also of an emotional language that employs keywords less to describe a destination in and of itself, and more to intercept what a tourist hopes to experience during a vacation.

'One of the oldest cities in the world, offering one of the most unique experiences in the world'; 'an extraordinary step back in time'; these are just two examples of narratives describing Matera. They fuse objective and real geographic information with subjective factors to create suggestions that, by presenting places-images, aim to transform the space of tourism from image into imagination.

To be successful, advertising images must enjoy a high degree of recognisability, even better when associated with an unquestionably unique character. And the narrative of Matera, as a *unique* city, is selected today to exalt international brands. From a national embarrassment to the promoter of a new status symbol that contrasts the previous century all thanks to a narrative. The emphasis on the spectacularity of place used for *space packaging* has generated a series of landscape stereotypes in which attractions, as natural as they are cultural, are highly theatricalised, while the space of tourism is reduced to a simulacrum of real places in which the community labours to recognise itself.

In the Sassi, hotels, B&Bs, restaurants, cafés occupy the same *grotto and cistern* homes that have earned a place in history thanks to an extraordinary coincidence between environmental, spatial and anthropological aspects. A true and proper ecosystem (natural and artificial), dependent on water, which Matera's inhabitants so successfully promoted in the *vicinati* that, despite being abandoned in the 1950s, continue to be perceived as an identifying element of urban space, so much that they were reproposed in the first logo of the Capital for Culture bid.[6] Today, instead, the same space that was once full of environmental, spatial and anthropological meanings, has been transformed into 'a space of anonymity, frequented by similar individuals, though alone', on par with all other aspects of the supermodernity investigated by Marc Augé.

On the other hand, new forms of experimentation with teaching and research in Matera are today focusing on participatory discussion – hoping to attract the interest of tourism – centred on what is here a vital theme: water. In particular, a Design Laboratory offering the activities of a *hands-on school*, is attempting to grow a culture around the theme of water and the ecosystem, involving students of Architecture. Since antiquity, water has consistently been an important

element that has conditioned and inspired architecture: from the classical to the contemporary – from Vitruvius to Zumthor, to mention only two influential names – water has forever represented an incredibly rich element in the genesis of architectural space. The Design Laboratory 4 in Matera, therefore, works in and around spaces with the capacity to narrate *water and architecture*, and favour the growth of a culture that promotes environmental equilibriums without condemning tourism. For its environmental, architectural and urban peculiarities, Matera represents a unique place in which to imagine *forms for understanding water*. The principal objective is to help students establish a relation between their actions (reflections and designs) and global issues linked to water and tourism.

Bibliography

- Bilò, F. & Vadini, E., *Matera e Adriano Olivetti*, Edizioni di Comunità, Roma, 2016.
- Corrado, G. et al., 'Constraints on the dispersal of Mt. Vulture pyroclastic products: implications to mid-Pleistocene climate conditions in the foredeep domain of southern Italy', *Géomorphologie: relief, processus, environnement*, no. 2, vol. 23, 2017, pp. 171-182.
- Dell'Aglio, M., 'Note di odonomastica materana', *Archivio di Etnografia*, Year VIII, no. 2, 2013, pp. 35-51.
- Croci, E., *Turismo culturale. Il marketing delle emozioni,* FrancoAngeli, Milano, 2009.
- Giacomarra, M.G., *Turismo e comunicazione. Strategie di costruzione del prodotto turistico*, Sellerio, Palermo, 2005.
- Giordana, F., *La comunicazione del turismo tra immagine, immaginario e immaginazione*, FrancoAngeli, Milano, 2004.
- Laureano, P., *Giardini di pietra*, Bollati Boringhieri, Torino, 2012.
- Rota, L., *Matera. Storia di una città*, Edizioni Giannatelli, Matera, 2011.

Notes

1. A. Colonna, D. Fiore & E. Vadini, *Vincenzo Corazza e gli anni Trenta a Matera*, Libria, Melfi, 2019. (Translation by the authors).

2. G. Corrado et al., 'Constraints on the dispersal of Mt. Vulture pyroclastic products: implications to mid-Pleistocene climate conditions in the foredeep domain of southern Italy', *Géomorphologie: relief, processus, environnement*, no. 2, vol. 23, 2017, pp. 171-182.

3. Source: APT Basilicata.

4. See the classification of Italian *comuni* (municipalities) based on the ISTAT tourism density index.

5. M.G. Giacomarra, *Turismo e comunicazione. Strategie di costruzione del prodotto turistico*, Sellerio, Palermo, 2005.

6. M. Dell'Aglio, 'Note di odonomastica materana', *Archivio di Etnografia*, Year VIII, no. 2, 2013, pp. 35-51.