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QNeST PLUS



Sustainable Tourism and Cultural Routes in the Ionian and Adriatic Regions

edited by ANNA TRONO

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Volume stampato con il Contributo del Dipartimento di Beni Culturali
– Università del Salento – Progetto QNeST PLUS.



tab edizioni

© 2022 Gruppo editoriale Tab s.r.l.
viale Manzoni 24/c
00185 Roma
www.tabedizioni.it

Prima edizione aprile 2022
ISBN versione cartacea 978-88-9295-443-4
ISBN versione digitale 978-88-9295-460-1

È vietata la riproduzione, anche parziale,
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Introduction

by Anna Trono

This book introduces the concept of cultural routes and itineraries, understood as an innovative tool with which to promote quality sustainable tourism in certain regions of the Adriatic-Ionian area, specifically in Croatia, Greece, Italy, Montenegro and Slovenia. These regions were chosen by the partners of the Quality Network On Sustainable Tourism (QNeST) project, financed as part of the EU's ADRIION programme (Priority Axis n. 2 "Sustainable Region", Axis II SO 2.1 "Promoting the sustainable valorisation and preservation of natural and cultural assets as growth assets in the Adriatic-Ionian area"), which is designed to develop an innovative approach to sustainable tourism on the part of stakeholders active in the fields of culture, nature, the Mediterranean diet (especially wine and olive oil) and accessibility, on whom the QNeST quality brand was conferred in the course of the project.

Many local routes were proposed as part of the project, although not all of them are presented here. Also not included are the four suggested trans-regional itineraries (based on *wine and olive trees; stone; water; merchants, pilgrims and travellers*), which potentially articulate a shared cultural platform to be developed in a subsequent phase.

Based entirely or partly on pre-existing trails, the cultural routes considered in the chapters of this book develop historic communication channels, together with elements of heritage that reflect long-standing interrelations and shared influences among a mosaic of cultural groups.

Every individual route presented serves to promote "cultural growth" and is the result of an analysis of people, processes and/or historic events that have a strategic value as "custodians of historic memory" or indeed an economic value, attracting tourists while respecting the environment.

In order to survive and thrive, cultural routes in general and the ones proposed in this book in particular must create and maintain the connection between society, culture and the environment, encouraging the visitor to respect the principles of sustainability. They are often associated with fragile, easily disturbed situations. In some cases they pass through urban contexts subject to excessive tourist pressure, resulting in the loss of their cultural specificity and environmental quality. Landscapes, the environment, culture and traditions are all fundamental factors for the tourist system. It appears that they can be exploited in many ways, without restrictions, costs or penalties, because in the final analysis there are no absolute, universally shared criteria by which environmental situations can be judged. This calls for participatory management on the part of stakeholders and the full involvement of the community. The objective is to make the routes sustainable and plan development in an eco-sustainable way: a serious challenge no doubt, considering that there is not always a good fit with the environmental issues of the affected areas, and one that requires a considerable degree of responsibility on the part of the public authorities and the interactive participation of visitors and local stakeholders.

The cultural routes proposed by the QNeST project cannot be separated from these obligations. They seek to offer a high-quality, diversified and sustainable range of tourism goods and services, appealing to the market by means of techniques that include technological promotional tools and new means of communication.

Following a theoretical approach to the concept of cultural routes, environment and sustainability in relation to the cultural itineraries of the European Union, the book also considers regional strategies and participatory planning for quality tourism in the Adriatic-Ionian regions and the role of an innovative ICT platform in the promotion of thematic routes.

In order to renew the strategies for the promotion of the regions and their use for tourism, the recourse to augmented reality was also deemed useful. Augmented reality makes it possible to enrich sensory perception by superimposing virtual multimedia elements on the real world, enabling the traveller to visualise what cannot be experienced or understood directly. Smart Tourism Technologies (STTs) are also helping to innovate the strategies for the promotion of the regions and their use for tourism, especially where they host historic, artistic and natural heritage of particular value.

The rich cultural and landscape heritage of the routes crossing the Adriatic-Ionian regions involved in the project requires that they be developed via effective strategies that incorporate not just traditional methods but also STTs in order to make the visitors' experiences active, participatory and easily accessible, enabling them to interact with the region being visited.

In the second part of the book the authors consider recent tourism trends in certain Adriatic-Ionian regions involved in the project, highlighting the role of the cultural and natural routes, as well as those centred on olive oil and wine, as an important factor in local development. From the functional point of view, with the broadening of the proposed themes of reference the routes are seen as interesting tools of the local economy. They are becoming the object of a dynamic cultural process, since each of them is generating and disseminating an expression of the culture of the Adriatic-Ionian area, with concrete and promising results in terms of responsible and inclusive tourism.

Seen as an important cultural product, helping to ensure the beneficial use of all the expressions of cultural heritage present in the various regions of the project, the cultural routes presented here meet the need to bring together and re-contextualise many aspects of cultural heritage that over time have lost their original unity. They make it possible to re-establish the value of places via their cultural identity (local lifestyles), to nostalgically explore sites and cultural resources (food-and-wine, handicraft, folklore, architecture) and to re-invent or activate strategies for the appropriate exploitation of the cultural, natural and economic landscape.

Contextualising cultural heritage in accordance with themes that are meaningful for the tourist, giving them a cultural and economic value, integrating art with accommodation, transport and food-and-wine services, means making them true attractors of tourist flows, which need to be joined together in a single system that ensures the sustainable development of the territory.

Various authors highlight their role in sustainable local development, considering management policies that seek to provide a range of services that facilitate the use of the routes and their associated cultural heritage. Finding a truly sustainable way to manage the resources linked to cultural tourism is obviously beneficial for the tourist and the host community, as well as in its own right. This requires adequate planning, considering a market that is strongly affected by multiple interests and interactions among the groups involved, in which various categories of actor, both public and private, operate.

Passing through the successive phases of the *plan-do-check-act* cycle, the chapters of the book show that sustainable tourism must involve and take account of the interests and objectives of the key actors, i.e. the industry, tourists and local administrators. The construction of consensus and strategic partnerships forms the basis of a solid symbiosis with the territory and is necessary for the promotion of sustainable (i.e. lasting) tourism.

Particularly important are promotional strategies that encourage the development of partnerships between public and private sectors, associations and local communities; that strengthen participation and the ability to act on a local level; that ensure control over the goods and services on offer and their effectiveness; that analyse and assess the cultural and economic results in quantitative and qualitative terms.

There are three factors of coordination which cannot be ignored: the markets, the bureaucratic hierarchies and the networks. For the latter, agreements can also be based on informal understandings, unwritten rules, words of honour, trust and cooperation.

In any case, it is necessary to have a clear strategy for optimal organisation not only of regional resources but also the environmental and socio-economic impacts, and to consider the heterogeneous and complex contexts in which the itineraries develop, activating a process that binds the regions involved together in a dynamic and healthy combination of competition and cooperation.

Cultural routes development in the Adriatic and Ionian Regions

From the idea to the product
(from the project to the praxis)

first part

QNeST Project and Cultural Routes of Adriatic and Ionian regions

by Anna Trono

1. Introduction

New forms of quality tourism have been growing steadily for years and make it necessary for providers to adapt and differentiate their product range. Indeed, tourists are increasingly interested in the “local” as a source of material culture and nature, and they demand tailor-made products yielding experiences that meet specific expectations. Cultural itineraries can be the cornerstone of this holistic process for a significant number of quality tourists, and they represent the new frontier of cultural tourism. They offer the beauty of silence, physical and spiritual wellbeing, the charm of nature and rural tranquillity. Combining rural villages and urban attractions, they reawaken the history of places and recover the value of their cultural heritage and landscapes. In line with these new trends in supply and demand, public and private bodies on all geographical scales have recognised cultural routes and itineraries as not only an expression of a qualitatively different approach to safeguarding and preserving the landscape and cultural heritage, but also as an opportunity for gaining recognition and for the sustainable development of new tourist destinations. After a brief analysis of cultural itineraries and routes as glocal phenomena providing a natural interface between the local and the global, this chapter shows how they can contribute to sustainable development, especially in inland and/or marginal areas. It introduces the Quality Network for Sustainable Tourism – QNeST project (ADRION Programme: Axis II SO 2.1 of the EU), describing its objectives and activities aimed at the creation of routes and itineraries shared by the project’s partner countries. These routes and itineraries constitute the common thread of this book, which is organised into two parts.

The first, after a brief presentation of the value of the routes and itineraries associated with the QNeST project, provides a theoretical framework in which to view the conceptual, methodological and political issues linked to cultural itineraries as a sustainable approach to tourism and makes reference to innovative techniques for their promotion.

In the second part, after a detailed geographical presentation of the Adriatic-Ionian Regions, the book presents some regional case studies of existing sustainable cultural routes.

2. Cultural routes and itineraries

Cultural routes and itineraries are open-air museums, the historical and contemporary expressions of a complex regional heritage rich in cultural and environmental assets and meanings, which has given rise to an extensive literature (see, among others, Briedenhann, Wickensm 2004; Berti 2012; Berti 2013; Denu 2005; Majdoub 2010; Zabbini 2012; Beltramo 2013; ICOMOS Documentation Centre 2013; Rizzo *et al.* 2013; Spinelli 2011; Timothy, Boyd 2015; Hvattum 2016; Siguencia *et al.* 2016; Ren 2017; Duda 2018; 2021; Paquette *et al.* 2021).

They develop in space and time in accordance with a variable geometry: those of medium-to-short length, the “routes”, generally tend to reclaim local paths, while those of medium-to-long distance, the “itineraries”, more often follow ancient historical and pilgrimage routes (Trono, Oliva 2013). Adhering to a well-defined thematic framework, they connect cultural resources located in one place or area (nodes) or aligned along an axis (lines), in a systemic interaction of cultural, economic, political and social elements and actors (Zabbini 2007).

They enable a voyage of discovery through places that are deeply intertwined with the experience of the communities that identify with them (Mariotti 2011). They meet the needs of the “evolved” and “refined” cultural tourist who is keen to look, discover and experience, interested in visiting lesser-known places and settings and in non-standard products. Recent success has been achieved above all by routes linked to the reassessment of heritage that is found throughout the area, including so-called minor architecture and the landscape. Those who travel these routes usually already have a good level

of historical and cultural knowledge, but cultural routes satisfy more than intellectual curiosity, and they should not be considered merely as “alternative” tourism destinations. Rather, they need to be interpreted in relation to the traveller’s overall cultural experience. They are an expression of the search not so much for the *real* as for the *authentic*, for contact with the social fabric of the places being visited, going well beyond the purchase of souvenirs. They recall the so-called Hesse Syndrome, which struck the novelist Hermann Hesse in the spring of 1901, when, in the course of his stay in Italy, he sought to understand the local situation and, as far as possible, to blend in with and absorb the identity of the local inhabitants (Becheri 1995).

While the demand for cultural itineraries arises from the new, different needs of travellers, it is clearly socio-economic factors that what guarantee their success. Indeed, politicians and tour operators consider them to be important vectors of a growing market, and policy-makers see them as new opportunities for the lasting development of rural, marginal and economically disadvantaged areas (Piersanti 2014). The creation of a widely distributed network of little-known places with considerable tourist potential can attract investment and give rise to a substantial supply chain involving transport, food and wine, construction, publishing, new technologies and many other areas, with all the resulting employment and economic benefits.

Itineraries and routes are the result of the inseparable interweaving of a region’s culture, history, nature and economy. They help to preserve and promote local diversity and, at the same time, enable an “intercultural” and “inter-generational” journey. To all intents and purposes they constitute a “complex cultural asset” made up of the tangible and intangible heritage found along them. They are not, however, merely “geographical” routes: they constitute a mental process structured on existing elements and are designed from scratch, requiring attention not only to local culture and traditions, but also and above all to the quality and authenticity of the theme of interest. This raises their real value, ensures their long-term preservation and conservation, and draws attention to quality sustainable tourism. To be successful, however, cultural routes and trails must not only preserve religious and cultural values and aspects of identity but also produce sustainable tourism centred on new destinations, peripheral areas and little-known places. Cultural routes thus lay the foundations of a modern tourism industry that emphasises inland and rural areas, enabling

them to position themselves in the tourist market and encourage off-season flows to the benefit of accommodation facilities and local human resources. Their value lies in their ability to bring together, particularly in disadvantaged and outlying regions, various factors of attraction which, considered on their own, would seem insignificant, of little interest and incapable of either inducing tourists to invest time and money visiting the place or ensuring respect for the cultural integrity and sustainable development of the area. The recovery of a location's cultural heritage and identity is now recognised as fundamental for the growth of the most fragile areas, and their appropriate exploitation for tourism purposes is a strategy that is increasingly used by regions to preserve their cultural identity and launch socio-economic development.

3. The management of cultural routes and itineraries

Cultural routes not only highlight the rich diversity of contributions to cultural heritage. They also point to a new ethos of conservation that considers cultural assets to be a form of shared and borderless heritage and a useful resource for the sustainable development of a constantly evolving society. The cultural itinerary understood as a means of enjoying various visited territories assumes key significance for travellers and host communities alike, and its management envisages a range of services that make the route and its associated cultural heritage readily available. Adequate planning is thus required, in view of a market that is strongly conditioned by multiple interests and interactions within the groups involved – a market moreover in which several categories of player operate. Analysing the development of the route/itinerary and the network around it means considering the merits of educational policies and initiatives that treat all cultural heritage equally and promote dialogue between different cultures. It also means understanding the relationships between the stakeholders (public and private, companies, institutions and scientific bodies) that interact within the network in order to pursue the development of tourism with reference to a region's specific and unique resources (economic, social, cultural and environmental in the broadest sense) (Trono 2014). From a legal standpoint, cultural routes and itineraries envisage various forms of cooperation and interaction between public and private bodies even in the

planning phase. These must take account of governmental institutions present in the regions, from the authorities responsible for cultural and architectural heritage to the various departments of the regional administration. In order to be effectively operational however, the routes require modernisation of the theoretical and administrative tools, involving local government and the active participation of stakeholders and local communities (Amorosino 2000).

The management of a cultural site is in itself complex, and the management of the itinerary or route even more so. An “integrated approach” is required, one that can meet the need for safeguard and conservation while taking care of the promotion and socio-economic development of the affected regions, above all considering the potential cultural value and its meaning on a local level.

From this point of view, safeguard and promotion are reconciled in the harmonious concept of systemic vitality, i.e. the viability of cultural heritage understood not only as knowledge of the physical structure of the items, but also and above all as the increasingly effective expression of their cultural role in the various contexts of promotion (Barile, Saviano 2012, p. 115).

Fulfilment of a route’s cultural, social and economic potential is thus a key aspect, especially given the importance of heritage as the expression of a community’s identity and of its ability to convey social memory and prefigure its future. Heritage is also able to involve the various institutions and support the development of local economies. Thus management is required to go beyond its traditional boundaries, both horizontally (from the individual items to the area of reference) and vertically (from knowledge to economic exploitation and promotion) while respecting the meaning of the places.

Incidentally, some of these objectives are being pursued by UNESCO, the Council of Europe and the European Union. In 1987, in its *Santiago Declaration*, the Council of Europe recognised the Camino de Santiago de Compostela as the first European cultural itinerary characterised by rich cultural, social and symbolic capital. In 2005, at the Warsaw Summit the Council of Europe confirmed the intention of the member states to

foster European identity and unity, based on shared fundamental values, respect for our common heritage and cultural diversity [...] to ensure that our diversity

becomes a source of mutual enrichment, *inter alia*, by fostering political, inter-cultural and inter-religious dialogue (Denu 2005, p. 9).

The European Union has not only understood the role of cultural itineraries in terms of “cultural growth” but also their economic character, including them in interregional and transnational planning. It notes that the broad geographical scale of a European cultural itinerary not only makes it possible to grasp the historical relations and the reach of the historical and cultural values of the diverse geographical contexts crossed, but it also favours recognition of the fundamental principles of a united Europe.

This is the aim of the European Union’s macro-regions strategy, which, concerning the Adriatic and Ionian Region (EUSAIR), was jointly developed by the European Commission, the countries of the Adriatic-Ionian region and other stakeholders. Adopted in 2014, EUSAIR seeks to create synergies and foster coordination between Italy, Croatia, Slovenia, Greece (EU member states), and four other Western Balkan countries soon to be admitted to the EU (Albania, Montenegro, Bosnia Herzegovina and Serbia). It is investing in four thematic pillars: blue growth, regional connections, environmental quality and sustainable tourism. Culture and tourism are considered to be inseparable elements of a far-sighted tourism development strategy for these territories. This starts with the needs and requirements expressed by tourists, to be met by a network and ideally a system involving not only coastal but also inland areas.

4. The Quality Network for Sustainable Tourism – QNeST project

EUSAIR’s objectives coincide with those of the Quality Network for Sustainable Tourism – QNeST project (ADRION Programme: Axis II SO 2.1 of the EU), which seeks to fulfil the potential of selected coastal regions of the Adriatic-Ionian Region of the Eastern Mediterranean by promoting sustainable quality tourism based on cultural routes and itineraries. The project includes three research bodies, three local agencies and one Chamber of Commerce based in six partner countries (Croatia, Greece, Italy, Montenegro and Slovenia), together with five associated stakeholders (see figure 1).



Figure 1. Stakeholders involved in the QNeST project. Source: our presentation.

The project sought to make the most of the historical, architectural, cultural and environmental heritage, traditions, local food and wine and the Mediterranean diet, guaranteeing accessibility to the weaker sections of the population in some areas of the Adriatic-Ionian region. QNeST is a project whose epistemological and ethical basis is a holistic and systemic vision of the human being, society and nature. It aims to promote a new culture and to exchange views with organisations and individuals working professionally in the fields of education and common values such as respect for the differently abled, constructive management of relations, sustainability and eco-compatibility, ethical economics, methods and techniques for raising awareness and the harmonious development of human potential. The focus is the development of the Adriatic-Ionian regions, which could represent a good model of participatory planning in which public and private sectors work together to build a “network” of tourist attractions and create a quality tourism brand that functions as the unifying, integrated and functional core of an articulated and compact regional system, competitive in terms of tourism and economy. The quality label is attributed to a variety of stakeholders and economic operators active in the territory, in accordance with well-defined quality parameters for the purpose of developing sustainable quality tourism. QNeST aims to revive and consolidate the centuries-old historical and cultural relationship between

the various territories involved, advancing new opportunities for dialogue and interregional cultural and socio-economic cooperation. Potentially, this entails the establishment of links between European countries and non-European countries in the Mediterranean that avoid rigid oppositions between cultures and religions, but produce opportunities for contact and exchange. Ideally, this will activate useful cooperation in the implementation of projects and integrated knowledge in the above-mentioned fields of interest.

Capitalising on past project experiences, QNeST has identified possible links with itineraries already included in the UNESCO list, such as UNESCO's *Intangible Cultural Heritage Art of Building Dry Stone Walls* itinerary, or recognised by the Council of Europe, such as *Olive Oil Trees*, *Iter Vitis* and the *Via Francigena*, which retrace ancient cultural and commercial routes. Following the journeys of trade, faith and adventure, which link the Mediterranean peoples in terms of cultural and economic experiences, the QNeST itineraries prompt Europe to recover a thousand-year-old cultural and economic connection with the countries of the Mediterranean, in which one may recognise a common European identity, and to renew and/or strengthen cooperation with those peoples while respecting the variety of characteristics and regional diversity.

In order to achieve these results, some local routes were created in pilot areas of the different project partner countries, and four thematic routes were shared among them – Water Routes, Stone Routes, Wine and Olive Oil Routes and Merchants, Pilgrims and Maritime Routes. The routes are aimed at promoting sustainable local and transnational tourism, to be practised all year round and extended to inland and peripheral areas. Ideally, this tourism is managed by operators who are attentive to the provision of quality services and environmental sustainability: operators who are able to preserve and exploit the tangible and intangible cultural heritage, with particular reference to traditional craftsmanship and the food and wine sector linked to the Mediterranean Diet (in particular the olive oil and wine sector). They should also be willing to devise innovative approaches to the range of goods and services on offer. They have been given a QNeST (ADRION) brand, with distinct symbols for each area of interest, with a view to building a network of sustainable tourism operators on the Ionian coast in the Eastern Mediterranean (see figure 2).

The creation of an interactive *online project platform* able to offer specific social network tools and thus to improve interactions between various types of

user (operators, citizens, associations, tourists, etc.) by the *Laboratory of Knowledge & Intelligent Computing (KIC), University of Ioannina* was an important step. The platform is able to highlight the most significant aspects of the region, to foster good practices and, by sharing common cultural itineraries, to raise awareness of Adriatic-Ionian identity. Last but not least, it can attract quality tourism. A further development in the promotion of cultural routes and itineraries was the decision to experiment with new digital solutions made available by the *Augmented and Virtual Reality Laboratory of the Department of Engineering for Innovation at the University of the Salento (AVR Lab)*, which made it possible to improve the tourist experience in terms of edutainment (education and entertainment) and to improve the local range of goods and services on offer.

The QNeST project enabled an extensive partnership to create products and services and set up networks and cooperative initiatives in the field of sustainable tourism in the areas affected by the programme. The excellent results made it possible to conceive and structure a follow-up to the project activities aimed at making the most of the project's achievements. Indeed, it entailed the implementation of numerous activities centred on participatory interaction between public and private stakeholders such as local and traditional operators, tourism service providers, craftsmen, experts in the sector, local communities and cultural, social and environmental institutions and associations.

The new QNeST PLUS project envisaged the creation of new itineraries of a cultural nature, naturalistic interest (parks, protected areas, wetlands) and economic value (food and wine itineraries and itineraries linked to the UNESCO Mediterranean Diet). This was in addition to the revival and promo-



Figure 2. Brands created. Source: QNeST Project.

tion of the four itineraries already created and shared by the various partner countries, which constitute cultural heritage to be preserved and promoted in view of their tourist potential. Their management, respecting sustainability and aware of the possibilities that a region can and must offer, is entrusted to the local stakeholders identified by the project, whose impact on local and regional economies is analysed in the various chapters that make up this book.

4. Conclusion

The routes and itineraries created in the regions of the Adriatic-Ionian area as part of the QNeST project and promoted by QNeST PLUS underpin the local relationships that support them and see the network as an effective metaphor.

It is not enough to merely identify and build a route, it is essential to make it attractive, offering those who travel along it a creative and exciting interpretation rich in experiential and emotional values, establishing an empathetic relationship and an effective bond of loyalty with those who live in the area. The work of the local authorities is therefore important, and cannot disregard the presence and involvement of stakeholders and the local community, in line with the logic of effective governance of the route. Their active participation enables a perspective of strategic communication, favouring social dialogue based on the principles of participation, solidarity and responsibility. This involves the local population learning about self-determination and acquiring authority and co-participation in tourism policy-making. Cooperation between a number of stakeholders and the construction of a network of local tourism operators is essential if the demands of travellers are to be met and, ultimately, if a cultural route/itinerary is to be successful. An important role will be played by young people, who are key to the long-term transmission of the project. This will require the intensive implementation of information and communication technologies (ICT) and their adoption by the population in outlying regions.

By focusing on cultural heritage and accessibility and well-being, and by contributing to the creation of sustainable quality tourism, this book, which summarises the fundamental characteristics of the QNeST project and of the regions on the Adriatic and Ionian shores of the Mediterranean, aims to re-

affirm the role of Mare Nostrum: a sea that can truly bring together its two shores and the people who live and work around it, while respecting its glorious history and the value of its cultural heritage.

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Environment and Sustainability as Related to Cultural Routes and Trails

by Tomasz Duda

1. Introduction

Thematic cultural routes have been for many years an integral part of Europe's tourist space and cultural landscape (e.g.: Zabbini 2012; Shishmanova 2015; Vana, Malaescu 2016; Trono, Oliva 2017 etc.). They are not only an organized form of heritage protection, but also shape regional awareness and increase the importance and attractiveness of the area in the context of tourism. Their functioning in public space is often perceived as a sign of social and administrative maturity in shaping the image of the region. To a large extent it is visible, among others, in activities aimed at the development of cultural tourism in the region as a leading or alternative form of regional education, addressed both to residents and incoming tourists. Regional cultural tourism based on the resources of local heritage and attractiveness of the landscape largely translates into the economy and economic attractiveness of the region. Culture and elements of heritage (historical and natural) in a region often remain the only enclaves of authenticity, contributing building its image and preserving its own identity (e.g.: Richards 2010; Chhabra 2019). One of the basic determinants of the functioning of thematic routes and other cultural regional routes is their authenticity, uniqueness and perfect coexistence with the surrounding landscape (Duda 2018a). The importance of the natural environment and its role as a factor responsible for shaping the cultural landscape and tourist space of the region has been the subject of scientific discussion for many years and is widely described in the world literature on the subject.

To ensure that cultural tourism is developed in an environmentally, economically and socially sustainable way, adequate management and monitoring have to be established, which should follow the principles of sustainable use

of resources in a way or at a rate that does not lead to the long-term decline of natural or cultural diversity, maintaining their potential to meet the needs and aspirations of present and future generations. It means heading for long-term profitability through creation of innovative, attractive and diverse quality products as a key factor for the economic growth of the region.

2. Cultural Routes and Trails as a part of sustainable environment and tourist space

Thematic cultural routes have become a permanent feature in the tourist space, regardless of latitude, culture or language. They are a visible reflection not only of trends or fashions in contemporary tourism and promotional activities of regions, but above all of the acceptance of one's own identity, tradition and heritage, as well as the need to protect it. Cultural heritage objects, next to nature and infrastructure, are an integral component of tourism space, understood as a part of the generally perceived geographic space where tourism takes place. Their presence, however, requires not only a precise identification of the space, but also a precise definition of the leading theme and subject of tourist penetration. Cultural heritage routes, thanks to a kind of symbiosis with the surrounding natural and social environment, expand the meaning and increase the "value" of the tourist space of the region, contributing to its partial competitiveness (Richards, Hall 2000; Nagy 2012). The development of thematic cultural-tourist routes is also a sign of the progressive transformation from consumer to participatory tourism, where the quality and diversity of cultural heritage and landscapes constitute a shared resource and enhance the attractiveness of lesser-known places. Involvement of local communities, considering their expectations and development needs, as well as identification and protection of interdependencies of the regional cultural heritage with environmental conditions shaping the tourist space, are elements of well understood sustainable development within the thematic route or trail. According to these factors, a well-developed cultural route can have multiple functions in environmental space (Duda 2018b) including:

- *integrative function*: allows to define the regional tourist space as an area attractive due to the specific and unique object of the trail as well as to

- focus activities and interests of local communities to support and shape the trail as a product protecting their heritage;
- *creative function*: consisting in shaping the tourist penetration space of the region, creating possibilities for development of infrastructure and information and promotion systems based on the authentic resource of environmental elements, as well as entire packages of the tourist offer allowing for narrative experience of not only individual elements of the trail, but also its entire character together with the natural and cultural landscape in surroundings;
 - *social function*: manifested by an increased interest in regional history, landscape, nature, culture or traditions among the inhabitants of the region, which translates into the identification of one's own identity and an increased awareness of regional distinctiveness, a sense of pride and the need to protect and appropriately shape the heritage possessed;
 - *historical function*: allows to preserve and protect its own historical heritage. It contributes very often to highlighting events, personalities or periods in history important for the region, previously undervalued or forgotten. Thanks to an appropriate narration it is also possible to perceive and understand dependencies between historical significance of a destination and natural factors determining directions and speed of cultural development;
 - *educational function*: to create a narrative form of trail use, using the potential of all objects on the trail as well as social and cultural resources for didactic purposes. Thematic heritage trail should in a coherent and multilayered way (accessible to various types of recipients) lead a story according to its theme, transferring the user from one object to another and presenting the educational values contained in them. It should also take into account the needs and expectations of local communities, which are not only heirs to the heritage, but also co-create the contemporary cultural landscape of the place; the educational function should include a sensitive perception of the destination, taking into account the regional or local point of view and interests;
 - *economic function*: heritage trails should be built and shaped also in the context of a new tourism product, of course in cooperation not only with regional self-governments, but above all with the inhabitants of the

region as well as with many economic actors and micro-entrepreneurs in order to use the potential of the topic for sustainable economic development of the region;

- *function of diversifying tourist traffic in space*: introduction of a thematic cultural route to the space may contribute to diversification of tourist traffic orientation and reduction of its current stream. Such activities also contribute to diversification of the tourist offer of the region, thus increasing its attractiveness; this function especially considers the role of conscious planning of tourist activities along the trail – it relieves congested spaces (or objects), contributing to balanced distribution of tourist use of the trail. It is also an element of conscious space management, in which sensitive use of naturally valuable areas should be particularly important in shaping the tourist offer of the trail based on elements of the natural and cultural heritage of the region.

However, despite many activities aimed at harmonious and balanced development of the tourist route space, the contemporary tourist activity is characterized by very strong consumption and poorly controlled exploitation of resources (e.g.: Kalvet *et al.* 2020; Graf, Popescu 2016; Flognfeldt 2005). In such an understanding of the world, cultural and natural resources have also become an object of trade and an element of intensive tourist colonization. On the other hand, the way of perceiving the attractiveness of tourist space is changing, exposing the needs for individualization, active rest, experiencing the landscape and education. There is therefore a need to develop a tourism exploration space, where the dominant role is played by an intact or poorly transformed natural environment and the balance between it and human socio-economic activity (Duda 2018b). As indicated by Mihalič (2000), tourism managers are, among others, willing to incorporate environmental measures into current strategies and methods if this results in reduced costs or increased revenues and profits. The environmental quality of a destination is one of the most important issues in travel decisions, regardless of the nature of the trip. The environmental debate on tourism most often recognizes the negative impact of the tourism industry on the environment. In a narrower sense, the term environment refers to the physical environment, which includes natural and man-made elements. In a broader sense, the social and cultural environment has been also considered (e.g. Inskeep

1991; Mathieson, Wall 1996). In the context of cultural routes, a broad view of space is not subject to any discussion. They combine elements of the natural environment with historical, social and cultural elements, often developed under their influence. Natural values such as beautiful landscapes, natural hydrological structures, clean water, fresh air and species diversity constitute in many cases determinants of the socio-cultural development of the communities living there. The whole thus understood, has developed over the centuries a unique image of the cultural landscape, which forms the basis of the thematic cultural (or heritage) trail offer. The quality of this multi-faceted environment is therefore an integral part of the tourist attraction of the whole route. Maintaining a high level of its overall quality has been important for the competitiveness of most of the sites and objects along the trail.

Cultural tourism (including cultural routes and trails), when managed sustainably, can significantly contribute to strengthen the local communities, stimulating ideas for new strategies and concepts of local and regional management and planning. To better exploit tourism potential positive impacts and to minimize the negative environmental and social impacts as far as possible, the planning and the implementation should be tailor-made, with respect of the region's specificity as well as of the local (regional) communities, their traditions and economic condition. Furthermore, it is of paramount importance to guarantee that the use of natural and cultural resources for boosting economic profit does not translate in their deterioration or destruction. To ensure that cultural tourism is developed in an environmentally, economically and socially sustainable way, adequate management and monitoring have to be established, which should follow the principles of sustainable use of resources in a way or at a rate that does not lead to the long-term decline of natural or cultural diversity, maintaining their potential to meet the needs and aspirations of present and future generations (Duda 2019).

3. Natural and social environments on cultural routes – a sensitive coexistence

Cultural and natural sensitivity, participation, sustainable development, or social responsibility are keywords that perfectly describe the contemporary per-

ception of cultural tourism and the related cultural routes. They are among the most desirable elements in creating, shaping and managing the cultural tourism space, both on a global, regional and even local scale. They are also indicators of the contemporary development of tourism, which, in contrast to mass, rather archaic passive tourism, relies heavily on the individualization and personalization of offers and the involvement of both their creators and recipients. One of the greatest challenges for contemporary cultural tourism is therefore the creation of new brand products based on sustainable features, considering the heritage of the local community and the natural environment (Głabiński Duda 2017). The relationship between natural and cultural elements seems to be very delicate and all activities should respect not only the natural environment, but also local traditions, social development and the interconnection and interdependence between them. Good practices for sustainable tourism should be considered when designing products – avoiding negative impacts of transport, processing and selling local traditional food and drinks, nature-oriented design, responding to ancient architectural and clothing traditions, etc. (Duda 2019).

Each trail, even if insignificant for tourism, is placed in a specific geographical space, which is described by the surrounding landscape, natural values, cultural or historical elements, as well as the communities living there. The cultural heritage of a region is therefore influenced not only by traces of the past (tangible or intangible), but also by the contemporary cultural, social and natural environment, which continuously shapes its uniqueness and timeless value. The natural environment acquires particular importance in this case, which in many cases even determines the development of the cultural landscape and the preservation of heritage elements. Thematic cultural routes, regardless of cultural conditions, build their attractiveness and uniqueness in the context of a specific landscape and geographical reality (Duda 2019). In a special way, the relationship between the natural environment and the heritage it shapes is visible in several types of thematic routes important from the point of view of tourism:

- *natural and cultural heritage routes* (e.g. Olive Tree Route, European Cemetery Route, Megalithic Culture Route, local cultural routes and trails related to park layouts, botanical gardens, etc.) – natural elements are here the main or one of the main determinants of routes' creation and development. Preservation and protection of natural elements, not only

strictly connected with the route, belongs to the most important directions of sustainable management and creation of sustainable tourism products. Natural elements use also as a factor conditioning the existence and functioning of local societies, whose development and activity depend on natural conditions (e.g.: Olive Tree Route and traditions of their cultivation, production and sale);

- *gastronomy and wine (enotourism) routes* (e.g. Iter Vitis, the Danube Wine Route, Rota do Vinho do Porto, regional wine routes in Italy, Spain, Portugal, France, Hungary or even in northern Poland). The relationship between climate and soil conditions and the operation of vineyards and entire wine regions is particularly evident in the context of small-scale, regional and local wine routes. It is the complex of natural, landscape and climatic features called terroir that is responsible for the success of wine-growing and the character of the wine produced. It is a very delicate ecosystem, the preservation and proper care of which are among the greatest challenges for sustainable tourism on cultural routes in general. Even small changes can contribute to the development or disappearance of the taste value and uniqueness of the wine created in a particular terroir. Hall (2002) noted that wine is now one of the few commodities that already have names that take into account the geographical place of origin. Thus, there is a strong relationship between the distribution of wine-growing areas and the development of wine tourism in them, which in turn influences the development of the local economy and sustaining the inhabitants' awareness of cultural distinctiveness and tradition. An excellent example of building a brand in the context of regional wine traditions and links between nature and culture is the slogan appearing on wine routes in Spanish Catalonia – “Catalunya, on el vi és cultura” (Catalonia, where wine is culture);
- *sacred and religious heritage routes* (Way of St James, Way of St Olaf in Scandinavia, Via Francigena, Trail in the footsteps of St Paul, Sacri Monti in Italy, the route to Montserrat in Spain, etc.). Pilgrimage to sacred places, the creation and development of places of worship and other religious activities have for centuries been based on natural resources, according to the principle of every faith – the closer to nature, the closer to its Creator (Duda, Doburzyński 2019). Religious heritage sites and places

therefore show strong links with the surrounding natural landscape, and their importance for the community is much more due to divine intervention than human activity. In the literature on religious tourism and pilgrimage routes, even the term ‘spiritual sustainability’ has appeared (Aulet, Duda 2020) denoting the degree of involvement of the religious community in the development and preservation of the genius loci of places of spiritual and religious significance.

The above-mentioned relationship between the natural environment and cultural heritage is one of the most important relationships that determine the development of thematic cultural routes in Europe and beyond. Considering the massive growth of tourism, dynamically increasing after almost two years of stagnation caused by the Covid-19 pandemic, the sustainable approach to cultural tourism becomes a huge challenge not only for the contemporary industry and people responsible for shaping tourism products (which undoubtedly are the cultural routes), but also for local communities and depositors of regional heritage. An extremely important problem becomes also a skillful and balanced use of cultural and natural resources of individual places on the trail, so that they really represent the authentic heritage and do not become a mere “tourist trap”, only in the nature of questionable ornamentation on an existing trail.

In recent years there has been a rather strong trend of conscious tourism that considers the needs and expectations of local communities and does not have a negative impact on the surrounding natural environment – sensitive tourism (e.g.: Muller, DeBernardi 2020, Kugapi *et al.* 2020, Wallace, Russell 2004, etc.). Examples from Scandinavia, also in the context of cultural trails, show the enormous changes that have taken place in recent years in the perception of Arctic areas as ecological and fully sustainable cultural tourism spaces. The very idea of sensitive tourism can perfectly apply to cultural trails, which to a large extent combine elements of cultural landscape, heritage and surrounding natural resources.

4. Conclusions

The idea of sustainable tourism is implemented in cultural routes in a multifaceted way. As systems representing elements of regional cultural and natural

heritage, they are conditioned by numerous historical, cultural and geographical links to the area in which they occur. The development of cultural routes is determined by environmental factors shaping their character, theme and authenticity. This concerns not only the natural environment conditions, but also the socio-cultural environment, which to a large extent constitutes the core of the tourist product of the entire trail. These interrelationships of conditions contribute to its attractiveness, understood as an authentic and sustainable tourism experience. In addition to the involvement of local communities and the sensitive use of their cultural heritage resources, it is the natural resources and their importance in the cultural process of the region that shape the perception of the trail as a counterpart of a unique theme and a dominant feature of the cultural tourism space. Permanent monitoring of the state of the environment, its protection and adaptation for the needs of sustainable tourism in the region are the biggest challenge in tourism management and planning strategies today.

In conclusion, it is worth noting that the elements of the natural environment, alongside similar ones related to cultural and social resources, constitute an essential component of each cultural trail. It is an integral element of a branded product of heritage tourism, the importance of which is difficult to overestimate. It also has aesthetic functions (as an element of the landscape), educational – not only in the context of ecotourism and nature tourism, but also the importance for the formation of cultural resources, and recreational and leisure functions. Finally, it is also an element enhancing the perception of the trail itself, contributing to its attractiveness, also from the point of view of interpretation and visual issues.

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European Union, regional strategies and participatory planning for a quality tourism in the Adriatic Ionian Regions

by Constanze Metzger

Transnational heritage routes have become a popular concept. While this concept was traditionally used for pilgrimage as a niche-product, it has become an innovative format in the field of heritage protection, tourism development and transnational cooperation. However, it is particularly complex to sustainably manage heritage that is located in different countries.

Today, different heritage routes or networks of heritage places cross the Adriatic and Ionian Region (Croatia, Greece, Italy, Slovenia, Albania, Bosnia and Herzegovina, Montenegro and Serbia). Not all initiatives are called “routes” but they share the objective of linking heritage components under a joint umbrella.

Travelers search for authentic cultural experiences on cultural routes. (Majdoub 2011) The routes offer a «type of tourism activity in which the visitor’s essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions products in a tourism destination» (World Tourism Organization 2019). Their activities invite the traveler to consume culture as part of the travel experience and to get to know different cultures through cultural tourism (McKercher, du Cros 2002).

Cultural tourism has shifted its traditional focus from the great arts and classic monuments to a more holistic and inclusive representation of different expressions of culture. It has become a widespread form of tourism, based on a wide network of structures and services and representing an important economic factor for development (Robinson, Picard 2006). It is estimated that an increase of a million Euro investment in cultural heritage can be equated with one thousand more cultural visitors in the region (Guccio, Lisi, Mignosa, Rizzo 2018).

With the growing number of tourists at popular cultural places and during the season, the conservation of heritage places can be at risk. (Council of Europe 2020) «Among the detected challenges in the development of cultural tourism in the Adriatic-Ionian Region, the most significant one would be the uneven distribution of tourism flows through time (high seasonality) and space of EUSAIR» (Klaric 2019).

This makes it all the more necessary that cultural tourism is managed in a sustainable way, through diversified multi-destination products and offers as well as awareness-raising for the protection of tangible and intangible heritage (UNESCO 2006). Sustainable cultural tourism also requires strong cooperation between professionals from the two fields, culture and tourism (Du Cros 2003). Heritage routes are often managed by cultural experts and lack cooperation with the tourism sector, thus a «Cultural Route needs to co-operate better with tourist agencies and tour operators» (Keca 2000).

In the following, two forms for routes or shared heritage networks are analyzed. From an international lens, “Stećci Medieval Tombstone Graveyards” are a serial World Heritage property to protect the medieval heritage in the Adriatic and Ionian Region. They combine heritage linked to tombstones of four countries. From a European lens, “The Iter Vitis Routes” are a Cultural Route of the Council of Europe to protect the heritage of viticulture. The route received support to develop green tourism offers and services in line with the objectives of the EU Strategy for the Adriatic and Ionian Region (EUSAIR) to strengthen sustainable tourism. The two programmes are chosen to provide an overview of strengths, weaknesses, opportunities and threats of international as well as European initiatives on heritage routes or networks.

1. Serial World Heritage Sites of UNESCO: Transnational heritage networks

The World Heritage Convention was adopted on 16 November 1972 to respond to the increasing need for the conservation of natural and cultural heritage (Labadri 2013). Its founders created an international conservation system as a sort of Red Cross to save the most outstanding heritage places in the world for future generations. Heritage under national legislation was considered as a property of

mankind and thus put under international responsibilities: «parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole» (UNESCO 1972).

World Heritage properties inscribed on the World Heritage properties have to be outstanding and universal in their value, leading to a highly selective list of sites (Cameron, Rössler 2013). It is due to this prestigious list that World Heritage sites receive international attention and attract millions of visitors. (Buckley 2018; Van der Aa 2005). They have become the most popular tourism destination, representing both a blessing and a curse since tourism at World Heritage Sites has become «a wholly unexpected development with far-reaching consequences» (UNESCO 2014).

An inscription as a World Heritage site requires the highest level of national protection as well as the establishment of sustainable tourism infrastructure and offers. World Heritage sites are requested to implement a management plan, monitor the conservation status and inform about it through periodic reporting.

However, the increasing number of State of Conservation reports reveals serious sustainability issues of World Heritage sites. The enormous success as travel destinations and generators of revenue has led to the politicized inscriptions of sites with weak management structures. «Predatory states would have their agendas supported through various channels, whether lobbying, coercion or financial incentives» (Meskell 2018).

2. Serial World Heritage sites at the World Heritage Convention

The Convention did not include “routes” in the statutory documents since heritage was defined in a traditional way as monuments, groups of buildings as well as sites or natural features, geological, physiographical formations and natural sites (UNESCO 1972; Feilden, Jokilehto 1998). However, the concept of heritage components grouped under a common theme found its way in the Operational Guidelines under a different terminology: At the third session of the World Heritage Committee, this concept of serial World Heritage properties, corresponding to the idea of connected heritage elements, was discussed and inscribed in the Operational Guidelines as «a series of cultural properties in different geographical locations» (UNESCO 1980).

18 years later, the World Heritage Committee discussed more detailed guidelines on the management of serial World Heritage properties to encourage and support the Member States to nominate this type of property. In recent years, the nomination of transnational serial properties has significantly increased, also because it is not counted on the maximum number of one nomination for those States Party that are already represented on the World Heritage list. (UNESCO 2019) Most transnational serial nominations are located in Europe, reflecting the historic development of Europe with its shared history and heritage.

3. World Heritage in the Adriatic and Ionian Region

The Adriatic and Ionian Region is one of the best-represented regions on the World Heritage list. As of January 2021, 86 World Heritage sites of the Adriatic and Ionian Region are inscribed on the World Heritage list (UNESCO 2021). More than half of these sites, 55 properties, are situated in Italy whereas Slovenia, Albania, Bosnia and Herzegovina, Montenegro and Serbia have on average four World Heritage sites inscribed on the World Heritage list. The Global Strategy for a Representative, Balanced and Credible World Heritage List addresses this geographical imbalance and the missing presence of World Heritage properties in Eastern Europe. (UNESCO 1994).

With a look at the serial World Heritage properties in the Adriatic and Ionian Region, 39 transboundary serial World Heritage properties are inscribed from a total of 1121 World Heritage sites. This corresponds to 3,5% on the World Heritage List.

In the Adriatic and Ionian Region, only three serial properties with three or more Adriatic and Ionian countries have been inscribed: Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe (Albania, Austria, Belgium, Bulgaria, Croatia, Germany, Italy, Romania, Slovakia, Slovenia, Spain, Ukraine), Venetian Works of Defence between the 16th and 17th Centuries: Stato da Terra – Western Stato da Mar (Croatia, Italy, Montenegro) and Stećci Medieval Tombstone Graveyards (Bosnia and Herzegovina, Croatia, Montenegro, Serbia).

Serial World Heritage sites remain an exception rather than a rule in the Adriatic and Ionian Region. This might be explained by the complexity of the

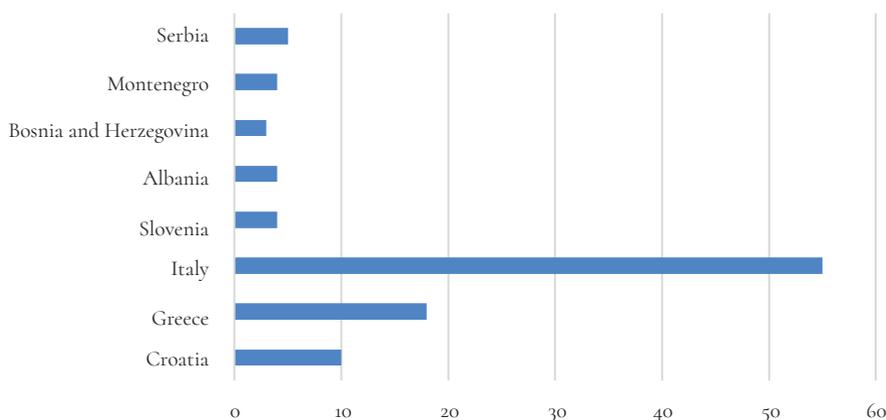


Figure 1. *World Heritage sites in the Adriatic and Ionian Region.* Source: C. Metzger.

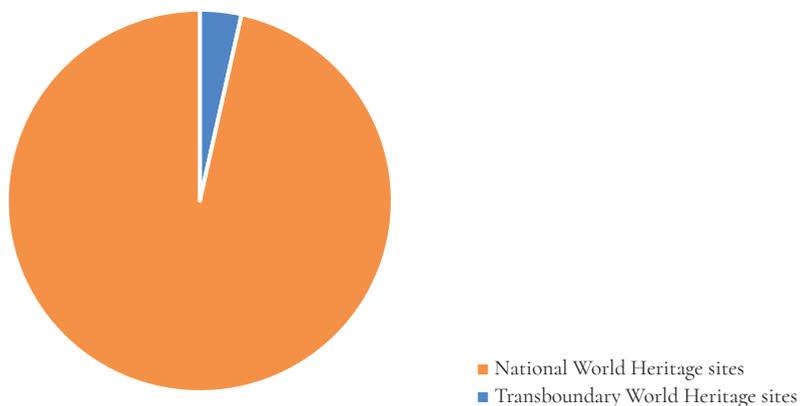


Figure 2. *World Heritage sites.* Source: C. Metzger.

management of this form of inscription that includes vast geographical areas and demanding structures. (Bailey, Amore 2019) It includes «cultural and language differences, different legal frameworks and financing structures, and also different ways of communicating the site's outstanding universal value» (Bernecker 2016).

4. Case Study: Stećci Medieval Tombstone Graveyards

In 2009, Bosnia and Herzegovina, Croatia, Montenegro and Serbia received upstream support from the UNESCO Regional Office in Venice. The office launched an initiative “Cultural heritage – a bridge to the common future” to prepare the Joint Nomination of Medieval Tombstones – Stećci. It was not only an important step towards enhanced heritage protection of tombstones (stećci) but symbolic political cooperation between the four former Yugoslav republics that had interrupted their cultural cooperation after the collapse of the Republic of Yugoslavia in 1990 (Kurtivic, Zivaljevic Luxor 2018).

In 2015, the four States Parties nominated “Stećci Medieval Tombstone Graveyards” with a core zone of 49,15 ha, containing more than 70,000 stećci at 3300 sites in four countries (UNESCO 2016). The nominating States Parties provided an in-depth risk analysis, taking into account factors such as infrastructure pressure, holiday home development and increased visitation.

In 2016, Stećci Medieval Tombstone Graveyards were inscribed on the World Heritage List with an overall commendation for the successful transnational cooperation of the four States Parties. The importance of the inscription as a symbol of peaceful cooperation to bridge political, religious and geographical gaps was emphasized (UNESCO 2016).

The national authorities of the four countries established an international Coordination Body with representatives from each State Party to ensure the joint coordination of the property, including through the development of coordinated standards and a common management approach. However, no joint secretariat for the management with joint programmes and budget was established. The daily management and further development of the stećci remained under the national responsibility and developed in different paces.

After the inscription, the awareness of the stećci reached broad international recognition and the protection of the stećci was granted the highest national level. Local awareness for the value and conservation of the stećci remained limited though (ICOMOS 2015). Hence, the Advisory Body ICOMOS recommended strengthening the management system through the involvement of the local communities in the maintenance of the heritage (ICOMOS 2016).

With regards to tourism development, the World Heritage Committee, in its decision 40 COM 8B.24, requested «developing and implementing monitoring indicators that include the impacts of development and tourism» (UNESCO 2016). After the inscription, tourism numbers remained low. Mostly the Croatian components close to tourist resorts on the Dalmatian coast and in popular winter sports locations were more visited by travelers. The majority of stećci in remote areas continued to lack good access and tourism infrastructure. The expectations of local authorities that local tourism would increase after the inscription could not be met (UNESCO 2018).

The World Heritage property remained on constant monitoring, issuing annual state of conservation reports in 2017, 2018, 2019 and 2020 (UNESCO 2021). According to the latest report on the state of conservation, tourism was further developed through monitoring indicators to assess the impact of development and tourism.

The conservation reports show that even though the number of travelers of tourists has grown, none of the stećci has become subject to tourism pressure. The responsible entities have made efforts to further develop sustainable tourism offers on a national level, however, no transnational tourism strategy is implemented (Bosnia and Herzegovina 2019).

It becomes evident that the conservation and promotion of the stećci could be further strengthened by enhanced transnational management through a joint secretariat, a joint budget and programme. This would represent an enhanced approach to present and protect the heritage located in different countries. As of today, the daily management is ensured on a national level, leading to discrepancies with regards to the development of visitors' facilities, communication tools and tourism offers.

Through joint efforts and resources, the sites could also further control the flow of travelers among the different component parts (Ona 2015). The better-known components could attract travelers and lead them to the less-known and “hidden” in a coherent and coordinated transnational tourism strategy. Resources could be channeled towards those components in need of further development. Since transnational serial nominations foster cooperation beyond national borders, they offer a particular potential for knowledge sharing and sustainable tourism management.

5. Cultural Routes of the Council of Europe: Transnational itineraries

In 1987, the Council of Europe launched the Cultural Routes programme with the Santiago de Compostela Declaration to «travel along these routes in order to build a society founded on tolerance, respect for others, freedom and solidarity» (Council of Europe 1987).

No concrete criteria for the certification and implementation of Cultural Routes were established. In 2013, the programme finally introduced a definition of a Cultural Route as «a cultural, educational heritage and tourism co-operation project aiming at the development and promotion of an itinerary or a series of itineraries based on a historic route, a cultural concept, figure or phenomenon» (Council of Europe 2013). Five fields of work were defined, namely cultural tourism and sustainable cultural development; enhancement of memory, history and European heritage; contemporary cultural and artistic practice; cooperation in research and development as well as cultural and educational exchanges for young Europeans.

With the Enlarged Partial Agreement on Cultural Routes (EPA), the programme was no longer funded under the regular budget of the Council of Europe but through contributions of members to the EPA (Council of Europe 2013). It remains a weakness of the programme that those financial contributions are largely spent on administrative costs of the EPA secretariat. None of the financial contributions of the 34 Member States to the EPA is directly provided to Cultural Routes networks, for example in form of an emergency fund for Cultural Routes in need (Council of Europe 2018). The weak tourism development and the limited number of activities on the sustainability of some Cultural Routes can be linked to this lack of resources.

6. Cultural Routes in the Adriatic and Ionian Region

37 Cultural Routes of the Council of Europe cross the Adriatic and Ionian Region. While 27 Cultural Routes are present in Italy, only one is represented in Montenegro and Bosnia and Herzegovina. Routes are well implemented in geographical areas with an existing, strong cultural and tourism infrastructure.

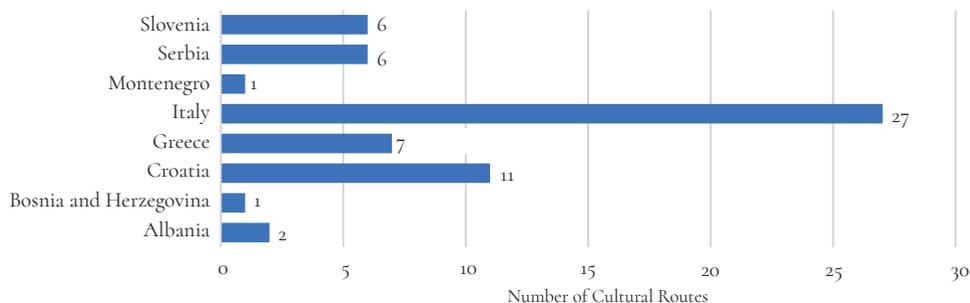


Figure 3. Cultural Routes in the Adriatic and Ionian Region. Source: C. Metzger.

The geographical imbalance becomes even more apparent when analyzing the distribution of Cultural Routes' members in the Adriatic and Ionian Region. Those members are in charge of the daily implementation of the Cultural Route and represent the network in the different countries. The analysis reveals that 240 Cultural Routes' members out of a total of 290 Adriatic and Ionian members are located in Italy. This equals to 70% of presence of Cultural Routes' members in one single country of the Adriatic and Ionian Region.

The members of the five Cultural Routes with the strongest membership in the Adriatic Ionian are also mainly located in Italy: Via Romea Germanica (35 members in Italy), Roman Emperors and Danube Wine Route (46 members in Italy and Croatia), Iter Vitis Route (28 members in Croatia, Greece, Italy and Montenegro), Phoenicians Route (33 members in Croatia, Greece and Italy) and Via Francigena (36 members in Italy).

According to a branding survey on Cultural Routes, the awareness of Cultural Routes in the Adriatic and Ionian Region is low due to lack of marketing and branding (Zouni 2019). However, there are some strong Cultural Routes networks that benefit from visibility and can ensure sustainable tourism in the Adriatic and Ionian Region (Klaric 2019).

7. Linking Cultural Routes and the EU Strategy for the Adriatic and Ionian Region (EUSAIR): Iter Vitis Route

In 2009, the Council of Europe certified the "Iter Vitis Route" as a Cultural Route to promote vine, winemaking and viticultural landscapes. It is a transnational

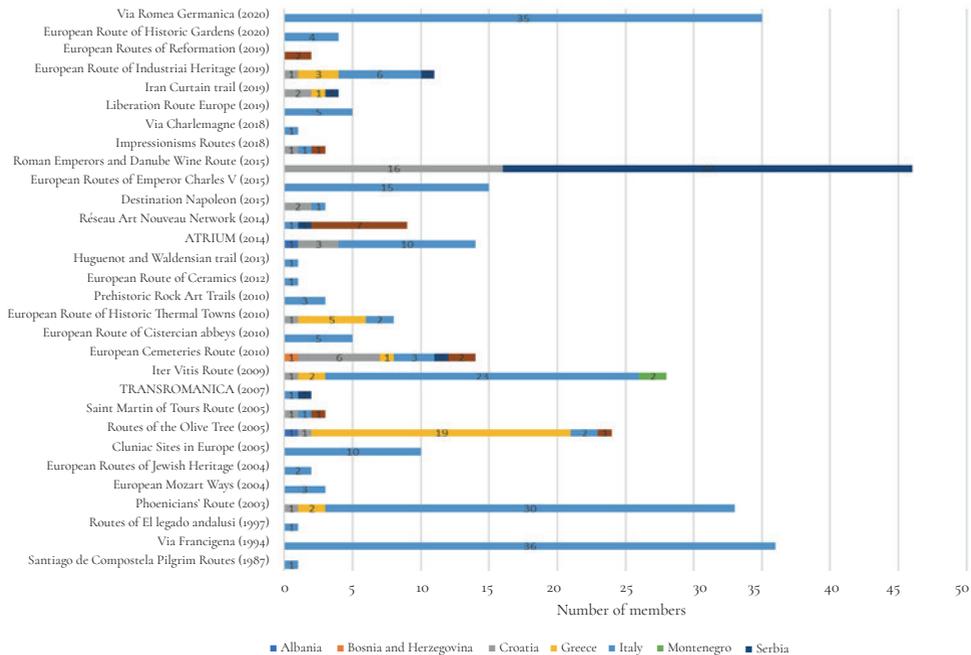


Figure 4. *Cultural Routes members for country.* Source: C. Metzger.

network with members located in 20 countries (Armenia, Azerbaijan, Croatia, Cyprus, France, Georgia, Greece, Israel, Italy, Luxembourg, Montenegro, Portugal, Republic of Moldova, Republic of North Macedonia, Romania, Russian Federation, Slovenia, Spain, Tunisia, United Kingdom) (Council of Europe 2021).

The Iter Vitis Route is well represented in the Adriatic and Ionian Region. Membership exists as an ordinary member in form of municipalities, regions and provinces. Extraordinary members are companies in the wine-making, local wine roads as well as wine shops and private museums. Honorary members are universities and cultural organizations.

The European Federation “Iter Vitis” is a non-profit organization that coordinates the management of the Route. An Executive Committee and a General Assembly are involved in the financial and strategic planning.

The federation was involved in the selection of the winners of the “Destination of Sustainable Cultural Tourism’ Awards”. Iter Vitis promotes the wine regions by organizing tours with cultural activities around wine (Iter Vitis

2021). Iter Viti's activities also include the annual awarding of a European Iter Vitis award.

The network plans further experimental tourism in the Adriatic and Ionian Region. Tours by horse, bike or on foot through the rural landscape will be linked to craft classes, photographic courses, cooking classes, wine tasting. These activities are generally implemented on a national level, for example, there is the "Iter Vitis France" association that promotes the wine-making landscapes in France through a separate webpage and a whole separate programme.

8. Iter Vitis Route and the EU Strategy for the Adriatic and Ionian Region (EUSAIR)

Iter Vitis Route profited from synergies with the macro-regional Strategy for the Adriatic and Ionian Region (EUSAIR). The strategy outlines the priorities for the cooperation of Croatia, Greece, Italy, Slovenia, Albania, Bosnia and Herzegovina, Montenegro and Serbia. The following four pillars are defined: Blue Growth, connecting the region, environmental quality reduction of sea and air pollution and sustainable tourism (European Commission 2014).

The pillar on sustainable tourism defines two main areas of work: Diversified tourism offers (products and services) and sustainable and responsible tourism management (innovation and quality). Sustainable tourism in the Adriatic and Ionian Region should be achieved by using the unexploited tourism potential of the region, reducing seasonality and addressing mass tourism. (Metzger 2020) Tourism offers in the Adriatic and Ionian Region should be improved and diversified and common standards and rules should be established to ensure sustainable tourism. The creative and cultural industries, as well as cultural entrepreneurship are mentioned as the actors to create innovative, creative and diverse tourism offers and services. The EUSAIR Action Plan states that «the full potential of the Region's rich natural, cultural, historic and archaeological heritage is not yet exploited in a sustainable and responsible way» (European Commission 2014).

In line with the EUSAIR-objectives, a Joint Programme of the Council of Europe and the European Union, Routes4U, was launched to contribute to sustainable tourism in the Adriatic and Ionian Region (Council of Europe 2018). The

Iter Vitis Route benefited from a Routes4U-grant to develop a touristic guide *Travel Experience: Adriatic and Balcans*. The guide was developed as a cross-border tourism promotional tool to increase the attractiveness of sites. Innovative tourism offers were developed and points of interest were identified in cooperation with local communities. A database was created including information on hospitality and wine-related events. Local tourist service providers were involved in the development of the branded products and services. The guide proposes different wine tours, among other things in Croatia, Slovenia, Montenegro, Bosnia and Herzegovina and Serbia (Council of Europe 2018; Iter Vitis 2020).

Iter Vitis also figures in the digital tourism catalogue *Routes4U Unknown gems worth travelling Europe* to promote sustainable travel (Routes4U 2021). This catalogue is based on the recommendations of marketing experts to brand Cultural Routes in the Adriatic and Ionian Region. Routes4U launched the brand strategy to develop a new “umbrella” brand for cultural tourism, merging the identity of the Adriatic and Ionian Region and the Cultural Routes in order to increase the visibility of the two. It contained an extensive survey with cultural and tourism professionals from the Adriatic and Ionian Region. It also included a swot analysis of the Adriatic and Ionian’s development as a tourism brand and identity. According to the survey, the main challenges in the tourism development of routes in the Adriatic and Ionian Region are overcoming the cultural differences, mitigating the negative effects of climate change, reducing mass tourism, improving access to heritage sites and increasing marketing activities (Council of Europe 2020).

Iter Vitis was also involved in several Routes4U-studies, such as a study on the economic impact of Cultural Routes in the Adriatic and Ionian Region (Metzger 2020). This study contained recommendations on how to strengthen sustainable tourism and heritage protection through Cultural Routes in the Adriatic and Ionian Region, for example through «the establishment of an Adriatic-Ionian Charter to encourage sustainable and responsible tourism practices in the macro-region» (D’Alessandro 2020).

The cooperation in the framework of the EU Strategy for the Adriatic and Ionian Region (EUSAIR) offered an opportunity for capacity-building, network creation and increased visibility in the EU context. This cooperation is of particular value for Cultural Routes of the Council of Europe that have limited resources at their disposal, however, function in line with the EU-objectives on sustainable tourism.

9. Recommendations for sustainable heritage and tourism management

Transnational routes or networks provide the opportunity to better present the diverse and rich heritage of the Adriatic and Ionian Region because they allow displaying different heritage facets that might not be limited to national borders. In this sense, the concept of a route across borders corresponds better to the holistic idea of heritage, because they allow the presentation of different forms of tangible and intangible heritage. Routes have a strong potential for the development of sustainable tourism products and offer in the Adriatic and Ionian Region.

The analyzed international programmes from UNESCO, Council of Europe or European Union are of primordial importance. Through the international recognition of transnational routes or networks, national conservation measures and support for those heritage places can be enhanced. Furthermore, international recognition often opens new funding possibilities that allow better management and conservation: on one side, funding from national, European or international funds. On the other side, revenue arising from an increasing number of tourists. In this context, tourism can play a positive force for the protection of tangible and intangible heritage (ICOMOS 1999).

However, the development of tourism has to ensure a healthy balance between the interest for growing tourism numbers and the needs for heritage conservation and living conditions of local communities (World Tourism Organization 2018). If this balance is disturbed, then the heritage as the main attraction for travelers as well as the experience of the traveler is threatened. This results in fewer visitors and a vicious cycle difficult to break. Only when the conservation of the heritage is ensured, then it can present an important economic source of revenue for local communities. The economic benefits are especially important in remote areas or countries with limited tourism services and infrastructure. Those areas require economic sources of revenue to further foster their tourism infrastructure and conservation methods (European Parliamentary Research Service Blog 2018).

This goes hand in hand with the necessity to involve local communities in tourism activities around the heritage sites to ensure sustainability. Local communities should share responsibilities and benefits: On one side, they should

be aware of the value of the heritage sites and involved in providing diversified and authentic tourism offers. On the other side, local communities should not only tolerate tourism but use the related profit as a beneficial source. Social participation is a must in the sustainable management of heritage routes across the Adriatic and Ionian Region (Council of Europe 2020).

The two programmes, serial World Heritage sites and Cultural Routes of the Council of Europe, differ in their functioning. A World Heritage site requires much more resources for the nomination process that is led by national authorities, while Cultural Routes are much smaller networks proposed by non-governmental organizations. The international recognition and funding for a World Heritage site is undoubtedly greater than for Cultural Routes. Hence, Cultural Routes need further financial support, as it was given for example in the framework of EUSAIR through the Joint Programme Routes4U.

It is this kind of inter-organizational cooperation that should be further developed in a coherent way to ensure sustainable routes in the Adriatic and Ionian Region. Instead of competition, synergies should be increased, strong networks created, experience and data shared. By joining resources and networks, transnational routes and networks can work to protect heritage and develop tourism in the Adriatic and Ionian Region.

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An Innovative ICT platform for Promoting Thematic Routes

by Dimitrios Salmas, George Pachoulas, Giannis Botilias
& Chrysostomos Stylios

1. Introduction

Nowadays, there is an improvement in living conditions and style, the consumption and entertainment styles have changed drastically, and advances in technology have a significant impact on this. Travel has become the most popular form of leisure, and various new touristic types have significantly accelerated the tourism industry's growth, such as long-distance travel and outbound tourism, and it is considered one of the fastest developing sectors in the world (Gao *et al.* 2013). Revenues from the tourism industry contribute significantly to many nations' economic well-being, including both developing and developed countries. Its contribution to the gross domestic and national product has risen over time, as people spend more time relaxing from the hectic corporate life (Beed, Sarkar 2017).

Information Communications Technologies (ICT) advances have greatly influenced tourism effectiveness, efficiency, and productivity gradually or radically through automated concepts. Doing business and corporate marketing through the Internet has become the inevitable part of any financial aspect. Web technology is utilized to help the effectiveness and efficiency of daily business activities, including business people in tourism. Likewise, ICT can be used to increase the number of tourist visits.

The primary reason for high ICT usage in tourism is its intangibility in the touristic product. It contributes to providing illustrations and imageries and helps potential tourists decide. A touristic spot is immovable, but the person needs to visit it to experience the product – it cannot be brought to the person. The third characteristic is uniqueness – not two places are the same. The

information and concept of one place are different from that of a neighboring place. This leads to diversity among the various locations. In addition to this, people tend to cover multiple locations on a single trip and not just visit a single location. This leads to many permutations of the locations, the possibility of alternate routes, the order of visit, mode of transport, accommodation types, and food.

Tourists have an inherent unfamiliarity with the spaces where they will travel. They need meaningful information to make decisions and select the best options. The newest generation of travel guides uses mobile location-based technologies to provide historical and cultural information. According to Hoadjli *et al.* (2017), tourism travel can be divided into three phases: before, during, and phase after. Tourists usually gather data about the place they are about to visit during the “before visit phase,” including accommodation, activities, and user reviews. In the visit phase, tourists mainly gather information about the locations and the hours of operation of the places of interest. After the visit, tourists share their trip either by posting on Social Media or submitting reviews for the places they visited. There is a need to handle an enormous set of data-enabled ICT to influence the tourism travel significantly and hospitality industry in the last decade (Smirnov *et al.* 2014). The convergence of ICT and the tourism industry has been the main factor in the growth and spread of tourism beyond physical borders and accessible to everyone. In this chapter, the authors present the QNeST PLUS application and the thematic routes that follow a travel guide’s design and functionalities, its architecture, and the technologies used to develop it.

2. QNeST PLUS platform

The need for information is more closely linked to the various aspects of any region, which allows the tourism industry to use a wide variety of technologies for the proper use of resources. The importance of the QNeST PLUS platform lies in the cutting-edge technologies used to develop the ICT system, transferring knowledge at different scales and providing users with up-to-date content. The key contributions are the creation of a single cloud-based infrastructure for managing multiple multimedia data published in different applications, the GIS framework for displaying thematic paths, and the design and imple-

mentation of a multi-platform software application using web technologies. The QNeST PLUS platform links network information together so that the visitor can quickly learn about the services and resources of their destination. This pattern follows technological networks, placing the application among economic network structures rather than social ones.

The QNeST PLUS platform provides various thematic routes with recommended Points of Interest (POIs) in the focusing area. The thematic routes promote local business and alternative tourism by providing a complete and unique experience.

The platform facilitates user navigation through user-friendly menus and user information through text, photos, videos, etc. It also enables the user to add ratings and filters based on his/her choices.

QNeST project partners participated in Scouting and Capitalization activities, gathering data from their territories and uploading them into the platform: QNeST PLUS members, landmarks, events, and thematic routes. There is a categorization for members, landmarks, and events; based on the four main drivers, Cultural & Traditional Heritage, Sustainable Environment, Mediterranean diet, Accessibility, and social well-being tourism services. Each driver consists of several sub-drivers, as shown in table 1.

Table 1. QNeST PLUS's main drivers and sub drivers.

Main Driver	Sub-Driver	Logo
Cultural & Traditional Heritage	Immaterial heritage (e.g. cultural, folk tradition)	
	Material heritage (e.g. handicrafts tradition)	
Sustainable Environment	Urban environment	
	Suburban environment	
	Parks and/or similar areas (Natura 2000, ZPS, SIC)	
	Transport/Inter modality	
Mediterranean diet	Energy efficiency	
	Food	
	Beverage	
Accessibility and social well-being tourism services	Diet	
	Accessibility Services	
	Social Well Being	

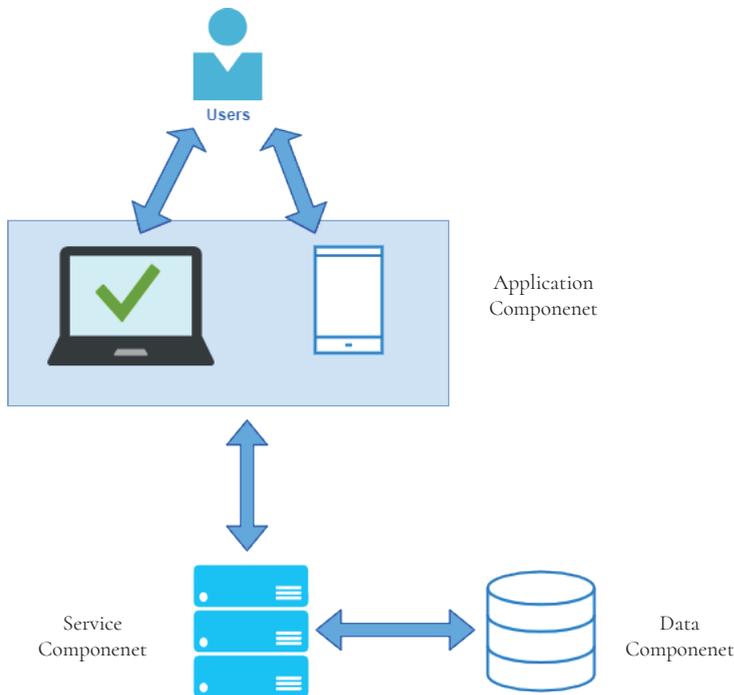


Figure 1. QNeST PLUS Application Architecture.

3. System Architecture

This system consists of three components: an application component, a services component, and a data component. In the process of system development, there are two layers front-end and back-end.

1. Data component. The data component is in the back-end layer together with the service system, is responsible for storing the various data of the system, and provides the essential data to support the whole service system's application.
2. Service component. The service component is the core of the system, including the Web server, which provides the system's network services. The service component is created with the use of RESTful Application

Programming Interface (API) architecture. The API is responsible for the communication between the application component and data component as well as handling and processing the data retrieved from the database before serving them to the application component.

3. Application component. The application component is the only component linked to the users, and the only one that allows the users to interact with the system. The component provides the functionality of the system and is directly serving the users. This component's layout and design are related to user experience, operability, and practicality of the system. To achieve a satisfactory result, the component has been created with a cross-platform approach. The system is available to the users from both the website application as well as the mobile one. In this chapter we will focus on the application component and its features.

4. Platform component

4.1. Main Menu

The main menu of the platform has the following sections:

- Home;
- Routes;
- Events;
- Landmarks;
- Members;
- Profile;
- Login / Register.

The menu has been designed based on the following features:

- Familiar place: The menu is located at the top of the page or on the left in the case of mobile access. These are places where users expect to find UI elements based on what they have seen on other sites or apps.

- Interactive menu: The links in the main menu have interactive features such as shading/ illuminating the current option and lifting effects when the user places the mouse over an option.
- Distinct design: Appropriate design settings (color saturation, colored border space, etc.) provide great visualization and stand out from other elements.
- Desktop application: The menu is located at the top in the form of horizontal lists, and it contains all the options – links to the individual components of the platform. The platform is responsive, and it supports devices of different dimensions, so the menu changes its format automatically.
- Mobile application: The app is available for both Android and iOS devices. In this case, the menu is hidden on the left of the screen, and through a button, it is opened and displayed to the user.

5. QNeST PLUS platform content

The QNeST PLUS platform displays information about routes, events, landmarks and registered members. The information for each of these modules is

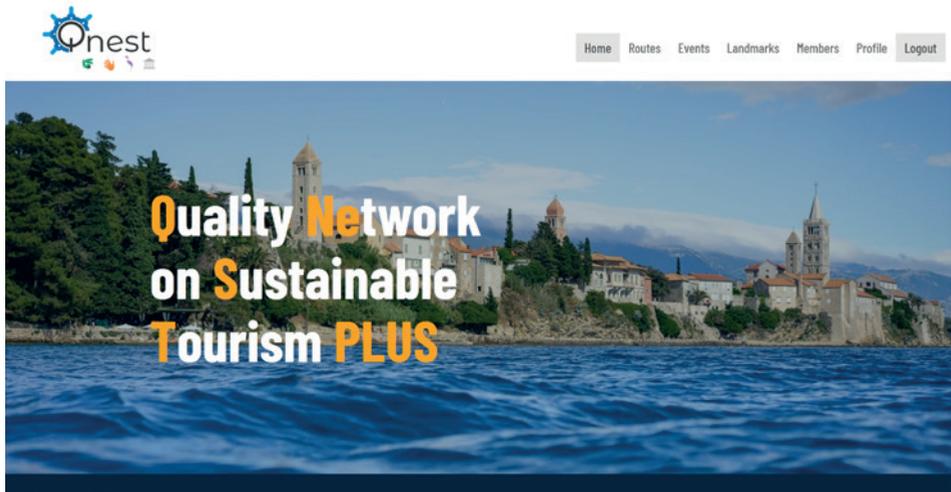


Figure 2. *Desktop version.*

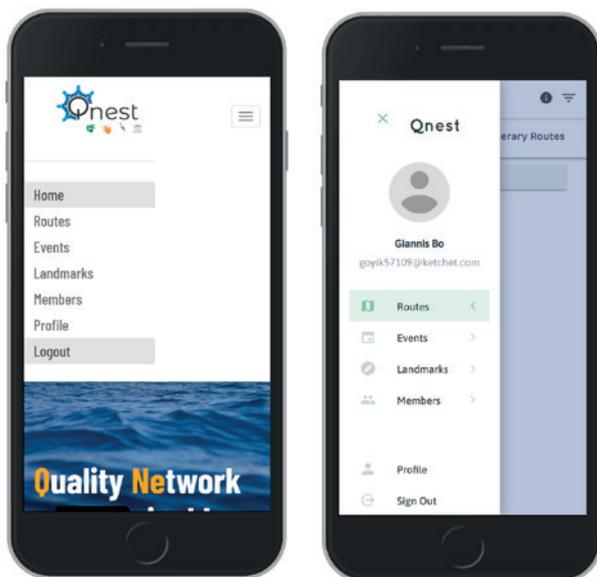


Figure 3. To the left Responsive preview of mobile view. Figure 4. To the right preview of menu in mobile app.

presented using various media to attract the visitor's interest and offer a better view of the specific module.

The main ways of displaying information are:

- Text. One of the most basic ways of displaying information is through text. Each module contains either a short or a more extensive description on the modules' details page.
- Interactive Map. Maps are used to display information on the QNeST PLUS platform. There are illustrated the points of interest and proposed routes. The points of interest are shown with the appropriate badge of QNeST PLUS and the routes with a coloured line.
- Gallery. Image are essential means of communication and information exchange. All routes, events, and landmarks on the platform include several images displayed through an image gallery. The image gallery automatically displays all the images in a slide show where the user can select one of them and “open” it in a larger scale.

Overview

Motovun is a medieval hilltop town that rivals the top towns in Tuscany in terms of sheer beauty. Situated on the top of a hill and overlooking the Istrian countryside, it is perfect to grab a glass of the local wine in a cute little restaurant overlooking the land. Here you can find specialty shops with free truffle tastings as Istria is famous for truffle hunting. Only 25 minutes car ride will bring you to Grožnjan - art city of Istria. You can feel the artistic vibe as soon as you enter Grožnjan with streets full of quirky art shops. From Grožnjan for 22 minutes you can reach cave Mramornica situated in Brtonigla considered by many speleologists to be one of Istria's largest and loveliest subterranean structures. Your next stop should be Baredine Cave a geomorphologic monument of nature and the first speleologic locality and tourist cave in Istria opened for visits since 1995. The sightseeing lasts 40 minutes, visitors descend along a 300m long pathway up to 60m below the ground and an underground lake and visit 5 beautifully decorated chambers. As you are already near Poreč, don't miss to visit Euphrasian basilica, one of the most significant world historical monuments it was put on the UNESCO World Cultural Heritage List in 1997. In Poreč you can enjoy the evening sunset on the terrace of many lovely restaurants near the sea while drinking famous local wine.

Figure 5. Text displaying information.

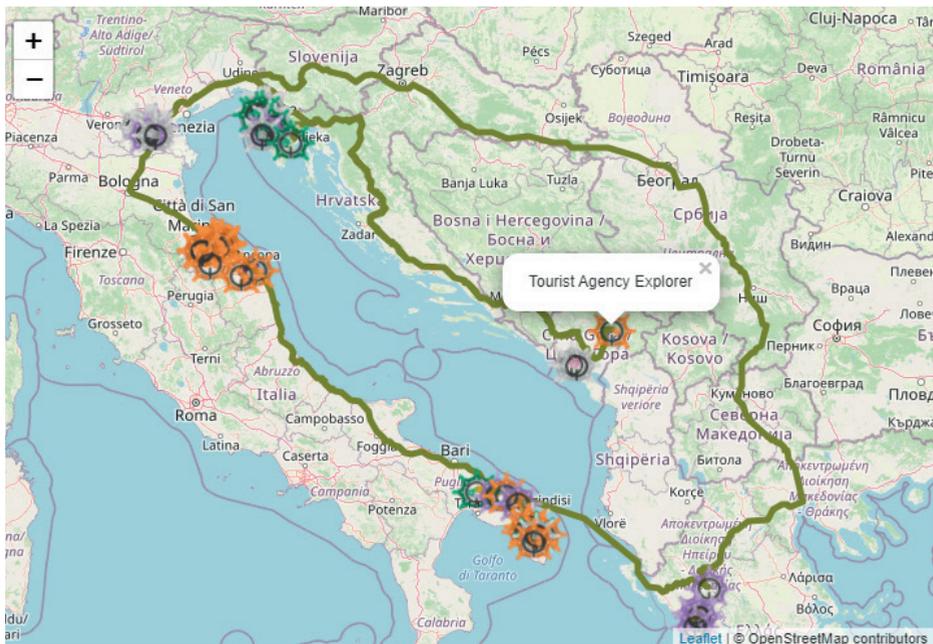


Figure 6. Displaying information using map.



Figure 7. *Displaying information using image gallery.*



Figure 8. *Displaying information using a video player.*

- Video. QNeST PLUS platform utilizes video to display information. Some modules have videos that are played directly.

6. Useful Links & Contacts Information

Besides the essential information in each module, they also include secondary information such as contact details and useful external links. Contact details include email, phone numbers, websites, and social media links.

7. Ratings & Review

Nowadays, when people are going to make any online selection, one of the first things that they do is check out online reviews and ratings. Ratings and reviews allow travelers to share their experience with a crowd of people about hotels, restaurants, attractions, etc., for a specific destination they have already visited and provide an overall star rating. In this way, they express their personal experience for a place and either promote or deter future travelers about what to visit or avoid while there.

A negative review can have long-term consequences for that business in our digital era. 90% of consumers read an internet review before visiting a place. Therefore, online reviews and ratings have become quite significant. A poor review may be highly damaging to a company. A single unfavorable internet review might cost up to 30 consumers. This is especially important in the tourism and travel industry, as people are looking for new things to do in different locations.

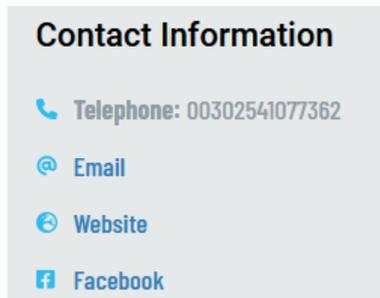


Figure 9. Table with contact information.

Vacations and experiences are intangible and generated and consumed simultaneously, prompting consumers to trust individuals who have already experienced the activity, stayed at the hotel, or eaten the meal. Travelers put their confidence in internet reviews («The Power of the Traveler Review» 2019).

QNeST PLUS platform provides functionalities either online (figure 10) or through the mobile app (figure 11) to evaluate and share users' experiences.

8. Search Filters & Near Me

The QNeST PLUS platform includes a search filter providing results per category of interest, e.g., food, drink, cultural attractions, sightseeing, and other points of interest in a particular place. Multiple filters can be applied and improve the end user's search, allowing them to retrieve the most relevant search results based on their selected criteria.

This search module filters all QNeST PLUS members, events, and landmarks from five countries, four main drivers, and ten sub drivers. Also, the application user can filter routes, events, landmarks, and members using a search

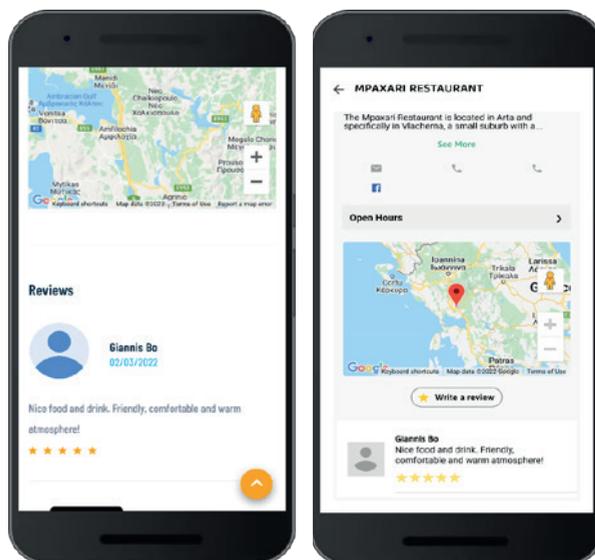


Figure 10. To the left rating and review system in Web site platform. Figure 11. To the right rating and review system in mobile QNeST PLUS platform.

bar function for quick results. figures 11 and 12 show how the search filter works for both the desktop and the mobile app.

In addition, the mobile application enables the user to explore and search the nearest QNeST PLUS members based on the user's location (figure 13).

9. Routes

One prominent feature of QNeST PLUS platform is travelers' routes. A route include events, landmarks, and registered members that users can visit under a thematic concept. Routes are composed of the most exciting waypoints for travellers to visit under a thematic concept.

The routes are divided into categories:

- Routes: They refer to routes at a local level containing a set of points of interest.
- Itinerary routes: Promotes cooperation between countries by creating international routes that correlate regional areas with related thematic routes.

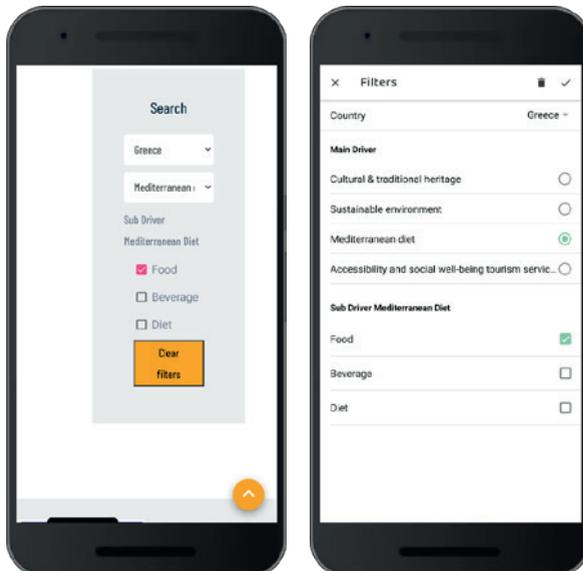


Figure 12. To the left filter system in the desktop application.

Figure 13. To the right filter system in mobile QNeST PLUS platform.

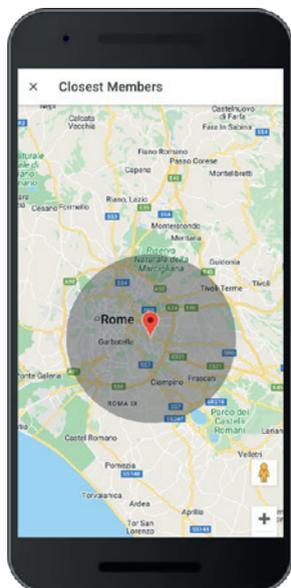


Figure 14. Search for closest member in mobile app.

The QNeST PLUS platform thematic routes provide all the necessary information that a tourist may need.

10. Waypoints

The focusing area around the Ionian and Adriatic sea is a region full of pilgrims and nature-based waypoints that compose some great thematic routes, and subsequently, great itinerary routes. Each route includes the business as its waypoints and several places of interest. The itinerary routes have multiple routes as their waypoints to promote transnational cooperation.

11. Conclusions

Several advantages emerge from the use of the QNeST PLUS application. First of all, the QNeST PLUS platform can increase the attractiveness of the thematic route since it promotes the inclusion and update of photographs, vide-

os, descriptions, and GIS functionalities. A region can be conceptualized in a single extensive system created by the many relationships between a particular location's private and public stakeholders. These exchanges within a region can contribute decisively to tourism, shaping many business and cultural realities. These characteristics are related to the tourist's requests and local stakeholders. Thanks to the cross-platform approach, the platform shares information either through desktop or mobile devices. Mobile devices' potential is growing with impressive speed, changing how tourists gather and access information, especially in outdoor activities. QNeST PLUS platform allows any person to

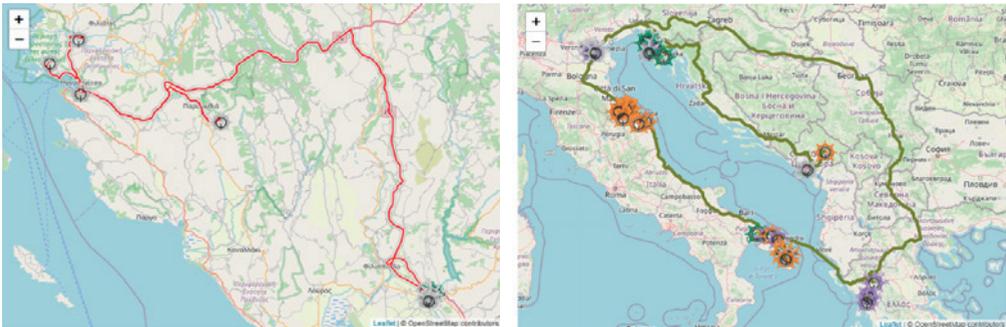


Figure 15. Normal route on the left and itinerary routes on the right.

Grožnjan	▼
Motovun	▲
<p>Country: Croatia</p> <p>Description: At the foot of the Motovun hill, the mythical Jason and the Argonauts sailed along the Mirna River, but the first inhabitants to leave traces populated this area in the period between 3,500 and 2,200 B.C. The first mention of Motovun in written records dates back to 804 and after centuries of domination by the Germans and the Patriarchs of Aquileia, Motovun asked Venice to be accepted under its rule in 1278 and remained so until 1797. At the time of the Austro-Hungarian Monarchy this area was renowned for the growing of trees used in ship-building.</p>	
See Details	
Baredine cave	▼
Wine tasting - Arman wines	▼
Euphrasian Basilica	▼

Figure 16. Waypoints of Routes.

access information and services anytime, from any place. End users click away from a service provider using infrastructure that incorporates laptops, smartphones, and desktops (Beed, Sarkar 2017).

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Cultural routes and new technological knowledge as an important tool of regional growth

Digital technologies for promoting QNeST network

by Lucio Tommaso De Paolis, Carola Gatto, Silvia Liaci

1. Introduction

The concept of place is referable to a geographical entity, with many elements of complexity that, all together, can describe the place itself. Some of those features help us to define the material aspects of a place and are related to the circumscribed physical space. Some others are immaterial features, like languages, beliefs, habits, culture. The perception of a place can be also expanded as long as we expand the space, beyond the idea of physical space. Nowadays information and communication technologies (ICT) offer the possibility to expand the definition, concept and functionality of the space itself.

The use of increasingly accessible technologies has led them to spread like wildfire, so today the promotion of a place is also linked to digital communication strategies.

From this trend was born and developed the concept of Virtual Heritage for the preservation, enhancement and use of places, understood as containers and content, historical, artistic, religious and cultural. This area of research increasingly addresses a global audience, taking into account limitations and diversity, with a view to greater inclusion. At the service of this goal, we find Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR) that have changed the way we interact with the real world and that today can be enclosed in the technological umbrella of Extended Reality (XR).

The objective of this paper is to provide an overview of the use of digital technologies of Extended Reality within strategies of territorial valorization. In particular, we proceed to describe some case studies that have focused on

the enhancement of cultural routes in the geographical area identified as Adriatic-Ionian, which includes not only points of interest on the Italian territory but also other European countries included in the basin of interest.

2. State of the art technologies

XR technology creates a sense of immersion by improving the realism of the virtual experience (Soliman, Peetz, Davydenko 2017; Suh, Prophet 2018) and enriching the real experience with digital content. The story of this technology starts around 30 years ago.

In 1994, scholars Paul Milgram, a professor at the University of Toronto, and Fumio Kishino, of the University of Osaka, created a theoretical model to explicate the well-known Reality-Virtual Continuum (Milgram, Kishino 1994), classifying experiences that combine real and virtual elements by placing the real world and the virtual world at opposite ends of the continuum.

Virtual Reality, which creates a completely artificial reality, simulates models of virtual spaces, usable through accessory devices, such as head-mounted displays – for example, Samsung Gear VR, HTC Vive, Oculus Rift, Oculus Quest, etc – and offers an immersive experience. The user has no perception of the real physical space and interacts only with the digital world.

Augmented Reality, on the other hand, integrates the real world with virtual (computer-generated) objects that appear to coexist in real-world space (Azuma, Bailot. *et al.* 2001), and are usable through devices such as smart glasses, AR displays, and mobile devices that provide contextualized information. The real world is at the center of the experience that is enriched by virtual details.

Mixed Reality is a technology that allows real space to be augmented to such an extent that there is no distinction between what is real and what is computer-generated. MR provides a dynamic experience between real and digitally constructed environments (Buhalis, Karatay 2022). Devices that offer this type of experience are, for example, holographic devices, characterized by the ability to display digital objects in the real world, or head-mounted displays, such as Microsoft HoloLens, capable of recreating a sense of presence by anchoring digital objects to the physical world.

Extended Reality (Mann, Furness *et al.* 2018) is not a simplification of the mentioned technologies but it should be seen as contamination between them in a real perception of the world that is virtualized and augmented to give life to parallel worlds. XR experiments tend towards networks of ubiquitous sensors and actuators that are the basis of smart cities. The multidimensional, multimodal, multi-sensory, and multi-scale XR creates a dialogue between computer-generated objects and real places. The user is at the center of these processes and his enjoyment of the real world is amplified, enhanced, personalized. Physical objects and places are replicated in digital twins usable by anyone in an extended reality that offers interactive and inclusive experiences.

These technologies can be combined between them in different ways, for different purposes, such as education, exhibition enhancement, exploration, reconstruction, and virtual museums. Some studies have demonstrated for instance that augmented reality is preferable for exhibition enhancement. Similarly, virtual reality seems better for virtual museums, and mixed reality is most viable for both indoor and outdoor reconstruction applications (Bekele, Pierdicca *et al.* 2018).

This is why, to design a complete experience, it is much more convenient to talk nowadays about XR. Just to highlight some international relevant case studies, we can cite the Remote Tourism company¹ that has created a new remote tourism tool, the first of its kind. Using a mobile device, tablet, or computer, one can explore the Faroe Mountains by interacting with people and places on an exploratory tour. Using controllers, you move around the virtual space and cameras are installed on-site to transmit video and images in real-time.

Another example is Brabant Remembers, a project funded by the Dutch DMO Visit Brabant, that consists of an AR application that integrates unconventional storytelling by engaging tourists in a historical journey set during the Second World War in the province of Brabant, the Netherlands. The stories of 75 people in 75 different places are told where tourists can discover personal and unusual stories (Bijsterveld, Hover, Klein 2019).

It should be considered also, that during the restrictions due to the Covid-19, some specific initiatives have been undertaken by some Institutions, ex-

1. <https://www.remote-tourism.com>.

ploiting XR technologies: Abu Dhabi's Department of Culture and Tourism has offered virtual replications of its attractions, such as Formula 1 virtual rides, artistic performances, and 360-degree virtual tours (Prati 2020).

The possibilities offered by technologies are many and in part still to be explored. Given the multitude of international case studies, we will now focus our attention on those projects that concern the geographical area covered by this study.

3. Case studies for QNest network

In the field of studies regarding the enhancement of the territory and cultural heritage, both tangible and intangible, historical and cultural routes play a very important role. They are an essential vehicle for the discovery of the territory and, when they are developed from the perspective of sustainability and accessibility, they become virtuous examples of innovative practices.

QNeST – Quality Network on Sustainable Tourism is a winner project of the European call ADRION 2016, for the Program Priority number two, called “Sustainable Region” (Bijsterveld, Hover, Klein 2019). It aims at discovering and enhancing the common characteristics and quality of the cultural, traditional and environmental heritage of the Adriatic-Ionian area. Indeed, the ADRION program is a European transnational program that invests in regional innovation systems, cultural and natural heritage, environmental resilience, sustainable transport and mobility as well as capacity building.

QNest project started in 2018 and closed in 2020, involved a strong network of European partners: University of Salento (Lecce, Italy) as lead partner, Chamber Of Commerce & Industry Of Xanthi (Greece), Istrian Development Agency Ltd (Croatia), Labirinto Social Cooperative (Pesaro, Italy), Ministry of the Economy – Directorate for Development of SMEs (Montenegro), Regional Union of the Chamber of Commerce of Veneto (Italy), University of Ioannina Special Account for Research fund (Greece), University of Primorska (Koper, Slovenia). Through the realization of a transnational model of participative interaction between private and public stakeholders, such as local and traditional operators, tourism service providers, craftsmen, sectoral experts, local communities, institutions and cultural, social and environmental associations, the

project contributed to improving and spread a common awareness on quality and sustainable tourism among different types of actors in Adriatic-Ionian area; to manage the local seasonality demand of tourism through the design and implementation of joint de-seasonal solutions; to discover the less well-known destinations using the fruition of new routes between coastal areas and hinterland; to facilitate the start-up and enhancement of tourist services through the promotion of joint marketing activities and the exchange of good practices at local and transnational levels.

To reach its objectives, the QNeST project moved towards an Adriatic-Ionian vision and strategy for the development of new quality tourist solutions, based on co-design processes between key stakeholders at local and joint levels and on the capitalization of existing good practices related to the most interesting features of sustainable tourism.

QNeST project created a common brand, representative of quality standards for sustainable tourism, stimulating the creation and the promotion of a quality network of Adriatic and Ionian economic operators, who have demonstrated experience in cultural heritage enhancement, traditional crafts, sustainable initiatives, food traditions and accessible services.

The project built more than twenty national routes and four Adriatic Ionian itineraries of a historic, religious and naturalistic interest and of economic value. They are *Water Routes*, *Stone Routes*, *Wine and Olive Oil Routes* and *Merchants, Pilgrims and Maritime Routes*. Cultural routes ensure a tourism offer of a highly experiential character, based on the heritage of a region. In addition, these cultural routes favor close connections between integrated economic activities: agriculture, handicraft, hospitality. They encourage forms of partnership and cooperation between contiguous regions, promoting tourism and economic development.

Following this strategy, QNeST ensures the launch of demonstrative and innovative initiatives able to: promote the quality network and the common brand; stimulate the exchange of information among the network members also through a collaborative ICT platform; improve the fruition, at local and transnational levels, of new routes and best practices, evocative of a common awareness for the development of qualitative and sustainable tourism.

To design innovative solutions that exploited technological tools, QNeST has involved also technological partners that contributed actively to the project.

Thanks to the collaboration between the Department of Cultural Heritage and the Department of Engineering for Innovation of the University of Salento, the Augmented and Virtual Reality Laboratory of the University of Salento (AVR Lab) has been involved in the QNeST project. AVR Lab is a research laboratory of the Department of Engineering for Innovation of the University of Salento and is composed of a multidisciplinary team of computer engineers and experts in cultural heritage and digital media². The research activities of the laboratory are mainly focused on Virtual Reality, Augmented Reality, Human-Computer Interaction, in many fields, such as cultural heritage, education, marketing medicine and surgery. According to the main goals of the QNeST project, AVR Lab has designed and developed digital solutions aimed at promoting this network and its routes. Some of these applications have been developed straightly for the project (the first three that we are going to describe in the following paragraphs), the others have been developed out of the project, but they still regard the Adriatic-Ionian area. All of those works represent experimental studies in the field of extended reality and start from extensive historical research about the specific topic.

4. AR mobile application for QNest maps

This mobile application is based on Augmented Reality technology, and it provides an innovative tool for tourists to “read” all of the QNest interactive maps. This application can be seen as an interactive tool to use paper maps innovatively. One of the results of the project was a set of maps, one for each partner involved in the project, with the definition of routes and itineraries.

Thanks to the AR application, users can “activate” all of these contents: simply by focusing with the camera of the smartphone on some points of the map, users can visualize a video related to that point (see figure 1).

This is a dynamic and engaging way to spread useful information and to get access to specific content about routes, stakeholders and points of interest.

2. <https://avr lab.unisalento.it>.



Figure 1. Augmented Reality Application.

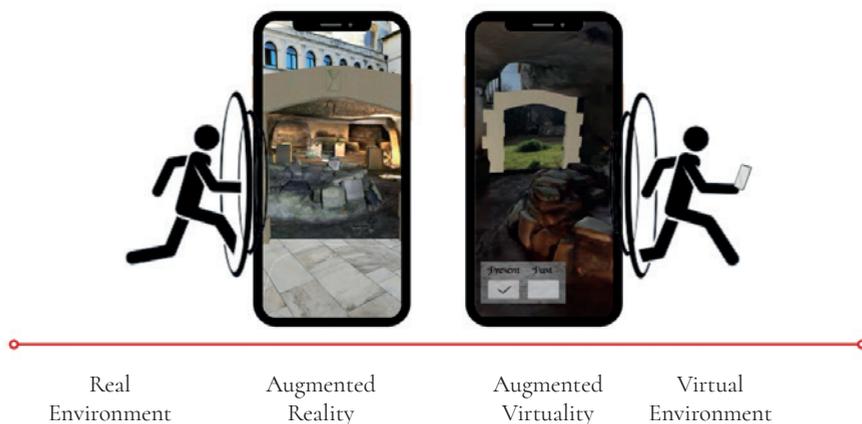


Figure 2. Virtual portal of Masseria Torcito.

5. Masseria Torcito AR & VR

This mobile application is based on Mixed Reality technology, and it allows access, even if virtually, to an old Hypogeum, the one of Masseria Torcito in the Apulia region. This hypogeum has been used as an oil mill for centuries and

now it is considered important historical evidence of the rural tradition of the village. Due to its collocation, this structure has some evident problems of accessibility. Torcito app is based on Virtual Portals solution, a Mixed Reality expedient able to offer a virtual gate, useful for visiting often inaccessible places (De Paolis, Chiarello, D'Errico, Gatto, Nuzzo, Sumerano 2021). Virtual portals are virtual objects superimposed on the real scenario where users are located, which gives users the illusion to stay in front of a virtual gate (see figure 2). Once properly registered the portals in the real scenario, users can access the virtual space by simply crossing the portal (Cisternino, Gatto *et al.* 2019).

It is not only a way to visit some inaccessible places, but also to walk in a historical reconstruction of the site itself, using some 3d models collocated inside the context. In this specific case, the virtual environment is the result of a photogrammetric reconstruction of the site, enriched by some 3D models of ancient machines for the oil industry, which were probably there when the mill was frequented. Thus, the virtual space beyond the portal represents an augmented virtuality space and the gate is the crossing point between virtuality and reality.

This application exploits Virtual Reality technology, and it has been designed and developed for providing an immersive virtual tour of the hypogeum oil mill of Masseria Torcito. The aim is to extend the possibility of fruition to different kinds of public, all over the world. What users need is simply a smartphone for running the application and cardboard, which is a low-cost device for VR.

The app has been developed in two different versions. The first one exploits the technology of 360° photos, which allows the creation of a photo tour in virtual reality. These photos are very easy to shoot and provide light images in terms of memory and processing.

The second version of the app makes use of photogrammetry. This version is more immersive and impressive in terms of sense of presence, but it requires more effort in terms of the processing and memory of the device. In the photogrammetry version, there have also been integrated some 3D models that represent the old machines of the mill, with the simulation of their movement. Some info panels can be opened or closed using a red spot: in this way, users can choose when to read the textual contents. These contents are about the history of this place, the process of oil production, and the life of the workers inside the mill. There is also the possibility to move through the corridors and to reach other secondary places of the mill.

6. AR application for frescos cycle of Santa Caterina Basilica

This mobile application takes advantage of Augmented Reality, to offer the user an immersive and educational experience, providing a wealth of information through multimedia content. The subject of the application is the Basilica of Saint Catherine of Alexandria, in Galatina, in the Apulia region. In particular, this tool allows deepening in autonomy the medieval pictorial cycle that covers the walls of the nave (Cisternino, Corchia *et al.* 2021). This technology is intuitive to use, does not require high costs for the implementation of the application, can exploit users' devices, and, therefore, does not require the purchase of additional hardware. The iconographic and iconological heterogeneity of the cycles, whose interpretation is still being studied by art historians, has led to the selection of eleven points of interest chosen based on historical and stylistic peculiarities little known to most visitors. The map of the Basilica is the main screen of the application because it contains eleven clickable points of interest (see figure 3). Each of them gives access to a preview screen that indicates what can be framed with the camera of the mobile device. At the top, a button with a drop-down menu provides information sheets on the history, pictorial cycles and the museum adjacent to the Basilica.

The preview screens are useful to understand which pictorial portion to frame. In addition to photographic reproduction, they contain the title of the fresco and the cycle it belongs to (for example, "The construction of Babylon" – Genesis cycle). These information screens allow access to the AR scenes through a button located on the bottom right. By framing the frescoes with the camera of the device, users visualize some icons corresponding to the audio guide, virtual restoration of a pictorial portion and also game, indeed at interest point number 10, it is possible to interact with the ancient musical instruments that are depicted in the fresco, and to listen to the sounds of this instruments depicted. The itinerary is guided by the voice (interpreted by a professional actor) of Pietro Cavoti (1819-1890), an illustrious artist from Galatina who for a long time was involved in the studies of the Basilica as President of the Conservation Commission of the Monuments of Terra d'Otranto and as Inspector of Monuments.

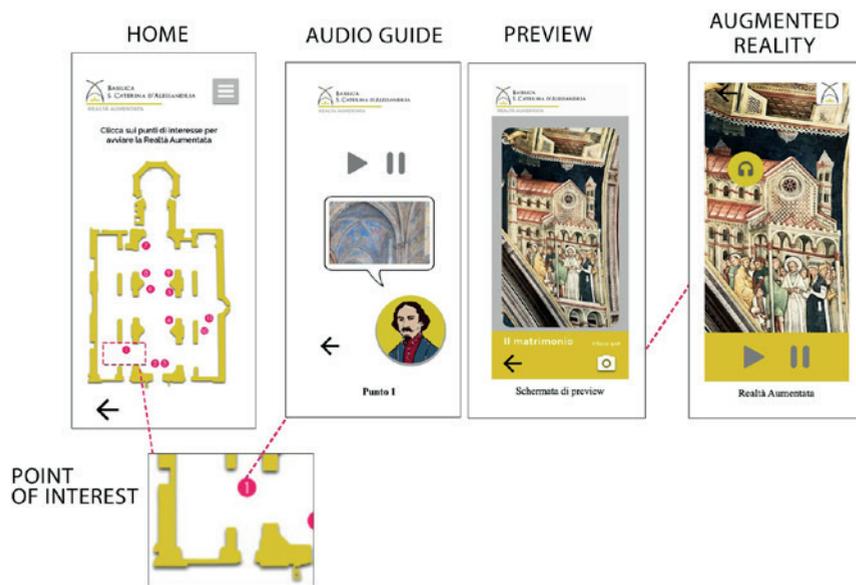


Figure 3. Home, Audio Guide, Preview and Augmented Reality sheets.

7. CumeRA Virtual Portal

Reality application, aimed at supporting the fruition of a cultural heritage no longer existing. As the study scenario of this work, a no more existing cult building has been chosen, the ancient church dedicated to Saint Elijah the Prophet, which stood on the main square of Ruggiano, a hamlet of a small village in the Salento peninsula (in Salve, Lecce, Italy) (Caloro 2000). The village rises in the hinterland of the Ionian coast and it is 13 km north of Leuca. The reconstructive hypothesis presented in this study is inspired by a long work of archival research and interviews collected among the inhabitants of the place. The application was conceived and developed for in-situ use, that is, in the place where the building was located, and therefore belongs to the category of outdoor mobile apps. It was decided to use a virtual portal that allows you to place the building in the same place and see it re-contextualized in the current urban environment.

The virtual portal is placed in the real world and, crossing this threshold, the user enters the virtual world and is catapulted into a different reality



Figure 4. Screenshot from the interior of the virtual portal.

by seeing how it was, what now no longer exists, just as in the case of the old church. CumeRA presents itself, at the start, with a simple screen that contains the navigation menu, through which you can navigate through the various information sections. From the menu, it is possible to access the central part of the app that allows the insertion of a virtual portal as an access point to the digital reconstruction of the building. The application has been

conceived and developed to ease of use and simplicity, endowing it with simple and intuitive graphics that can guide the user to the correct use of the application.

8. Spatial Augmented Reality for the animation of a pictorial cycle

The following research work has been investigated the potential of another technology, the daughter of Augmented Reality, the Spatial Augmented Reality (SAR) that in the field of applications is better known as Video Mapping. The technology allows irregularly shaped objects to be transformed into a display surface for video projection.

In this specific case, the potentialities of SAR have been exploited for the elaboration of a video mapping performance as a tool of visual narration, transmission and enhancement of the historical and cultural context of Monopoli, in particular through the animation of the pictorial cycle of Nicolò Maria Signorile in the Cathedral of the city. (Bellifemine 1979).

Four canvases depicting the legend of the founding of the cathedral, have been animated to communicate the story that tells of the landing of a mysterious raft at the port of the city, bringing with it a sacred icon depicting the Madonna Della Madia, which will become the cornerstone of the city community. The guiding thread of the narration – made clearer with the help of

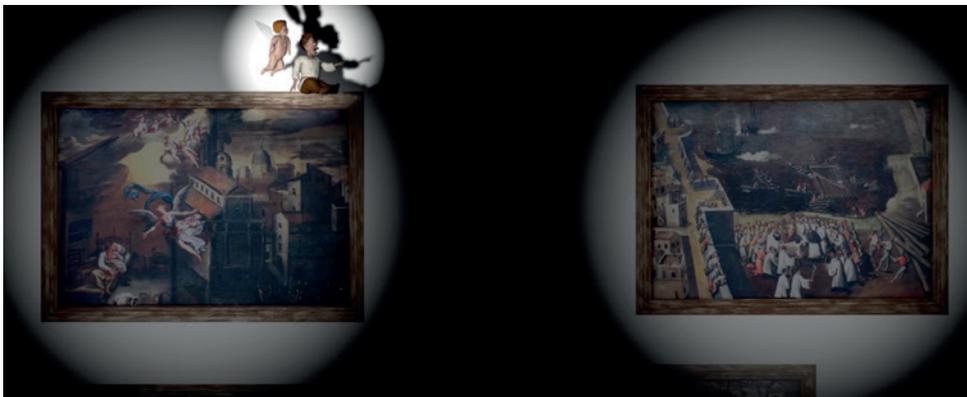


Figure 5. A frame from the video mapping performance.

sound design and a narrator's voice – is the animation of a character depicted in the first painting, the sacristan Mercurio, who decides to break the fourth wall and escape from the painting in which he is depicted. In this innovative mode of storytelling, the character, jumping from one painting to another and flanked by an angel who calls to the rescue, accompanies the viewer to discover the history of the paintings.

The research work has been developed through several executive phases that have been based on the historical and artistic research, an important aspect to create a narrative consistent with the real facts and to set up a work that provides for the timing of the projection that the work of 2D editing and 3D modeling. Storytelling and storyboards identified key scenes related to scene and character animations, sounds describing movement, and video effects used to emphasize the story. The goal was to convey the story through a structured animation that involves all four paintings in a communicative form aimed at knowledge and fun (edutainment). Through entertainment for educational purposes, cultural heritage finds another means of expression, stimulating the sensitivity and attention of users.

Although video mapping would seem to be linked primarily to a spectacle, in some contexts like the one under consideration it has been useful for the enhancement and dissemination of a heritage that would have been lost, forgotten. Spatial Augmented Reality techniques have allowed faster dissemination of contents related to the historical and artistic heritage of the geographic area. The fruition, since it doesn't need additional devices to take place, has characters of immersiveness and shareability. The non-invasive projections enrich the surfaces with color and light, highlighting the intrinsic characteristics of the works. The user becomes a co-actor in the space and from a passive receiver becomes an active observer, to interact with what they see, to assemble the pieces of the story and thus discover the attractions of the space they visit (Bouzis, Panoraia 2022).

9. Era-Ora: a VR application for the Corsano Castle

This work examines the Castle of Corsano, an ancient monumental building, located in a small town on the Adriatic coast of Salento, currently in a state of abandonment and inaccessible for over thirty years. Physical access to a cul-

tural place, where there are no dangers, should be the main goal of the policies of valorization of an asset, to involve the largest number of people and create participation. However, in cases where the state of preservation is very difficult, sometimes, it is necessary to resort to other means that become tools for accessibility, or side by side and support a more traditional use.

This is what we proposed to do in the project in question, virtually reconstructing the evolution of the Castle of Corsano over time, thanks to the information received in some sources: a hybrid combination of historical research and technology.

The work is based on the idea that the enhancement of an ancient tangible and monumental asset, still inaccessible, can be combined with the recovery of collective historical memory, means of intangible cultural assets. This means working to a real archive, enjoyable using a medium that is, in itself, intangible: Virtual Reality technology. This dichotomy between real and virtual, between history and memory is the *fil rouge* of the entire project, which makes it its strong point. The established storytelling foresees the reconstruction of the environments of the Castle in its salient transformation. In particular, for the 15th century, the fortress has been reconstructed; however, since there is no documentation regarding the internal partition of the rooms, it has been decided to reconstruct it only from the outside (De Marco 1983). On the contrary, the fruition of the 18th and 20th centuries phases of the building, takes place inside the rooms, giving the user the possibility to interact with pop-ups, information panels and with the voices of the “tabacchine”, the women workers of the tobacco manufacturing (see figure 6).

The project, starting from the three-dimensional reconstruction of the rooms of the Castle, and, in part, of its furnishings, sees the development of a Virtual Reality application, with the possibility of interacting with the environments of the palace and learning the historical information collected, not only through bibliographic research but also through the action of remembering, which involved, in particular, the elderly of the village. The main goal is to create an archive of memory and to make virtually accessible one of the most emblematic historical places in the village, which otherwise risks being definitively forgotten. The result of the project was the development of an application capable of integrating the material cultural heritage, with a large part of the intangible one, consisting of folk songs, interviews and memories of the village that have involved the citizens of Corsano.



Figure 6. Inside the Castle of Corsano: the 20th century tobacco manufacturing.

10. Agnano RiVive: a VR application for Ostuni Archaeological Park

Agnano RiVive is an Immersive Virtual Reality application, developed for the Museum of Preclassical Civilizations of the Southern Murgia in Ostuni, where the archeological findings of the Archaeological and Naturalistic Park of Santa Maria di Agnano, are preserved.

The Archaeological and Naturalistic Park of Santa Maria di Agnano, capable of restoring evidence of every era, is located about 2 km from the center of Ostuni and has as its focal point the cave at the foot of Mount Risieddi. Over the years, the Museum of Preclassic Civilizations of Southern Murgia that manages the Park has been committed to deepening, through numerous excavation campaigns, the knowledge of the main moments of the life of the site.

These are especially identifiable in the Palaeolithic presence, in the building of a Messapic sanctuary, and the establishment of a Christian cult; in this site,

therefore, from the cult of the Great Mother – deified in the figure of Ostuni 1 –, we passed to the Messapic cult addressed to Demeter and finally to the cult of the Mother of Christians, which saw the building of a seventeenth-century chapel and the creation of a fresco depicting the Madonna and Child, still visible today in the eastern cavity (Coppola 2013).

In particular, the Agnano cave can boast a well-stratified deposit that has returned exceptional evidence, including the burial of the pregnant woman known as Ostuni 1, dated 24410 ± 320 B.P. based on coal found within the deposition and on a fragment of the coast.

The application gives the possibility to the user to explore the Upper-Paleolithic settlement, located inside the park, and to interact with the ancient manufacturers (see figure 7).

Teleporting is the way of movement that was chosen for this virtual world: by clicking a button on the controller, the visitor can activate a red ray, that turns green when he or she encounters the so-called teleport point. There are nine teleport points along the path, each one has information about the palaeoenvironment and the surrounding context.

In the storyboard, the last teleport point brings the user to virtually assist in the burial ritual of Ostuni 1, the world's oldest gestation, collocated in the exact point of the cave in which she has been found out, and in the same position and with her burial set around the corpse.



Figure 7. Interaction simulation inside the VR environment.

Furthermore, a fundamental element that enriches the experience, along all the path, is provided by the archaeobotanical studies, which have been the base for the representation of the paleo-environment (Fiorentino 2012).

11. New technological perspectives: accessibility challenges

Technological tools are constantly evolving as hardware and software capabilities are increasing. This opens up new possibilities for experimentation. Communication, in general, can use these tools and in turn experiment with new scenarios of use: communication in the cultural field insists on some fundamental pillars, also in continuous evolution, from which it cannot prescind, namely: accessibility, in all its meanings, inclusion, participation and involvement. These themes are aimed at defeating together a major issue that is always around the corner: that of exclusion.

Exclusion is context-specific and varies in degree. There may be economic reasons: for some people, traveling around and enjoying cultural heritage, as well as visiting a museum, is a luxury against the daily costs of living. Exclusion may also be social: when belonging to a minority group in a community in which the dominant social norms are drawn from another community different from your own determines how you behave (Lynn Mulvey, Boswell *et al.* 2012).

These concepts are fundamental to designing new experiences of visitation and fruition, both when using analog tools and when designing experiences through the use of digital communication and fruition tools. In both cases, the aim is to tell some stories, and this is a privilege as well as a responsibility. Starting from these suggestions, in the following paragraphs, we deepen two innovative ways of fruition, that is aimed to reduce exclusion and to experiment within unexplored fields.

12. Digital Twin

The concept of heritage today is not only linked to an aesthetic value, to memory, and testimony, but it is also strongly associated with the potential related to its renewal and the re-signification of its being and form.

In the contemporary world, cultural heritage is reflected in new forms of preservation and use, and the digital age has enhanced the possibilities of acquiring and managing information in various fields: from libraries to architecture, from landscape to tourism, from museum collections to education. The conception of heritage, its subjects, means and ways of dissemination has been updated, favoring more and more hybrid approaches by preservation, valorization, and transmission. The tools and methods used to document heritage often follow different paths depending on the languages of the different contexts involved in the knowledge process. Issues related to the fragility of heritage and the risk of losing its integrity and essence due to natural and/or anthropogenic events often emerge during the investigation. Hence the importance of implementing timely, targeted and compatible but also planned interventions. For this to happen, a multidisciplinary approach and methodological connection are needed to achieve the common goal of knowledge for the conservation and communication of heritage.

Preservation and usability become two sides of the same coin, in an inseparable relationship. From studies on digitization for the preservation and safeguarding of tangible heritage (Hajirasouli, Banihashemi, Kumarasuriya 2021) to the creation of virtual tours such as those offered by Google Art&Culture or the Vatican Museums, to break down limitations and barriers. From photogrammetric surveys to the creation of 3D models, to offer faithful historical reconstructions implemented in Serious Games. Or H-BIM (Heritage Building Information Modeling) (Croce, Bevilacqua *et al.* 2021), an emerging technology that enables the virtual understanding, documentation, publicizing, and reconstruction of the built heritage – developed by BIM Portale, a project funded by the European Commission under the Horizon 2020 Programme –. In the scenario of new technologies applied to the world of cultural heritage, there is one technology that has not yet been widely investigated, the Digital Twin (DT). The concept of DT was first used in 2001 by Michael Grieves – Chief Scientist for Advanced Manufacturing at the Florida Institute of Technology-, who during a Product Lifecycle Management (PLM) course at the University of Michigan described the digital twin as the virtual and digital equivalent of a physical product (Jiang, Ma, Broyd, Chen 2021). Grieves was referring to a dynamic representation in which the real and virtual dimensions were strongly connected. The two dimensions, again in the context of industrial produc-

tion, remained connected throughout the product's life cycle: from creation to production, operation and disposal. DT, which therefore offers the possibility of virtually recreating real objects and conditions in virtual spaces, may have great potential in the field of cultural heritage, the digitization of which could open up new scenarios for conservation, use, and valorization.

The potential of DT is not only linked to the faithful reproduction of an artifact or context but also to the possibility of linking the two dimensions, the real and the virtual, to a system of data and information. The contents, which may concern the physical and chemical conditions of a real dimension, are processed by a system of sensors and are synchronously transposed onto the digital twin.

H-BIM (Historical or Heritage Building Information Modelling), which aims to create intelligent models and creates a bridge between the digital and physical twin, is the starting computer architecture that generates an information model that is congruent and geometrically consistent with reality. Thus, DT combined with a data storage and management system can be a resource for quantifying and qualifying the status of a work, an artifact, or a context.

The combination of DT and H-BIM goes beyond the simple 3D model and adds structural, compositional, and historical information to the geometric modeling. The concept of DT as a parallel/external digital model is in favor of the artificial evolution of the real system augmented by a "cognitive" apparatus thanks to the use of Artificial Intelligence (AI) (La Russa, Santagati 2020).

The need to safeguard historical heritage and advances in digital technologies applied to cultural heritage has pushed towards new conservation and preventive diagnostic procedures. Emerging technologies have offered the possibility to carry out a more in-depth investigation, monitoring, conservation and fruition of an asset and DT, together with Artificial Intelligence and Big Data management, allows a closer reading of cultural heritage, increasing its resilience over time and supporting heritage scholars in conservation interventions.

The fully navigable DT, which can be implemented within Extended Reality (XR) applications, gives new ideas to the normal fruition of cultural heritage and develops in a wider perspective of social inclusion, breaking down physical, spatial and temporal barriers.

13. VR Art Therapy for wellbeing

According to the 2019 World Health Organization (WHO) report, the role of arts and culture in empowering well-being and quality of life has been demonstrated, using more than 3000 studies that have highlighted their effect on public health. Acting on people's well-being means acting on a complex system made of layers, in which besides a physical component, there are emotional, intellectual-cognitive, spiritual, social and professional ones. All these categories coincide with the holistic idea of well-being promoted by the World Health Organization. This leads to considering the correlation between culture and well-being as a priority in the idea of the creation of cultural policies that include public administrations, institutions, museums and organizations.

For instance, social isolation is an increasing social issue that does not regard only the emergency due to the pandemic: loneliness among young, middle-aged, and older adults is a serious public health concern of our time because, and it is demonstrated to have a strong correlation with cardiovascular, autoimmune, neurocognitive, and mental health issues. Social isolation is a condition that often for physical or psychological obstacles, prevents people from moving around, performing creative activities, traveling and visiting cultural places.

From this point of view, the technology of Virtual Reality (VR) has been identified as the means through which this experimentation can be carried out since it can provide another dimension, continuous and coherent to the physical space. It can represent a decisive paradigm of innovation both in an emergency period and in normal life (Gatto, D'Errico, Paladini, De Paolis 2021). For instance, thanks to this technology, the collection of the museum can be "broken down" and recomposed according to the specific narrative goals, without losing the museum identity, as a structure able to contextualize meanings, to generate a sense of belonging and identity, both individual and social. Of all the technologies that make up e-health, Virtual Reality is the one that creates the sense of presence, using immersive, interactive and collaborative virtual environments. Certainly, the physical presence of the visitor in the museum, such as in a place of cultural interest, is encouraged as much as possible, when this can be done in total safety, but it is necessary to design other tools of fruition, able to extend these spaces (Gatto, D'Errico *et al.* 2020). Therefore,

VR technology can be inserted in this context as a useful tool to restore the sense of presence where physical presence is not possible, due to contingencies related to the individual. It can be seen also as a tool for practicing art therapy activities. The concept of traveler or visitor thus becomes broader, including those who cannot move. On the other hand, the concept of travel is enriched with a greater beneficial potential, responding to needs linked to the well-being of fragile people.

An example is an application that is being developed for the *Ermes* project, funded by Regione Puglia and born from the collaboration between AVR Lab and ASL Lecce. In this case, we are working on virtual therapeutic environments, to contrast the sense of isolation of people in a situation of hospitalization. The path involves the use of a virtual environment of museum type and an outdoor archaeological type. The scenario is not static and of observation only, but practical activities are foreseen such as art therapy: specifically, the application provides the possibility to model an ancient ceramic, through a virtual lathe, starting from a block of clay, also virtual, following the (simplified) instructions dictated by experimental archaeology. In this case, storytelling combines elements of place narration, heritage fruition, creative activity, and learning by doing. The journey in this case is no longer only physical, but also emotional.

14. Conclusions

In the last few years, in the field of cultural tourism, there has been a growing need to update traditional tools to improve the level of fundamental aspects of the sector, such as communication, audience engagement and, last but not least, accessibility.

Even for those who deal with information technologies, such as Extended Reality, tourism has represented for some years now a new and exciting frontier of experimentation. The idea has been consolidated that thanks to the mutual exchange of information and methodological tools between different disciplines, it is possible to widen the perspective of investigation, preventing those systematic errors in which one risks running into when observing from a single point of view.

Openness to dialogue and comparison has meant the birth of new quality standards, shared languages and transversal methods. We began to talk about interdisciplinarity. In this scenario, the adoption of increasingly sophisticated technologies has acted as a catalyst for a process that had taken shape but risked remaining distant from market reality. It is undeniable, for example, that studies on cultural heritage, both tangible and intangible, are the basis for the creation of a tourist offer that is aware of and respectful of places, with a view to the enhancement and promotion of territories, just as one cannot talk about cultural tourism without delving into the world of ICT.

Smart solutions come from experimentation of new possible combinations between several tools: thus, the enhancing of a tourist route can also be combined with the need to reach fragile people, who would hardly be users of a route in the traditional sense, but thanks to new technologies can enjoy the benefits of visiting historical places and practicing cultural activities, without feeling excluded. This means going beyond the concept of accessibility, assuming a higher goal, which is that of people's well-being.

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Selected Case Studies

second part

Geography, Cultural Heritage and Tourism of the Adriatic-Ionian regions

by Anna Trono

1. Geography of the Adriatic Ionian regions involved in the QNeST project

The Adriatic-Ionian territories of interest to the QNeST project include three Italian regions (Marche, Puglia and Veneto), two Greek regions (Xanthi, in the Greek region of Eastern Macedonia and Thrace, and Epirus), Istria in Croatia, the Coastal-Karst Statistical Region of Slovenia and Montenegro, with highly heterogeneous physical-geographical and socio-economic characteristics.

Collectively these regions form an extensive and complex territory with a wide range of physical and economic characteristics, which have determined the anthropic and political conditions of the individual regions located on the Adriatic, Ionian and Aegean Seas.

The eastern Adriatic coastline is one of the most characteristic in Europe due to the presence of a particular type of coast – the “*Dalmatian coast*” – in which a series of hills and ridges parallel to the coastline make access to inland areas difficult. The coastline is extremely irregular, with a large number of habitable coastal islands (*otok*), shoals (*greben*) and islets. The latter number over a thousand, while there are about sixty larger islands, some long and thin, others more complex, composed of a number of ridges separated by valleys or *polje* (Cori 1989, p. 73). Slightly different forms are found at opposite ends of the Adriatic coastline. To the north is the *Istria* peninsula with its “*rias*” (submerged valleys) between the Gulf of Trieste and the Gulf of Kvarner: a linguistic and cultural crucible and an important crossroads thanks to its geographical position on important transport corridors (both road and maritime) connecting the Mediterranean to central Europe. Of its 3,130 square



Figure 1. *Adriatic, Ionian and Aegean Countries*. Source: our presentation.

kilometres, only a short stretch of coastline – which has seen many vicissitudes and has been dominated by a succession of countries, leaving indelible signs on its architecture and culture – belongs to the young *Slovenia*, specifically lying within its Coastal-Karst Statistical Region. The rest of the peninsula belongs to the Republic of *Croatia*. At the southern end of the Dalmatian coast lies *Montenegro*, with the large branching ria of the Bay of Kotor, followed by the Island of Bojana, situated on the border with *Albania* between two branches of the river of the same name. The country has a highly indented coastline with bays delimited by promontories, karst mountains up to a thousand metres high covered in dense vegetation and small plains: it has more than 290 km of coast, including 59 km of beaches with fine sand.

Of interest on the Italian shore of the Adriatic is the lower Po valley, which slopes gently down to the Adriatic. Its coastline, rich in lagoons, runs from the Gulf of Trieste down to Rimini (Almagià 1959, p. 632). From here the coast runs in a straight line, with no bays or natural havens except for the promontory of

Monte Cònero, which protects the port of Ancona. We are now in the Marches (*Le Marche*), a region without real plains, where the rivers have succeeded in creating only the smallest of alluvial extensions, which the Adriatic tends to wash away (Almagià 1959, p. 1087). Lastly we come to Puglia, descending as far as Otranto, where the Adriatic blends into the Ionian, which in turn leads to the eastern Mediterranean. With an extensive coastline (784 km), the longest of the Italian regions, Puglia's succession of plains is interrupted in the northern part by the mountainous Gargano peninsula and in the centre by the hills of the Subappennino Dauno and the Murge. The region of Molise lies to the north-west, with Campania and Basilicata to the west. The coastline of the Gargano has many inlets, such as those of Vieste and Mattinata, each with sandy beaches. Elsewhere, the wild promontory is rocky, with limestone cliffs plunging into the sea. Moving southwards, a continuous beach runs from the port of Manfredonia to the mouth of the River Ofanto, picking up again in Torre Canne, from where it runs almost continuously to Otranto (November 1987). Just South of Otranto is Punta Palascia, the most easterly point of the Italian peninsula. Here the Adriatic becomes the Ionian, on the opposite shore of which lies the region of Epirus in Greece.

Connecting the Balkan countries and Italy, Epirus includes four Regional Units (Arta, Thesprotia, Ioannina and Preveza) and is characterised by a geomorphological diversity that distinguishes the coastal area of Preveza and Thesprotia from the agricultural lands of the south-western part of the region and the larger mountainous and semi-mountainous areas further inland. Lastly, Xanthi, a Regional Unit within the region of Eastern Macedonia and Thrace on the Aegean Sea, has a fascinating coastline with numerous gulfs and watercourses and represents an important staging post between the Mediterranean and the Black Sea. A frontier region with an international character on Europe's eastern boundary, it is full of contrasts. Its history is reflected on the social level by its ethnic make-up, a mixture of peoples (Greeks, Bulgarians, Macedonians and Turks, but also many Armenians, descended from exiles fleeing the Turkish genocide) with a complex and fascinating cultural mosaic with links to the Orient.

As emerges from this brief presentation of the geographical area of interest to the QNeST project, morphological fragmentation sharply differentiates the territories as we proceed southwards, with the 41st parallel marking the boundary between the more continental northern part and the truly Mediterranean southern part, fragmented into peninsulas and islands steeped in the

Mediterranean, even forming a miniature Mediterranean, the Aegean, which has sometimes been called the «Greek Mediterranean» (Almagià 1960, p. 899).

The Mediterranean is the common thread joining these territories, with its rich biodiversity and important ecological heritage, as well as the originality of the culture and techniques that spring from the strengths and ingeniousness of its inhabitants. This originality, which arises from its history, has attracted and still attracts a broad variety of human activities. For millennia its coasts have seen a continuous flow of human beings, goods, ships, ideas, religions and ways of life which, in their multiple diversity, constitute a common identity which it is increasingly indispensable to defend, not only because the roots of our civilisation lie within it but also because it is in the Mediterranean area that the development of a united Europe will play out.

2. Cultural heritage and UNESCO World Heritage sites

The coastal regions of this part of the north-eastern Mediterranean are of great interest thanks to their artistic and natural heritage, traditions and local products, which distinguish them from other regions and give them a competitive advantage, representing an opportunity for sustainable development in terms of both social and economic growth. These territories share a very rich cultural heritage, whose state of conservation in the Balkan regions has been compromised by the turbulent events of the last two centuries.

The landscape, an “ancient palimpsest” of the historical and political complexities of the communities, with its physical components and layers of history and its system of signs and values, highlights the rich inheritance of a past made up of both homogeneity and differences which are seen in the cultural history and the languages of these countries.

2.1. *Cultural heritage and Unesco heritage sites*

The area's thousands of years of history and the wealth of its cultural heritage are highlighted by the huge number of medieval churches with beautiful frescoes, art galleries, collections and museums, and by the skills and expertise of a celebrated craft tradition. This is reflected above all in the strong concen-

tration of sites listed by Unesco as belonging to the *material and immaterial cultural heritage* of the world.

A relatively large number of Unesco sites are found in Slovenia, which is one of the richest countries in terms of world heritage by number of inhabitants.

Among the others, important are the Škocjan Caves in the Coastal-Karst Statistical Region with its subterranean river canyon, in the list since 1986, now included within a regional park with protected cultural and natural heritage and educational and cycling paths. Also highly interesting are the sites with *prehistoric pile dwellings* in the marshes of Ljubljansko Barje, which contains two of the 111 such settlements built between 5000 and 500 BC around the Alps. Even today, the wood is still in good condition, as attested by the remains kept in Slovenian museums.

Croatia also boasts a considerable quantity and diversity of valuable and unique cultural material and immaterial heritage. Of the material heritage of the Istria Region, worthy of mention are the villages and towns along the coast and the castles inland (Morosini-Grimani, Rota, Pietrapelosa, Possert, Paz etc.). Particularly important are the historic ancient sites in the Unesco world heritage list: *the Palace of Diocletian in Spalato; the Old Town of Dubrovnik; the Cathedral of St James in Šibenik; the Stari Grad Plain on the island of Hvar; and the episcopal complex including the Euphrasian Basilica of Parenzo* in the Istrian peninsula, a unique historical monument to early Christianity in an excellent state of conservation.

The immaterial heritage of Croatia includes a long list of items from the country's ancient cultural tradition: ritual and festive events, craft products and elements of literary and musical interest, such as the complex style of popular music played and sung in duets typical of Istria and the Croatian coast (table 1).

The density of Unesco sites along the eastern Adriatic is further enriched by others in Montenegro. The first site was recognised in 1979: *the Natural and Culturo-Historical Region of Kotor*. Immediately after its recognition it was inserted in the list of sites at risk, due to the damage caused by the devastating earthquake of April 15th of that year. It was removed from this list in 2003, after the repairs, largely financed by Unesco. Also of interest are the two transnational Unesco sites: *Stećci Medieval Tombstones Graveyards*, listed in 2016 and shared with Bosnia and Herzegovina, Croatia and Serbia, and *Venetian Works of Defence between the 16th and 17th centuries*, built to support the expansion and power of Venice. The site includes six defensive works in Italy, Croatia and

Table 1. Properties registered in the UNESCO World Heritage and Intangible Cultural Heritage Lista (update at December 2021). Source: <https://whc.unesco.org/en/list/>; <https://en.unesco.org/countries/>, our presentation.

COUNTRY	CULTURAL SITE		INTANGIBLE HERITAGE	NATURAL SITE	
	PROPERTY	TRANSBOUNDARY PROPERTY	ELEMENT	PROPERTY	TRANSBOUNDARY PROPERTY
CROATIA	– Velika and Mala Crljivica, Cista Velika – St. Barbara, Dubravka, Konavle	Stećci Medieval Tombstone Graveyards	Mediterranean diet (present in some countries of the Mediterranean basin) Ojkanje singing	– Paklenica National Park – Oglavino-vac-Javornik – Paklenica National Park – Suva draga-Klimenta – Hajdučki i Rožanski kukovi	Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe
	– Defensive System of Zadar – Fort of St. Nikola, Šibenik-Knin County	Venetian Works of Defence between the 16th and 17th Centuries: Stato da Terra – Western Stato da Mar	Klapa multipart singing of Dalmatia, southern Croatia Nijemo Kolo, silent circle dance of the Dalmatian hinterland	Plitvice Lakes National Park	
	Old City of Dubrovnik		Sinjska Alka, a knights' tournament in Sinj	Papuk Unesco Global Geopark	
	Historical Complex of Split with the Palace of Diocletian		Annual carnival bell ringers' pageant from the Kastav area	Vis Archipelago Unesco Global Geopark	
	Episcopal Complex of the Euphrasian Basilica in the Historic Centre of Poreč?		Festivity of Saint Blaise, the patron of Dubrovnik		
	Historic City of Trogir		Lacemaking in Croatia		
	The Cathedral of St James in Šibenik		Procession Za Krizen ("following the cross") on the island of Hvar		
	Stari Grad Plain		Two-part singing and playing in the Istrian scale		
			Art of dry stone walling, knowledge and techniques		
			Falconry, a living human heritage		
	Medimurska popevka, a folksong from Medimurje				
GREECE	Archaeological Site of Philippi			Rebetiko Polyphonic Caravan, researching, safeguarding and promoting the Epirus polyphonic song Mediterranean diet (present in some countries of the Mediterranean basin) Art of dry stone walling, knowledge and techniques	Vikos – Aaos Unesco Global Geopark

	<ul style="list-style-type: none"> – Tombola – Laghetto della Costa 	Prehistoric Pile Dwellings around the Alps	Mediterranean diet (present in some countries of the Mediterranean basin)	Gargano National Park	Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe
ITALY	<ul style="list-style-type: none"> – Fortified city of Bergamo – Fortified city of Peschiera del Garda – City Fortress of Palmanova 	Venetian Works of Defence between the 16th and 17th Centuries: Stato da Terra – Western Stato da Mar	Falconry, a living human heritage (present in many countries around the world)	The Dolomites	
			Art of dry stone walling, knowledge and techniques		
	Venice and its Lagoon	Longobards in Italy. Places of the Power (568-774 A.D.)			
	Castel del Monte				
	City of Vicenza and the Palladian Villas of the Veneto				
	Historic Center of Urbino				
	The Trulli of Alberobello				
	City of Verona				
	Botanical Garden (Orto Botanico), Padua				
	Padua's fourteenth-century fresco cycles				
Le Colline del Prosecco di Conegliano e Valdobbiadene					
MONTE-NEGRO	<ul style="list-style-type: none"> – Grčko groblje, Žabljak – Bare Žugčica, Žabljak – Grčko groblje, Plužine 	Stećci Medieval Tombstone Graveyards		Durmitor National Park	
	Natural and Cultural-Historical Region of Kotor				
	– Fortified city of Kotor	Venetian Works of Defence between the 16th and 17th Centuries: Stato da Terra – Western Stato da Mar			
SLOVENIA	<ul style="list-style-type: none"> – Kolišča na Igu, severna skupina – Količa na Igu, južna skupina 	Prehistoric Pile Dwellings around the Alps	Door-to-door rounds of Kurenti	<ul style="list-style-type: none"> – Krokari – Snežnik-Ždrecle 	Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe
			Škofja Loka passion play		
	Idrija – Old Town	Heritage of Mercury, Almadén and Idrija	Art of dry stone walling, knowledge and techniques	Škocjan Caves	
	Idrija – Smelting Plant			Idrija UNESCO Global Geopark	
	Idrija – Kamšt water pump with the Rake water channel and Kobilica dam				
	Gorenja Kanomilja – Kanomilja or Ovcjak Water Barrier				
	Vojsko – Idrija Water Barrier				
	Idrijska Bela – Putrih's Water Barrier on the Belca creek				
Idrijska Bela – Belca Water Barrier on the Belca creek (or Brus's Water Barrier)					
			Karavanke UNESCO Global Geopark		

and others of more modest value, and natural and cultural sites. It is also associated with many famous historical figures including artists, authors, musicians (Rossini, Pergolesi, Bramante, Raffaello Sanzio, Giacomo Leopardi, etc.).

Puglia is also rich in heritage items that constitute an impressive cultural inheritance. Puglia is a land with a “complex civilisation”, whose roots lie in the noble Homeric rural ideal, the great pagan mystery of the Acropolis, the Mediterranean traffic of the Phoenicians, the Greek colonies of Magna Graecia, the transit of the Crusaders, the multiform historic experience of Central Europe and the Ottoman conflicts, reflected in the cathedrals and castles, the baroque architecture (whether it be the florid style of the Salento or the more restrained approach of Martina Franca) and the *trulli* and fortified *masserie*. There are three Unesco World Heritage sites: *Castel del Monte*, *The Trulli of Alberobello* and *Monte Sant'Angelo*, the latter part of the *Longobards in Italy: Places of Power*.

Closely connected to Italy in terms of its historical, geographical and cultural characteristics, in a strategic position at the entrance to the Adriatic, is the city of Kerkira on the island of Corfu. Very close to Epirus, a project partner area, it has been recognised as a Unesco World Heritage site thanks to its rich evidence of historic cultural pluralism, including three Venetian fortresses that served to defend the commercial maritime interests of the Republic of Venice against the Ottoman Empire.

Last but not least, the heritage contained in the Unesco cultural sites in the partner areas of the QNeST project is enriched by the cultural heritage of Xanthi in the Greek region of Eastern Macedonia and Thrace. A key centre of the tobacco trade and an interesting settlement of Ottoman origin, Xanthi encapsulates a multiculturalism seen in the intriguing mixture of typical red roofs with minarets and its singular mosaic of cultures, peoples and religions. An area of transit on the route to the Orient, the historic and cultural role played by Xanthi was recently recognised by Unesco, which listed the nearby *Archaeological Site of Philippi* in 2016. On the basis of the archaeological and architectural heritage of ancient Philippi, it was considered «to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared». In addition; on the basis of its role in early Christianity as a site frequented by St Paul it was considered “to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history”.

2.2. Natural Resources

In contrast to the wealth of “inland” green areas, the map of the of the WDPA (*World Database on Protected Areas*) shows a distinct lack of natural areas and parks along the Adriatic coast.

This does not include Slovenia, which boasts two sites recognised by Unesco as belonging to its network of Global Geoparks: the transnational *Karawanken / Karavanke Global Geopark* and the *Idrija Global Geopark*. The *Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe*, is a transnational composite UNESCO World Heritage nature site that represents the best conserved parts of the beech forests appearing in the most recent ice age. The *Mura River Biosphere Reserve* (part of the World Network of Biosphere Reserves), whose alluvial plain is called the *European Amazonia*, stretching across a number of European countries, contains the largest alluvial forest in Slovenia, recognised as world heritage by Unesco in July 2018.

Croatia, the third richest country in Europe in terms of water resources and ecological heritage, also has a great many natural and national parks, nature reserves (accounting for 10% of the surface area of the country) and marine parks. Of considerable interest is the *Plitvice Lakes National Park* (with 16 stupendous lakes with numerous waterfalls), added to the Unesco World Heritage list in 1979. The coastal landscape of Croatia is undeniably unique, with its infinite number of bays, islands, inlets, beaches and historic and natural resources visible everywhere: the coastal cities of Istria, the Kvarner Gulf and Dalmatia and the seabeds rich in flora, fauna and archaeological finds make it a key destination for tourism.

Of interest is in Montenegro the *Durmitor National Park*: a natural site formed by glaciers and crossed by rivers and subterranean streams, with eighteen glacial lakes (“the eyes of the mountain”) scattered across the Durmitor massif.

On the Italian shore are sites and landscapes of great historical-cultural and environmental importance, such as the city of Venice and the Po Delta, as well as the famous beaches of the Conero Riviera in the Marche region and the Tremiti Islands off the coast of Puglia.

Nature management is strategic in the Marche region, where about 8% of the region, almost 90,000 hectares, is covered by parks and protected areas, including two natural reserves, four regional parks and two national parks.

The Puglia region is also rich in parks and terrestrial and marine protected areas, which are mostly located along the 784 kilometres of coastline and in the Tremiti Islands, that since 1996 have been part of the Gargano National Park, which includes the extensive ancient beech forests of the *Foresta Umbra* nature reserve – a protected natural area recognised in 2017 by Unesco as natural world heritage as part of the transnational environmental site entitled “*Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe*”.

On the opposite shore, in Epirus, in the region of Ioannina, is the *Vikos – Aios UNESCO Global Geopark*, on the north-west side of the Pindus massif. Among the landscapes of historical, cultural and environmental interest, worthy of mention are the numerous archaeological sites, historical and architectural monuments and many ecologically sensitive and protected areas of high ecological and aesthetic value. There are 31 areas listed in the Natura 2000 network in Epirus (equivalent to 28% of the total area), to which may be added various

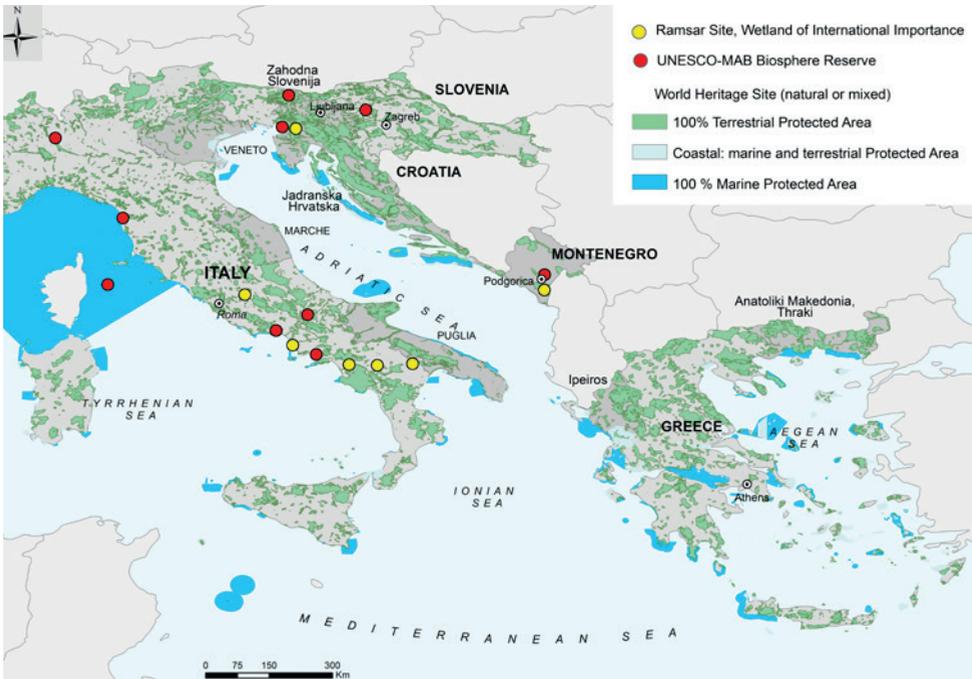


Figure 3. Parks, reserves, wetlands and protected areas in the region of interest to the QNeST project. Source: <https://www.protectedplanet.net>, our presentation.

other protected areas and national parks recognised on the European and international level, such as the *Amvrakikos Gulf* national park, also listed under the Ramsar Convention.

The north-east of Greece, specifically the region of Eastern Macedonia and Thrace, marks the end of the areas of ecological interest to the QNeST project, with the *Eastern Macedonia and Thrace* national park, of great biological, aesthetic, scientific, geomorphological and educational value. Incorporating the natural protected areas of the River Nestos, Lake Vistonida, Lake Ismarida and their surroundings, it was set up in 2008 in order to safeguard more effectively the habitats and the rare species of flora and fauna that populate the region. The wetland and forest of the national park is one of the most important in Greece and is of considerable size (930,000 hectares).

2.3. Local products linked to the Mediterranean Diet

Gastronomic resources are an expression of a region's cultural heritage and a strategic resource for tourism because they highlight the profound link between food, landscape, culture and identity. Indeed, dishes consistent with the geographical features, traditions, culture and local products of the regions are multiplying. An important role in the rediscovery of the cultural, aesthetic and health benefits of food is played by the *Mediterranean diet*, inscribed by Unesco (16 November 2010) in the List of Immaterial Cultural World Heritage, at the suggestion of Italy, Spain, Greece and Morocco. Defined as «a set of skills, knowledge, rituals, symbols and traditions concerning crops, harvesting, fishing, animal husbandry, conservation, processing, cooking, and particularly the sharing and consumption of food», it is an affirmation of identity and continuity for the populations of the Mediterranean basin. The *Mediterranean Diet* promotes intercultural dialogue while emphasising respect for diversity, and plays an important role in cultural events and celebrations, «bringing together people of all ages, conditions and social classes». Gastronomic tourism is clearly an opportunity for promoting the values of the past and functionally integrating them into the present as a “resource”, not just in cultural terms but also as a “cultural asset” on the strictly economic level (Croce, Perry 2010). Indeed, it helps to promote local craftsmanship and quality tourism.

The products linked to the *Mediterranean Diet* associated with the regions of the QNeST project that characterise quality cuisine are numerous.

However, among the many products associated with the Mediterranean Diet, *wine* and *olive oil* are the most widespread and representative of the food-processing and gastronomic sector as a whole, which is still seeing strong growth. Indeed, various players are investing in the sector's supply chain, seeking to improve the range of products and services on offer and to attract tourists who not only love the local gastronomy, but are also interested in the other qualities of the region they are visiting.

The *olive tree* is one of the most characteristic crops of the entire Mediterranean basin, where 99% of the world's olive oil is still produced. «The production of oil is not just a profession, it is a tradition», wrote Matvejevic in his *Mediteranskibrevijar* (Mediterranean Breviary). «The olive is not just a fruit, it is also a relic», he argued, proposing it as one of the symbols of the *Mare Nostrum*, in which Italy is a key player.

Today as in the past, the *olive tree* dominates the landscape and the economy of the QNeST regions. In Puglia the olive tree is an inimitable and enviable attraction in terms of both nature and tourism, above all in the *Plain of the ancient olive trees*, between the “white city” of Ostuni and Fasano, Monopoli and Carovigno, a “pilot area” of the QNeST project. Also unique are the landscapes of olive groves and vineyards, in the hilly areas near the coast and inland of Marche region, exemplifying the concept of a heritage to conserve and pass on to future generations. In Veneto, olives are grown on the eastern side of the River Garda, known for the cultivation of the olive tree ever since Roman times, as well as on the hilly areas in the provinces of Verona, Vicenza, Padua and Treviso, including the Colli Euganei and Berici, in a belt that crosses the region from west to east. On the opposite shore of the Adriatic, in the Istrian peninsula, olive cultivation also shows considerable dynamism. In Slovenia, olive trees are present above all in Istria, which has the highest production and investment in the sector. Olive cultivation in Croatian Istria also has great potential too. With thousands of hectares of olive groves producing millions of litres of extra-virgin oil every year, it accounts for the lion's share of olive cultivation in Istria. Considering the global climate change in progress (and the death of olive trees in the southern Salento due to the spread of *Xylella*) it may be assumed that Istria will become the new frontier of a crop whose cultivation is shifting northwards from the Mediterra-

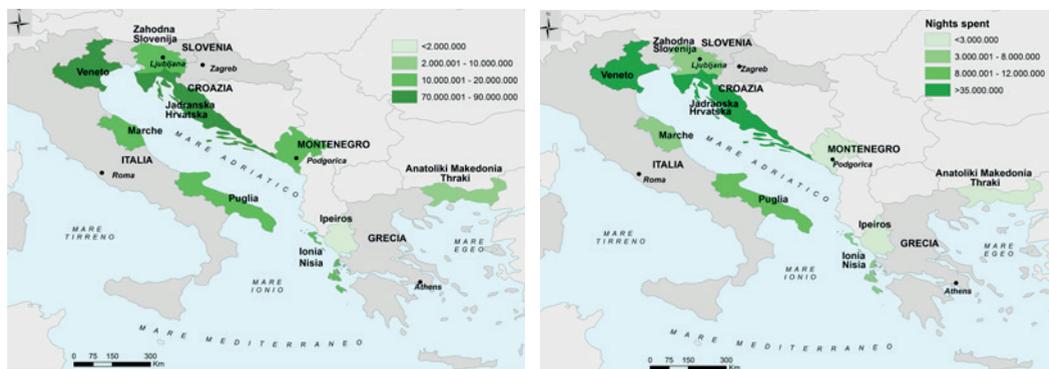
nean. Montenegro, with its more than 400 thousand olive trees, also has enormous potential for olive oil production, although a much greater role is played by nearby Greece in, that is the third largest producer of olive oil in the world and the biggest producer of black olives. The olive tree also accompanies the vine in the regions of Eastern Macedonia and Thrace and Epirus, where the rich *tradition of wine-making* is carried on by vineyards and wineries that offer tourists food-and-wine itineraries and a local beverage called “tsipouro” (Bada 2003; Alebaki, Ioannides 2017; Kostopoulou, Andreadis, Karoulia, Gaki 2017). Viticulture is known to have originated in the Hellenic peninsula and spread from here to Italy and subsequently all over Europe. It was after the Second World War that with wine became truly successful, with the recovery and exploitation of local vine varieties, restoring wine’s cultural and significance and its link to regional identity. This objective is shared by all the populations of the Mediterranean, who consider viticulture to be a fundamental element of their local traditions. This is the case with the people of Istria and Veneto, which gives wine its full attention. Also very famous and considered to be exceptional are the wines of Marche and Puglia (and particularly the pilot areas of the North Salento and Valle d’Itria), together with the olive tree, vines have been a distinctive feature of local agriculture since ancient times.

3. Tourism in QNeST areas

In terms of European tourist flows, the substantial and constant growth of the Balkan countries (including Greece) and Italy as travel and holiday destinations was one of the most significant trends of the years preceding the Covid-19 pandemic.

Indeed, figures 4 and 5 show that presences in the regions covered by the QNeST project recorded increasing values. For example, Puglia grew by more than two million from 2011 to 2019, and western Slovenia (Vzhodna Slovenja) saw more than 5 million in the same years (see figure 6).

Slovenia offers a wide variety of landscapes and natural conditions (mountains, lakes, coast and the karst plateau), as well as local culture and history, made up of a blend of Romance, Germanic and Slavic traditions. It thus provides ideal conditions for the development of the tourism sector, considered



Figures 4-5. *Nights spent at tourist accommodation establishments in the years 2019 and 2020.*
 Source: *Nights spent at tourist accommodation establishments in the years 2019 and 2020.*

one of the most promising of the local economy. This is also true of Puglia, where tourist presences are mainly concentrated in the coastal strip, given the clear prevalence of a tourism still linked to the traditional three Ss (sun, sea and sand), although recent market trends and the effects of the pandemic suggest this might be changing.

As is clear from a critical reading of the data on tourist flows in 2020 (see figure 5), the impact of Covid-19 has been devastating in all regions of interest to the QNeST project.

On the Italian shore of the Adriatic, tourism is characterised by other systems and forms of regional organisation. In fact, on both sides of the Adriatic there are similar types of tourism on offer, but they are based on substrata that evolved differently. On the eastern side there is an attempt to offer a product closer to nature and culture, but the sector is poorly organised and has focused on large numbers. In contrast, on the Italian side, as emerges from the Veneto experience, the range of goods and services was and still is more structured, relying on an excellent organisation of structures, infrastructure and services, and it has diversified the old tourist model with a view to sustainability.

This objective is shared by the Marche region, whose stagnant trend in presences over the last ten years (-6%) has been aggravated by the pandemic (-26%), highlighting the need for the urgent recovery of a fragile sector, already severely damaged by a prolonged “seismic crisis” caused by the 2016 earthquake, from which the Region’s Regional Tourism Promotion Plan had sought to rescue it.

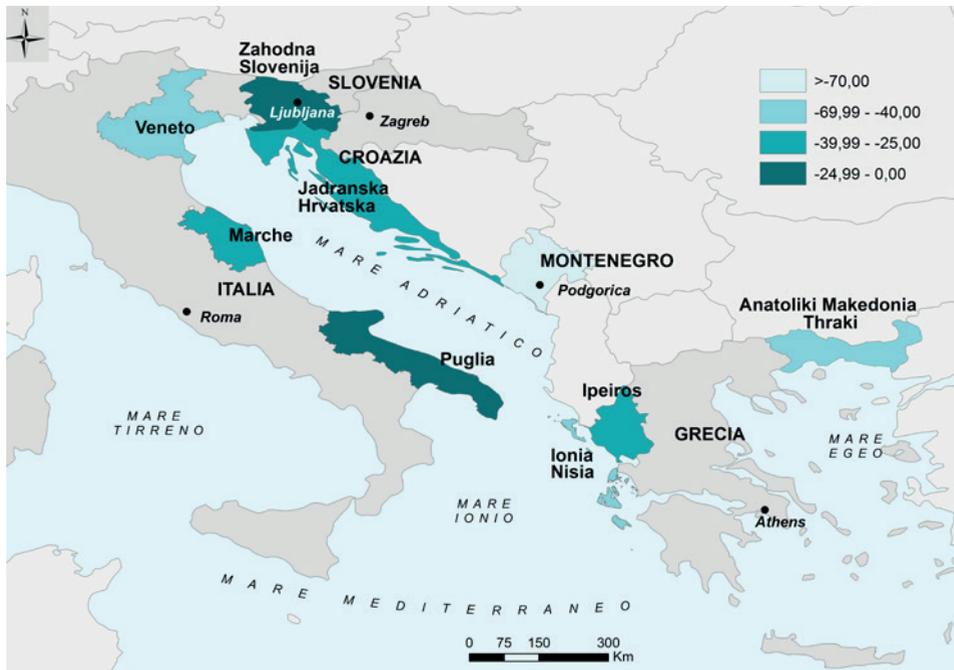


Figure 6. Variation (%) in Nights Spent in QNeST areas (2011-2020). Source: National statistics agencies of the individual countries participating in the QNeST project, our presentation.

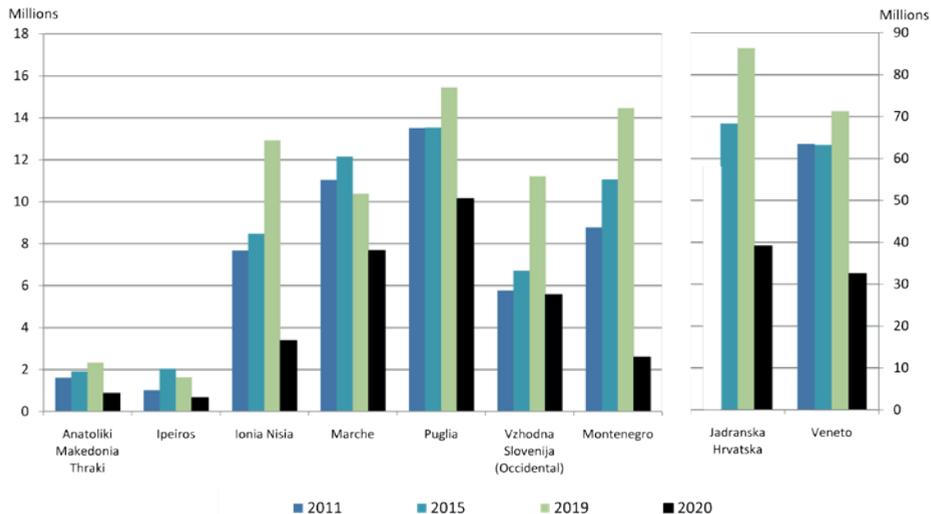


Figure 7. Variation in tourist presences in QNeST areas in the years 2011-2020. Source: National statistics agencies of the individual countries participating in the QNeST project, our presentation.

Plans and projects for the recovery and renewal of tourism are being replicated in the Puglia region, which has also been hit during the pandemic by a sharp reduction in presences (-34%, as shown in figure 7), without however depriving it of its long-established seaside tourism. The latter continues to exert strong pressure on the coastal environment, with a tendency to trivialise and stereotype the tourist sector, increasingly characterised by mass-production and a loss of specificity, reduction of environmental quality and the slow corrosion of indigenous social structures. At the same time, a culturally rich tourism attentive to the sustainable management of natural resources is gaining ground, especially in the Itria Valley, the pilot area of the QNeST project.

4. Conclusion

The tourism situation briefly outlined above calls for new regional policies – including social and economic measures, funding and investment – designed to counter the dramatic effect of the pandemic and to contain potential threats to the stability of some urban economies. Of particular concern is the possible resurgence of overtourism in some popular destinations, such as the beach resorts along the Adriatic coast. A related threat is the reappearance of mass tourism, which has often characterized some of the project's areas of interest, with massive construction, partly determined by the wish to offer beach holidays at competitive prices. In contrast, what is required are strong controls, greater attention to quality and the use of spaces that are not subject to speculation but rather comply with the principles of sustainability. The goal is a form of tourism that pays attention to nature and inland areas, frequently marginalized, whose relatively low population density makes them ideal destinations. Such areas meet the desire for isolation prompted by the pandemic, as evidenced by the rise of proximity tourism seen in the summer of 2020 and 2021. To this end, it is appropriate to take an in-depth look at the tourism and accommodation sectors and the policy responses – at the national and regional level – designed to mitigate the crisis of the sector. What is really needed however is more incisive intervention to a) strengthen the resilience of the sector in the inland and peripheral areas of the Adriatic-Ionian macro region, and b) support a revival of the sector based on the anti-systemic reprogramming of activities in line with the objectives of sustainability and ecological transition.

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Sustainable Tourism in Istria (Croatia)

Cultural routes and territorial identity as drivers for long-lasting local development

by Raffaella Gabriella Rizzo

1. Introduction and object of the research

This chapter intends to focalise on the Croatian Region of Istria (EU NUTS₃-HR036), which is located in the peninsula at the head of the Adriatic Sea. The coast is articulated, dotted with small historic towns (Umag, Poreč, Rovinj and Pula) with Roman remains, as well as architectural sites dating from the Byzantine and Venetian dominions. The landscape of the whole territory is scenic. The rolling hills inland are covered with vegetation and scattered with villages. Because of the nature of its soils, from west to east the area is divided up into “red Istria” (limestone), “grey Istria” (sandstone/marl), and “white Istria” (calcareous/dolomitic).

Known as “the land of a thousand islands”, Croatia is characterised by the presence of several Special Protected Zones, natural parks, elements of historical/cultural heritage, religious sites (some devoted to pilgrimages), historic towns and villages, UNESCO sites, and natural and local food products. This set of attractions – together with the precious intangible heritage – plays an important role in the achievement of the objectives of the *Strategy for Croatian Tourism Development*. One of the instruments for this purpose is the implementation of multi-thematic routes, the core topic of this chapter.

Following a summary of the geographical context and some historical notes (§1), we will illustrate some tourism-related aspects (§2) and the policies that have been implemented. In §3 we describe the three thematic routes identified under the European Community project “Quality Network On Sustainable Tourism (QNeST)”, which cover parts of the area in question. These often interweave and are complemented by the rich and detailed information for tourists to be found in public portals and private websites (§4).

2. The geographical and socio-economic context of Istria County

Istria is a triangular peninsula that points downwards in the northern part of the Adriatic Sea between the Gulf of Trieste (Italy) the Kvarner Gulf (Croatia).

The base of the triangle lies to the north and the area narrows towards the south, with fringes stretching down as far as Cape Kamenjak in the homonymous nature reserve. It includes to the north the part of Istria that is in Slovenia and the small portion of Istria that is Italian. 89% is made up of Croatian Istria (2,822 sq. km.). Here, in Istria County – the third level of administrative division in local government – one finds the 3 *Routes* developed within the ambit of the QNeST Project and dealt with in greater detail in section no. 3 (figure 3).

We will now dwell on certain morphological (Sestini 1963, pp. 43-45) and settlement-related aspects. The coast has a Mediterranean climate and twists and turns for almost 450 km (excluding the islands). It is very articulated and varied, with frequent bays (with sandy, pebbly or stony beaches), sometimes with high, linear stretches or with rugged cliffs. The promontories and small peninsulas are undulating or steep. Facing the coast, there are islands, islets and rocky outcrops.

Along the coastline, there are notable inlets where the sea penetrates inland. In the western sector, two are perpendicular to the coast itself:

- the first lies further north and constitutes the Mirna Valley [the river is navigable for a few kilometers, and, in the past, it was important for transporting lumber from inland Istria to Venice (De Luca 2011, p. 45; Baissero 2019)];
- the second inlet is central. It constitutes the 12 km-long Lim Channel, which is prolonged into the hinterland as an erosional valley (the Draga or Kanfanar Valley) (Rossit 2015, p. 315). In south-eastern Istria, on the other hand, one finds an incision running from north to south: this is the Rasa Valley, which ends in the long homonymous Channel.

The hinterland, from west to east, is made up of a karstic plateau (on average, between 100 and 300 metres above sea level), largely covered in Mediterranean scrub and punctuated with white dry-stone walls. It is at times flat, or

with little valleys with frequent rises and a few spurs in which, over the centuries, hundreds of small, ancient stone settlements, hamlets and little towns have located themselves (Farina 1989; Lago *et al.* 1987).

Given the nature and orientation of the rocks, superficial and underground karstic phenomena are common (Bognar 1996), producing valleys, chasms, sinkholes and caves like the marble caves at Brtonigla; those at Baredine (Nova Vas), Pazin, Festini (Žminj); and Romuald's Cave (Lim Channel). In appearance, the part further inland is verdant; this is made up of scrubland and more or less continuous woodland, interrupted by plots of cultivated land with red soil due to the ferrous residues from the decomposition of the calcareous rocks (Merlak 2019).

Far from the coast, the climate is of a mild, continental type. The countryside in the centre/south is punctuated with *casite*, small stone buildings used in the past for sheltering tools and farmers/shepherds (Lago 1994). Given their interest from the point of view of cultural heritage, the *Casite Park* has been created at Vodnjan, with the restoration of 200 buildings, some of which can now be visited.

The altitude, on the other hand, is quite considerable to the northeast – in Čićarija and in the Učka mountain range (almost 1,400 m). This last feature, lying just behind Opatija, is a nature park and has stunning floristic characteristics (Tomasi 2012).

Istria County is composed administratively of 10 *townships* (Buje, Buzet, Labin, Novigrad, Pazin, Poreč, Pula, Rovinj, Umag and Vodnjan) and 31 municipal areas. The towns, except for (56,540 inhabitants in 2015) are all small, and the municipalities – though small demographically – generally have between 1,000 and 6,000 inhabitants.

The salient characteristic of Istria's settlement structure, though, is that it is further subdivided into hundreds of small hamlets, usually of around 100-200 inhabitants (*naselje*). In the old part, the residential areas of the municipal centres – both on the coast and in the hinterland – are compact, built of stone and generally surrounded by walls, with little cobbled streets and squares, the seat of the local government, a castle, noble coats of arms and especially those of the Venetian domination, with the Lion of St. Mark, and with – a recurring iconic feature – water tanks, as well as churches of varying size with – separate, to one side – towering *campanili* (belfries).

Though it is a territory that is relatively limited in size (it is indeed only a Province), the Croatian part of Istria has a very complex history and has, over the centuries, been subjected to invasions, construction and destruction. Various dominions have ruled over either the whole of the area or parts of it. There have been many and varied immigrations – from the Veneto, from Germany and from the Balkans – and emigrations too, ending up with the real exodus after the Second World War that depopulated many of the settlements. Different traces of all of the above remain in the monuments, the buildings, the demography, idioms and traditions.

There are many cultural assets and protected cultural centres present in Croatia. The Ministry for Culture and Media has produced a *Register of cultural assets in the Republic of Croatia* (Cevolin 2019, p. 427), also in digital form and available on a geoportal.

Some of these sites are on the 3 QNeST routes, as will be illustrated below (figure 4).



Figure 1. Casite, Park Kažuna.

3. Economic activities: tourism and agriculture

3.1. *Tourism: the policies*

Croatia is nowadays defined as “a rising star” of tourism (Dwyer *et. al.* 2017, p. 1). In 2019, with revenues of 10,097 million euros, the tourism sector was one of the pillars of the Croatian economy (ICE-Zagreb Office 2019, p. 7). It represents 10.4% of the Croatian GDP and 13.3% of the country’s employment (Dwyer *et. al.* 2017, p. 2). This could be considered as one of the results of the *Strategy for Croatian Tourism Development to 2020* (Ministry of Tourism 2013). This plan aimed to diversify the tourist offer by improving the sustainable management and attractiveness of thematic tourist routes and de-seasonalizing tourist flows (ICE – Zagreb Office 2015, table of p. 14-15). Besides, Croatia has been involved (and still is) in several EU projects (Ilic 2017) and the development plans of individual strategic towns are being worked on.

3.2. *The evolution of tourism in recent decades*

Croatia is in seventh place in Europe with 84.1 million tourist presences of non-residents according to the Eurostat figures for 2019, approximately a third of which are represented by Istria County. For confirmation of the importance of tourism in Istria, see the data provided by the *Istrian Tourist Board* in tables 1 and 2.

In 2019, foreign tourists came from 75 countries and from every continent; the internal Croatian component was also well represented. The two tables only refer to those countries from which there were more than 50,000 arrivals; all the others are grouped together. The neighbouring countries – Austria, Slovenia and Italy – play an important role, even if the highest value is represented by Germany (23% of arrivals and 30% of overnights). Domestic tourism is in fifth place. Also quite significant are the countries of Central Europe, Holland, the United Kingdom, Switzerland and France.

In the two tables it is possible to make a temporal comparison for the period 2019-2009. We also provide the figures for 2020, to document the major decrease caused by the SARS-COV-2 pandemic.

Tables 3 and 4 show the distribution by municipality (arrivals and overnights) for the period 2009-2019. These are all coastal municipalities.

Table 1. *Istria County: tourist arrivals in the years 2020, 2019 and 2009. Source: Istria Tourist Board.*

Country	2020		2019		2009	
	Arrivals	%	Arrivals	%	Arrivals	%
Austria	152,800	8.14	654,667	14.20	336,657	12.36
Croatia	182,804	9.74	313,216	6.79	171,147	6.28
Czech Republic	97,608	5.20	152,319	3.30	98,009	3.60
France	13,274	0.71	64,478	1.40	55,144	2.02
Germany	601,905	32.07	1,059,908	22.99	580,774	21.32
Hungary	40,927	2.18	129,062	2.80	55,143	2.02
Italy	98,559	5.25	462,910	10.04	432,538	15.88
Netherlands	32,595	1.74	171,155	3.71	149,376	5.48
Poland	80,528	4.29	130,279	2.83	53,462	1.96
Slovakia	21,094	1.12	68,601	1.49	32,433	1.19
Slovenia	352,327	18.77	605,923	13.14	403,215	14.80
Switzerland	28,746	1.53	67,303	1.46	34,073	1.25
UK	15,272	0.81	146,201	3.17	42,310	1.55
Others	158,560	8.45	583,777	12.66	279,889	10.27
<i>Tot.</i>	<i>1,876,999</i>	<i>100.00</i>	<i>4,609,799</i>	<i>100.00</i>	<i>2,724,169</i>	<i>100.00</i>

Table 2. *Istria County: tourist overnights in the years 2020, 2019 and 2009. Source: Istria Tourist Board.*

Country	2020		2019		2009	
	Overnights	%	Overnights	%	Overnights	%
Austria	958,040	7.09	3,483,770	12.13	1,995,205	10.67
Croatia	809,441	5.99	1,202,043	4.19	868,855	4.65
Czech Republic	610,475	4.52	974,503	3.39	636,918	3.41
France	66,222	0.49	271,334	0.95	261,282	1.4
Germany	5,224,540	38.66	8,694,612	30.28	5,258,943	28.12
Hungary	225,084	1.67	654,064	2.28	301,037	1.61
Italy	614,052	4.54	2,269,964	7.91	2,224,571	11.89
Netherlands	298,838	2.21	1,520,712	5.30	1,652,535	8.84
Poland	549,151	4.06	878,515	3.06	385,055	2.06
Slovakia	128,409	0.95	407,445	1.42	204,781	1.09
Slovenia	2,562,692	18.96	3,621,754	12.62	2,423,831	12.96
Switzerland	194,205	1.44	389,031	1.36	213,436	1.14
UK	101,532	0.75	943,701	3.29	304,529	1.63
Other	1,172,003	8.67	3,398,108	11.84	1,972,796	10.55
<i>Tot.</i>	<i>13,514,684</i>	<i>100.00</i>	<i>28,709,556</i>	<i>100.02</i>	<i>18,703,774</i>	<i>100.02</i>

Table 3. Tourist arrivals by municipality: 2020, 2019 and 2009. Source: Istria Tourist Board.

Municipality	2020		2019		2009	
	Arrivals	%	Arrivals	%	Arrivals	%
Bale	27,596	1,47	55,726	1,21	23,271	0,85
Brtonigla	34,855	1,86	76,132	1,65	37,779	1,39
Fažana	67,615	3,60	144,439	3,13	91,008	3,34
Funtana	99,107	5,28	237,206	5,15	171,073	6,28
Labin	71,231	3,79	245,272	5,32	180,227	6,62
Medulin	195,667	10,42	426,221	9,25	258,195	9,48
Novigrad	104,327	5,56	230,296	5,00	140,222	5,15
Poreč	203,953	10,87	589,120	12,78	391,235	14,36
Pula	149,184	7,95	445,623	9,67	214,023	7,86
Rovinj	294,562	15,69	721,060	15,64	364,048	13,36
Tar-Vabrica	90,082	4,80	256,373	5,56	181,226	6,65
Umag	183,328	9,77	505,155	10,96	355,098	13,04
Vodnjan	43,454	2,32	57,366	1,24	32,800	1,20
Vrsar	87,087	4,64	221,560	4,81	156,073	5,73
Others	224,951	11,98	398,250	8,64	127,889	4,69
Tot.	1,876,999	100,00	4,609,799	100,00	2,724,169	100,00

Table 4. Tourist overnights by municipality: 2020, 2019 and 2009. Source: Istria Tourist Board.

Municipality	2020		2019		2009	
	Overnights	%	Overnights	%	Overnights	%
Bale	193,112	1,43	362,458	1,26	139,633	0,75
Brtonigla	320,748	2,37	627,770	2,19	342,884	1,83
Fažana	520,586	3,85	1,055,382	3,68	822,197	4,40
Funtana	743,193	5,58	1,721,331	6,00	1,354,601	7,24
Labin	453,250	3,35	1,440,277	5,02	1,166,995	6,24
Medulin	1,448,537	10,72	2,765,651	9,63	1,842,136	9,85
Novigrad	641,074	4,74	1,331,891	4,64	838,732	4,48
Poreč	1,388,144	10,27	3,485,233	12,14	2,641,670	14,12
Pula	855,878	6,33	2,174,652	7,57	1,056,050	5,65
Rovinj	1,846,127	13,66	4,011,658	13,97	2,596,044	13,88
Tar-Vabrica	804,826	5,96	1,973,775	6,87	1,471,278	7,87
Umag	1,273,200	9,42	2,724,542	9,79	2,039,082	10,90
Vodnjan	532,307	3,94	684,474	2,38	296,559	1,59
Vrsar	712,854	5,27	1,634,030	5,69	1,270,621	6,79
Others	1,780,848	13,18	2,716,432	9,46	825,292	4,41
Tot.	13,514,684	100,07	28,709,556	100,29	18,703,774	100,00

The coast is used to a large extent for seaside tourism, whose attraction is based on the “3s” model – *sun-sea-sand* – especially for the mass market (Ilić 2017, p. 192; Rossit 2015; Albolino 2014). This is concentrated on the west coast, between Umag and Pola (Gosar 2014, p. 170; Kranjčević, Hajdiniac 2019), and also stretches as far as Medulin in the extreme south (tables 3 and 4). To gauge its importance, we provide the example of the municipality of Novigrad in 2017: resident population 4,345; tourist arrivals 222,774; arrivals/inhabitants: 51.6 (Brščić *et al.* 2020, p. 150).

Since the end of the 20th century, in particular, the coast – both in the west and the south – has been to a large degree given over to tourist developments: the coastal residential areas have expanded with neighbourhoods for the tourists. Other areas have been developed from scratch with hotels, resorts, holiday camps, and non-hotel accommodation (especially apartment rentals in private houses).

All kinds of services have been created: hotels suitable for MICE (Meetings, Incentives, Conferences and Exhibitions), sports facilities – both aquatic and on land – even with local specialisation; for example, Umag has around 60 tennis courts. There have been conversions of previous state mega-buildings into smaller units, with foreign investments from Spain, the United Kingdom, Germany and Italy (Gosar 2014).

Campsites are also frequent (Brščić *et al.* 2020): from luxurious ones like the Camping Park Umag (with a great variety of types of accommodation, from the numerous “mobile homes” to glamping) to small family-run campsites (both on the coast and in the hinterland).

By the sea, numerous little harbours and marinas have been created for pleasure boating (Favro, Glamuzina 2005). Nowadays, one can find out about all these aspects via internet and, with all the types of communication and illustration available, it is easy to take a “real” virtual trip to the area.

3.3. Agriculture

Near the coast (but also widely inland) viticulture is practised [3,200 hectares of vineyards and 20 million litres of wine in total (Rihelj 2018)], and 109 wineries are to be found that are much frequented by tourists (Pitacco 2014 for the history of vine-growing in Istria; Pičuljan *et al.* 2019; Ilak Peršurić *et al.*

2016). There are also 5 Wine Roads (Ruzić 2008, p. 12; Albolino 2014, p. 427). The wine-producing companies are exhaustively publicised on the web and are geolocalised. Tourists prefer to drink wines obtained from indigenous grape varieties such as Istrian Malvasia (Istarska malvazija) and Terran (Oliva *et al.* 2012; Ilak Peršurić, Tezak 2011). Olive-growing is also widespread, with 141 producers of oil and 7 Olive Oil Roads. Istria participates in the Olive Oil Itinerary of the Council of Europe (<https://www.coe.int/en/web/cultural-routes/the-routes-of-the-olive-tree>) and Pola has an Olive Oil Museum (<https://oleumhistriae.com/en/home/>).

The area in the northwest (Umag, Buje, Brtonigla and Novigrad) is the one with the greatest specialisation in both of these crops <https://www.coloursofistria.com/en/destinations/map-istria/winemakers#TopPage>.

Given the shape of the peninsula, the hinterland is quick and easy to reach (10-30 km in the northern section, much less in the south), allowing for tourism and hiking in the countryside to be very mobile (Ruzić, Demoja 2017). Numerous other types of special interest tourism are available: cultural tourism (Grzinic, Vodeb 2015); bicycle touring (Bait *et al.* 2019) and motorbike tourism; food and wine tourism, linked to typical local products (truffles in particular); various other kinds in which this phenomenon expresses itself (Rakitovac, Maruzin 2017; Žužić 2014).

One type of tourism that is very common everywhere in Istria is bicycle touring, which takes advantage of a plethora of minor roads. Detailed cartographies of routes and tracks of varying difficulty are available on internet. Especially worth mentioning is the “Parenzana” cycling trail because it constitutes an example of recuperation and reuse of the tortuous layout of the former railway (123 km) (figure 2). With its narrow gauge and continuous rises and falls, this had been built during the Austro-Hungarian Empire and left abandoned in 1935 when Istria was under the dominion of Italy (cartography in Bertarelli 1934, inserted between p. 336 and p. 337; Rakitovac, Maružin 2017).

For the importance of bicycle touring see also the route of EuroVelo 8 – Mediterranean Cycle Route in Croatia (which will run along the entire coast of Istria, as part of the cycling itinerary through all the European Mediterranean countries).

4. The QNeST routes

The complexity of the territory of Istria County lends itself to the identification of three multi-themed routes (figure 3). Two of these lie in the northern zone of the region:

1. the *Cultural-Natural Route*, from Poreč winding North-East to Motovun and then North-West to Grožnjan;
2. and the *North Istria Route*, from the Učka Nature Park to Hum, Roč and on to Vižinada;
3. the third is in the southern zone: the *South Istria Route*, from Cape Kamenjak to Pula and the Church of St. Blase [via the Punta Cristo Fortress and the Brijuni National Park (figure 4)].

With its plethora of very differently themed resources, Istria can capture the interest of the tourist with attractions that appeal to a whole range of potential needs and desires: cultural, religious, artistic, musical (figure 5), or related to sports (figure 2, POI 13), food and wine, or cures and wellness. These attractions become the basis – or have the potential to do so – for strategies for developing tourism (and eco-sustainable tourism), to increase Croatia's competitiveness in this sphere (DESK Structural Funds ICE-Zagreb Office 2015).

In this respect, one may consider – for example – the project for promoting the Brijuni Islands and their coastlines, with cooperation between the Region of Istria and the Republic of Croatia (www.brijunirivijera.hr). This National Park is one of the points of interest of the *South Istria R.* (POI 4; figure 2).

In the past these were islands where the élite spent their leisure time or went for cures; at the same time, they enjoyed a political/diplomatic role because of the residence of Tito. Today they are «a mature destination for special interest tourism which demonstrates the need to reinvent itself» (Urošević 2020).

Remaining in the southern part of the region, another park touched by the route is Cape Kamenjak (POI 1): a Natura 2000 protected zone near Premantura, about ten kilometres from Pula, this is an interesting floristic site, particularly for orchids, with an indented coastline and uninhabited islands (Ljubičić *et al.* 2020; Vuković *et al.* 2011). It includes two Marine Reserves whose seabeds have complex ecosystems (<https://www.croaziainfo.it/kamenjak.html>).



Figure 2. Parenzana Cycling Trail.

The other two routes are also involved with nature-based tourism due to two sites: the Učka Nature Park on the *North Istria R.* (POI 17) and the Baredine Cave on the *Cultural Natural R. of Istria* (POI 9).

The former covers 160 km² and has been a protected area since 1999. It welcomes visitors with two didactic trails: “Plas” and “Vela Draga” (www.pp-ucka.hr). Travelling along them, one can admire the bluebells – an endemic plant of the Učka mountain range – and rare birds such as golden eagles, European vultures and grey griffons.

The latter (the Baredine Cave) is a natural geomorphological monument that has been protected since 1986. The habitat of the small endemic amphibian *proteo istriano*, it is situated on the western side of the Istrian peninsula. Open to visitors since 1995, Baredine offers a principal attraction – the cave with its 300 metres of walkways – accompanied by a varied complementary offering aimed at appealing to tourists of different ages: a park with a botanical trail; a site for speleological climbing; the tractor exhibition and shop; an opportunity to taste local products (olive oil, wine, *supa* and Istrian *prosciutto* – ham).

This dense offering of protected areas is matched by a rich variety of settlements and villages. Here we take into consideration:

- On the northern route: the mediaeval village of Roč (a district of Buzet) (POI 15), the site of the Small Glagolitic Academy, and the tiny hamlet of Hum (POI 16). These two villages are connected by a memorial path – the Aleja Glagoljaša – with sculptures and plaques written in the Glagolitic alphabet (Selvelli 2015).

- On the *Cultural Natural Route*: Grožnjan (POI 11), the artists' town – rendered lively by academies and summer workshops – and Motovun (POI 10), a little town with Romanesque /Gothic architecture situated in the valley of the Mirna River and known also for the protected area of Motovuska šuma [the last alluvial forest in the Mediterranean (natura-historica.hr)].

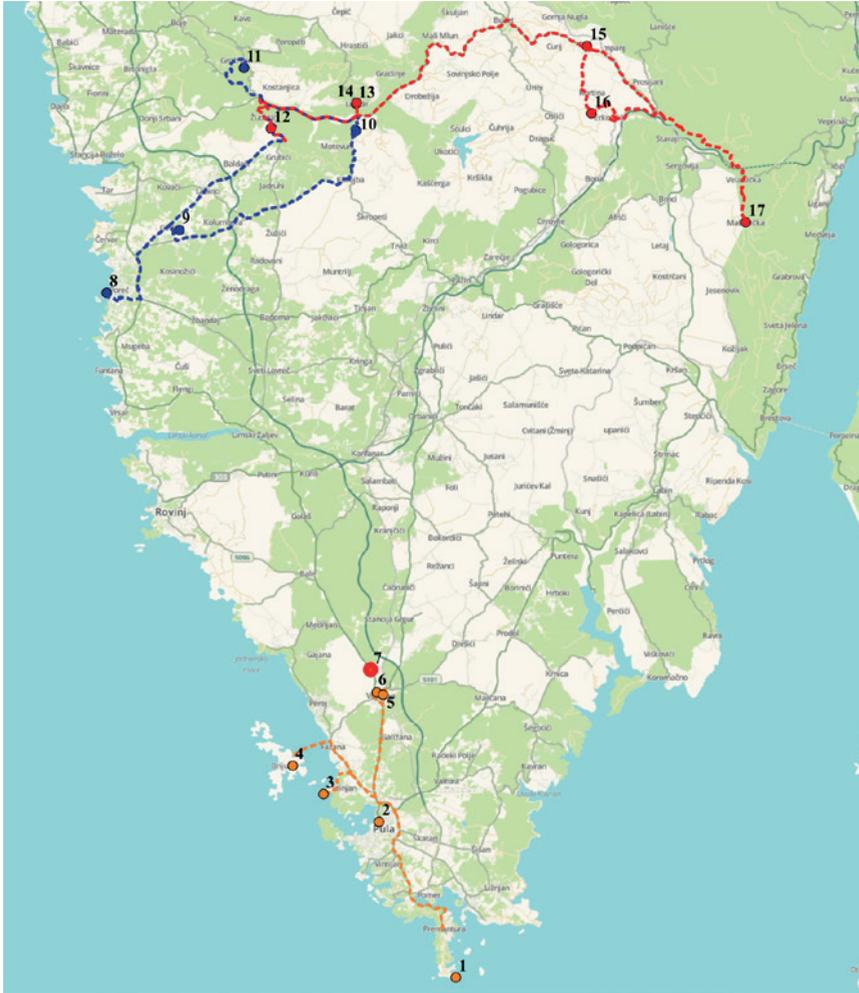


Figure 3. The 3 QNeST routes in Istria County: in orange the South Istria R., in blue the Cultural Natural R. and in red the North R. (see the text for the POIs). Source: Raffaella Gabriella Rizzo, 2021.

Both sites are destinations for festival tourism (musical/film), with annual events that allow for immersion in culture “as part of a new paradigm of cultural heritage” (Cerin Otočan 2020): the international *Jazz is back BP* Festival (Grožnjan), the brainchild of jazz maestro Boško Petrovič, and the *Motovun Film Festival* (which attracts around 20,000 spectators every year) (figure 5).

The towns, villages and other small centres are also custodians of heritage that bear witness to the peninsula’s artistic/religious riches.

This aspect is sufficiently important for Istria to become a destination for religious tourism. Examples on the *Cultural Natural Route* are the Church of St. Blaze (POI 6) and the episcopal complex of the Euphrasian Basilica in the old town centre of Poreč (POI 8). This has been a UNESCO World Heritage Site since 1997. It consists of a group of outstanding religious monuments, with classical and Byzantine elements [the EX.PO AUS project (IPA Adriatic CBC Programme 2007-2013)]. On the *South R.*, we draw attention to two sites of great historical/architectural significance: the Punta Christo Fortress (POI 3) and the amphitheatre of Pula (POI 2).



Figure 4. Brijuni National Park.

Both in the centres and the rural zones, it is important to insert points of interest that represent the local food and wine products and traditions (§ 2.3). In this regard, we suggest on the routes POIs 5, 7, 12 (Chiavalon Extra Virgin Olive Oil, Arman wines and the Babos winery) and 14 (Zigante truffles).

5. Information and promotion/marketing on the web

With regard to information about Istria, the *Istria Tourist Board* (www.istra.hr) is very active. This site deals with the entire County, with its logo and a thematic menu: *Sun & Sea, Green Istria, Culture, Gourmet, Sports & Outdoor, Health and Wellness*.

Within the portal, the menu is well articulated, offering an extremely rich variety of material, resulting partly from EU projects. Moreover, the information is made available on a more detailed territorial scale by the *Central Istria Tourist Board*, as well as by the individual municipal tourist boards. These either group together the tourist boards of associated municipalities with the principal local tour companies, or they represent single municipalities.

The companies that manage the individual websites reveal all the aspects on offer in the areas as a whole – conveyed by a logo – to meet the needs of users/tourists. In these cases, too, a menu with several categories is shown (destination, gastronomy, nature and campsites, sports, wellness and sea, accommodation), each with a dropdown menu. The companies involved (those who have subscribed to the portal) are listed by type (and often geolocalised) and can therefore be selected. In this way, Istria County is also present as:

- North-western Istria (Umag, Novigrad, Brtonigla, Buje and 2 companies).
- Central Istria (Pazin, Cervolje, Lupoljav, Pican, Gracisce, Caroiba, Sveti Petar, Sveti Lorenz, Tinjan). Here the 8 thematic routes are available (§1). Also, one can now consult of the cartography of cultural assets published by the Istria Tourist Board and broken down into 8 itineraries that wind their way through the whole of the province:
 1. The frescoes itinerary;
 2. The Glagolitic route;
 3. The Parenzana;

4. The itinerary of the Castles;
 5. The Venetian era trail;
 6. The “In the footprints of the dinosaurs” itinerary;
 7. The Archaeological Parks Route;
 8. The itinerary of the *casite* and the *masiere* (low dry stone walls) (<https://www.istra.hr/en/information/brochures>).
- Individual municipalities.

There is also the *Agency for the development of tourism in Istria – IRTA*, which groups together a large number of subjects in a synergistic manner. One of these, for example, is *Istria Bike*, which offers dozens of detailed, well mapped and thematically described trails (<http://www.istria-bike.com/it/multimedia>), which can also be downloaded via a QRC.

On the one hand, the management of the tourist sector in Croatia – and consequently in Istria County – seems to be largely centralised on the part of the government of the Republic itself (Master plan for the development of Istrian tourism 2015-2025). On the other, there is a multiplicity of actors (§4) who strive to convey the appropriate information to the tourist, the end user



Figure 5. *Motovun Film Festival*.

– of the resources and the routes. There are many such initiatives in Croatia; amongst them are tourism trademarks (coloursofistria.com), proposals to renew the image of given areas, sometimes using a bottom-up approach (publicity campaign for Mali Lošinj *1 visit is worth 1000 pictures*), quality projects for the destination (IQM Destination with the creation of a card: <https://iqmpass.om>), etc. The Istrian Development Agency – IDA has created, in collaboration with the Region of Istria, the IQ (Istrian Quality) trademark, registered in 2005, to highlight the quality of Istrian products (<https://ida.hr/it/bn/pianificazione-strategica/iq-qualita-istriana/>).

6. Conclusions

Because of the advent of the pandemic, it is unfortunately impossible for the moment to give any evidence of the impact of the routes proposed by QNeST.

In 2019, in fact, the relative promotion through the (especially local) media, fairs, and the creation of *ad hoc* networks between national (and foreign) tourist agencies had only just begun. In general, reflecting on the all-round concept of a (sustainable) “network”, one notes how the virtual environment of Istria County – often inserted in websites dealing with the whole of Croatia – presents itself as being rich in opportunities for getting to know the territory and its resources.

One can see that the websites are well structured, often featuring good geographical and contextual descriptions of the locations linked to (tangible or intangible heritage). These descriptions are not infrequently accompanied by cartographies, brochures or catalogues with maps of various kinds (sometimes also webGIS). Often the portals, even if they are of private subjects in the world of business, offer links to other entities, including local territorial agencies (www.baredine.com, with 8 territorial logos at the bottom). Sometimes they have been created by availing themselves of European co-financing (e.g., <https://www.adriagate.com/>).

Alongside the portals, there appears to be considerable use of social media: Facebook, Instagram and YouTube. One should also note the blogs of enthusiasts – including non-Croats – who profess their love for Croatia and promote it (e.g., OlgaK’s “About Croatia” personal blog, “Croazia Info Blog” by Branko and Nicoletta).

Within the general ferment in the tourism sector that we have sought to highlight in this chapter, there has been a debate in Croatia in the last ten years regarding the necessity for integrated and sustainable management of tourist destinations (Bosnić *et al.* 2014). Batinić in 2018 underlined the importance of creating entities that bring together the public and private sectors, like the Destination Management Organization (DMO) (Batinić 2018, p. 80).

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Cultural assets: a key factor for sustainable growth and development in the region of Epirus, Greece

by Maria Styliou, Chrysostomos Stylios

1. Introduction

The region of Epirus is located in northwest Greece and it is a focal point among Italy, Northern Greece, and the Balkan Countries. It includes four regional units (Arta, Thesprotia, Ioannina, Preveza) (figure 1), with a total area of 9.203 km² (6.9% of the country)¹.

Epirus offers significant benefits in terms of traditional and alternative activities, which have yet to be sufficiently exploited. These benefits, which highlight and promote the cultural particularity of the area, can become a driver in the development of special forms of tourism and the attraction of tourists 12 months a year, as Epirus has comparative advantages. These kinds of advantages include areas of exceptional natural beauty, archaeological monuments, national parks, local cultural traditions, and other assets closely affiliated with tradition, culture, and nature. Through the creation of tourist routes, which will contain such cultural and natural assets and based on the differentiated forms of tourism arising mainly from the modern interests of the mobile tourist population, the following benefits will ensue: on the one hand, the enrichment of knowledge through the paths of local culture and history will be achieved; on the other hand, the natural beauties, through their geophysical orientation, and the local society's cultural development, through its historical course, will emerge.

1. <http://www.epirus.gov.gr/portal/index.php/epirus/genika-stoixeia/the-epirus.html>.

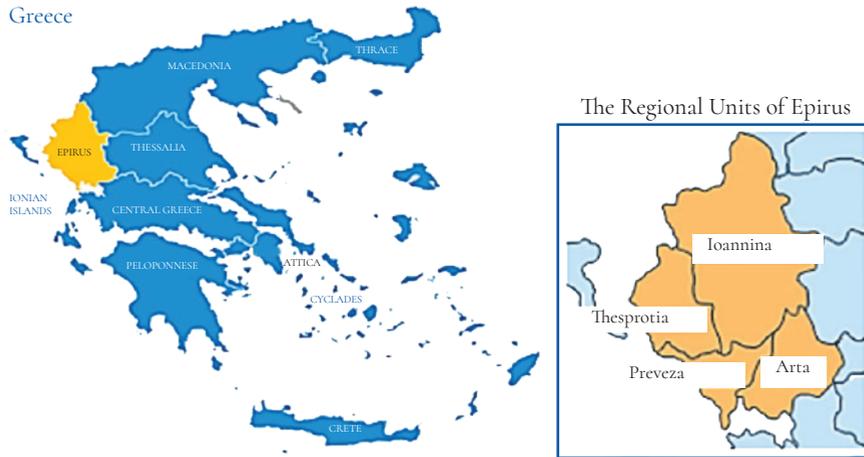


Figure 1. Map of the region of Epirus and the regional units in detail.

2. The region of Epirus and its characteristics

The main characteristic of Epirus region is its geomorphological diversity. There are three main zones: the coastal zone of Preveza and Thesprotia, the agricultural land which includes the southwestern part of the region, and the wider area of the mountainous and semi-mountainous areas. The entire area is characterized by the mountainous relief and the abundance of rivers traversed by stone-built arched bridges, forming its remarkable natural environment. The coastline climate is moderate, while in the interior, it is harsh, with heavy winters, frequent frost, and abounding rain and storms².

The total area has an indicative number of environmentally sensitive and protected areas of high ecological and aesthetic value that make it particularly privileged regarding its natural heritage. In fact, there are 31 areas listed under the Natura 2000 Network (28% of the total area), while there are various protected areas and national parks acknowledged at the European and international levels, such as the Amvrakikos Wetlands National Park, which is also listed under the Ramsar Convention.

2. <http://www.epirus.gov.gr/portal/index.php/epirus/genika-stoixeia/the-epirus.html>.

Beyond the discovery and exploration of the admirable natural environment, one of the main reasons to travel to Epirus is cultural motivation. From the perspective of tourist resources, culture includes art forms (music, dance, theater, painting, etc.), traditions of the area, historical and religious monuments (archaeological sites, museums, churches, monasteries, etc.), structured environment (architecture, traditional settlements, bridges, historical city centers, etc.) and cultural events. Indeed, as regards cultural resources, the region of Epirus has a significant competitive position advantage due to the existence of many historical and religious monuments and cultural traditions in various arts.

3. Points of interest in the area of Arta

Regarding the natural and cultural heritage, significant progress has been made in recent years concerning conservation and enhancement activities. This effort is focused on the creation of routes in areas of natural beauty and significant ecological value, as well as in archaeological sites, monuments, museums, and architectural heritage assets in the region of Arta.

3.1. *Religious and Cultural Heritage Route*

Arta is known for its monuments as remnants from ancient times to the Byzantine period. At that time, the city was called Amvrakia and later on it became the capital of the Despotate of Epirus. Arta is known for the significance of its Byzantine churches and monasteries, and so it has designed a religious and cultural heritage route. The route aims to promote and highlight the cultural assets both in the center of the city (figure 2) and in the suburbs and nearby areas (figure 11) and it consists of the following points of interest:

The most well-known monument is the Bridge of Arta (Plaines 1992), which connects the city of Arta with the villages on the plain. The beginning of the construction of the monument is placed at the time of Pyrros, King of Epirus (3rd century BC), while the columns up to the height of the arches date from the time of the Despotate of Epirus. The bridge acquired its final form from a French architect, and the construction lasted three years, from 1612 to 1615.

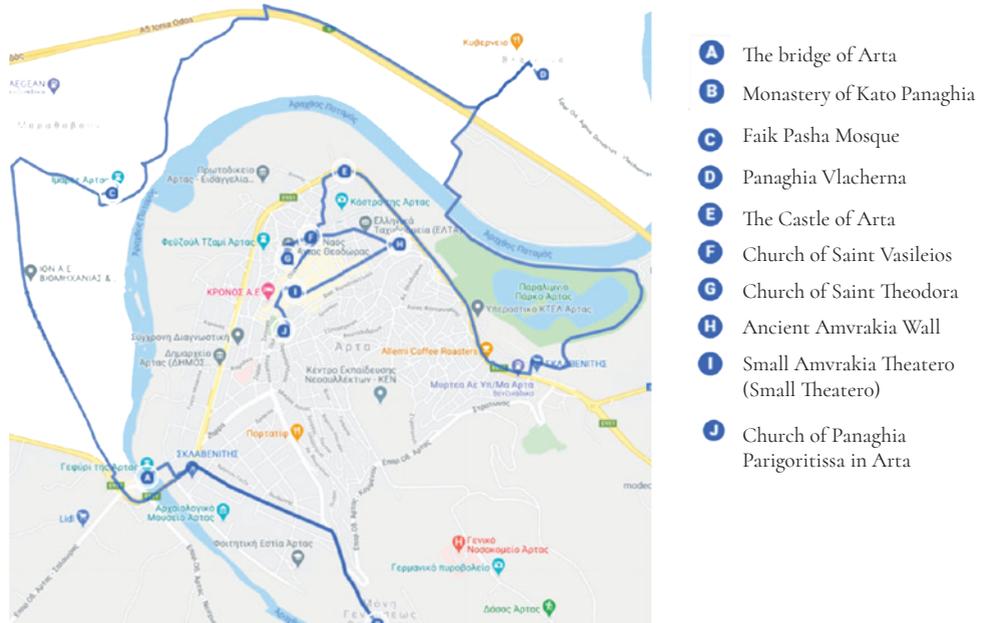


Figure 2. *The religious and cultural route in the center of the city of Arta.*



Figure 3. *Bridge of Arta.*

There is a legend about the construction of this well-known Greek bridge, which refers to the master mason's beautiful wife, who had to be sacrificed in the foundations of the bridge; in order to ensure that the bridge would not collapse. The bridge consists of four semicircular arches, completely asymmetric, and it was built with large stone blocks (figure 3).

The Monastery of Kato Panaghia is located at the foot of the hill named Peranthi, on the road towards the village Glykorizo, and is a women's monastery. It was founded in 1250 by the Despot of Epirus, Duke Michael Komnenos, and this name was given to distinguish it from the great church of Arta, Panaghia Parigoritissa. Today, what remains of the original building complex is the Catholicicon, which is a cruciform temple of unique architecture, as distinguished by its ceramic decoration and its icons.

The Faik Pasha Mosque is located just a few kilometers from the city of Arta. This Ottoman monument was built in the 15th century, and it is one of the best-preserved mosques in the area.

The magnificent church of Panaghia Vlacherna³ (figure 4) is a characteristic monument of the village of Vlacherna which lies across from the city of Arta, and its name derives from the famous Panaghia Vlacherna of Constantinople. Externally and internally, the temple has been damaged by the passing of time. The altarpiece used to be wooden, but it was replaced by a marble one that was destroyed during the Ottoman occupation (Giannelos 1990).

The Castle of Arta (Triantafyllou, Rerouskou, Lampropoulou, Markopoulos 2012) is a representative sample of Byzantine architecture and one of the most famous sights in the area (figure 5). It was built in the 13th century by Duke Michael Komnenos to enhance the defensive capability of Arta, which was the capital of the Despotate of Epirus. The castle is built on the top of a hill, which was considered to be a strategic location by the residents of ancient Amvrakia, and this fact justifies the existence of ruins of the fortification of Amvrakia on the northeastern side of the castle.

Outside the castle, stands the Clock tower of Arta (figure 6), the oldest clock in Epirus, which was built in the 17th century. The clock had Arabic numerals and functioned mechanically, a fact that has not changed to date.

3. http://www.religiousgreece.gr/epirus-thessaly/-/asset_publisher/bD2Iayf9w5H8/content/i-n-pa-nagias-blachernas.



Figure 4. *Church of Panaghia Vlacherna.*



Figure 5. *Castle of Arta. Source: Municipality of Arta.*

The church of Saint Basil (Mastrotheodoros, Beltsios, Bassiakos, Papadopoulou 2018) is a 13th-century place of worship located on a narrow pedestrian street in the city center of Arta. It has a rich ceramic decoration while being fully brick (figure 7). Despite the passage of centuries, the church's exterior is still in excellent condition and constitutes an elegant example of Byzantine art.

The church of Saint Theodora (Trono, Rizello, Ruppi 2008), who is actually the patron saint of Arta, is located in the center of the city and is a major tourist attraction on account of its exquisite architecture (figure 8). It was



Figure 6. *Clock tower of Arta.*



Figure 7. *Church of Saint Basil.*

built in the 13th century by the Queen of the Despotate of Epirus, Theodora, and originally, it was dedicated to St. George. Theodora became known for her philanthropic work and her devout life. The church functioned as a women's monastery, and Theodora lived alone there after her husband's death.



Figure 8. *The temple of Saint Theodora.*



Figure 9. *Small theatre of Amvrakia.*

The development of the ancient city of Amvrakia led its inhabitants to build walls that needed to be adequately fortified. According to all indications, the wall of Amvrakia was constructed in the 6th century BC, and it was completed in the 4th century BC. Occasionally, various fragments of the wall have been discovered during excavations, scattered throughout various parts of the city of Arta (Giannelos 1990; Yardley 2000).

At a short distance from the wall, the small theatre of Amvrakia⁴ is located (figure 9). It is the smallest ancient theatre revealed so far in the Greek region. The theatre is not situated on a natural hillside but on an artificially embanked slope, which covered the foundations and mosaic floors of a mid-4th century BC bath. The orchestra, parts of the cave, and the western part of the proscenium's stylobate have been uncovered (Papayannis, Pritchard 2011).

The emblematic church of the Panaghia Parigoritissa⁵ is a masterpiece of Byzantine architecture characterized by design innovations both inside and outside the building. It was built in its present form at the end of the 13th century by Duke Nikephoros I Komnenos (1240-1297), his wife Anna Palaiologina Katakouzene, and their son Duke Thomas Komninos Angelos, as evidenced by the dedicatory inscription located on the inner side above the western entrance of the main church. The temple, the altar, and 16 cells have been preserved and still remain today. The temple's interior has been damaged by the passage of time and by various conquerors, resulting in the alteration in its interior decoration. However, the temple still impresses with its imposing size and innovative design, being one of the best-known landmarks of Arta (figure 10).

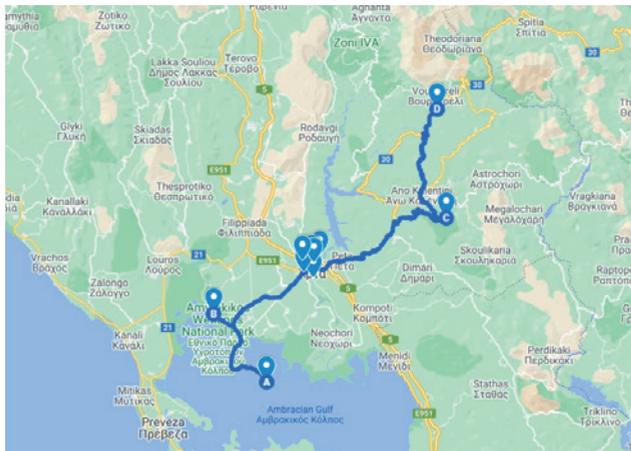
On a small island named Koronisia, in the middle of the Amvrakikos Gulf, lies the small church of Panaghia Koronisia (the Nativity of the Virgin Mary), which is the remnant of an old and wealthy monastery. Nowadays, there is a road leading to Koronisia. It is one of the oldest monuments of Byzantine Arta. According to written accounts, it was founded in 1193, it used to house many monks, and it was very famous and especially wealthy. From this monastery, only the church and the small chapel of Osios Onoufrios – a few metres away to the east of the church – still exist. In fact, according to local tradition, the

4. <https://www.diazoma.gr/en/theaters/ancient-theater-amvrakia-small>.

5. http://www.tap.gr/tapadb/components/com_jshopping/files/demo_products/144_Parigoritissa_Artas.pdf.



Figure 10. *Church of Panaghia Parigoritissa.*



- A** Panaghia Koronisia
- B** Panaghia Rodia
- C** Monastery of Panaghia Rovelista
- D** The Red Church

Figure 11. *The religious and cultural route outside the city of Arta.*

well of the monastery was built by Osios Onoufrius himself. Today, the church functions as a parish church (Trono, Rizello, Ruppì 2008).

The church of the Panaghia Rodia⁶ (figure 12) is located near the village of Vigla in Arta, on the banks of the lagoon of the same name. It was built in

6. <https://www.blueflag.gr>.



Figure 12. *Church of Panaghia Rodia.*

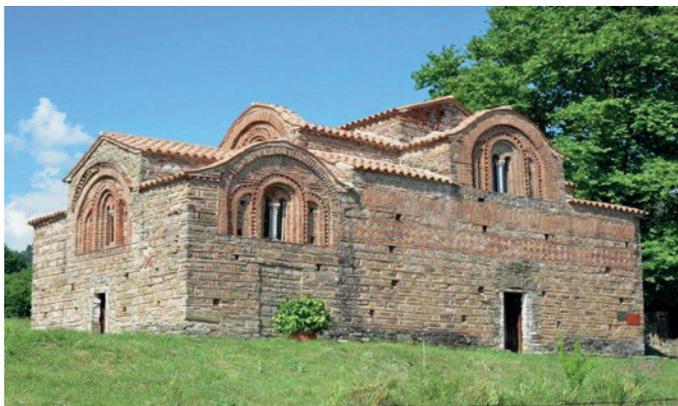


Figure 13. *Red Church of Vourgareli.*

1860 on the ruins of an older temple, which was demolished in 1860, and it is dedicated to the Assumption of the Virgin Mary.

Moving towards the mountainous areas of Arta, the remarkable Monastery of Panaghia Rovelista (Bousias Ch. 2000) is located 30 km east of the city of Arta and it is a very important pilgrimage. The construction of the monastery is closely related to the miracle working icon, situated in the interior of

the main church. The presence of the faithful, who come to worship there, is particularly impressive on September 8th, which is the feast day for the monastery.

The Red Church of Vourgareli, known as “Kokkini Ekklisia” (Trono, Rizello, Ruppì 2008), is the only remaining Byzantine monument in the Central Tzoumerka area. It is one of the most important monuments in Epirus, having been dedicated to the birth of the Virgin Mary and was named “Red Church” due to the bright red color of the brickwork of its masonry (figure 13). Among intellectuals, the church is known as Panaghia Vella because it was a dependency of the monastery of Vella in Ioannina. Concerning the foundation of the church, there is a story which has passed into local folklore. Apparently, the following tradition: the master builder of this church had earlier built the church of Panaghia in the village Vlacherna in Arta. His apprentice, however, built the church of Parigoritissa, which was more impressive than his own (there’s also a local folk song referring to this incident). When the master builder learnt that his apprentice had done a better job than him, he felt dizzy, fell from the roof of the Red Church and died. According to that folktale, Parigoritissa and the Red Church were built during the same period, which is true (Yardley 2000).

3.2. *Nature-based route*

The region has significant natural attractions, landscapes of high aesthetic value, and an extensive coastal zone extending over 430 km, where there are plenty of beaches which have been awarded the eco-label Blue Flag⁷. This outstanding coastal zone is suitable for the development of several forms of tourism (historical, cultural, ecotourism, nature-based, wetland, etc.). The growth of nature-based tourism has been identified as one of the key components of sustainable development, securing both local growth and environmental protection in urban and mountainous areas.

In terms of natural resources, the region includes⁸:

7. <https://www.blueflag.gr>.

8. <https://naturazoo00.eea.europa.eu>; http://www.ekby.gr/ekby/en/EKBY_home_en.html; <https://www.arcgis.com/apps/MapJournal/index.html?appid=dcaf4a6a959b4c92a8c7572bcd32a785>; <https://www.naturagraeca.com/ws>.

- Amvrakikos Gulf – Delta Louros, Arachthos, an area with international significance, listed under the Ramsar Convention⁹ (Ramsar 2014).
- Three National Parks:
 - Northern Pindos National Park – Valia Kalda;
 - National Park of Tzoumerka – Peristeri & Arachthos Gorge;
 - Amvrakikos Wetlands National Park EU Natura 2000 network (Greek Biotope/Wetland Centre 2014).
- A Geopark of UNESCO, Vikos – Aoos Geopark, a member of the European and Global Geopark Networks.
- A Category III: Natural Monument or Feature of IUCN, the Platanos of Arta¹⁰.
- Two Forest Aesthetics; the Forest of Ioannina and the Forest of Nicopolis – Mytikas.
- Twenty-two sites within the European Protection & Sustainable Development Network “Natura 2000”.
- Two SPA (Special Protected Area) Conservation Areas; Ori Paramythias, Stena Kalama & Stena Acheronta (GR2120008).
- Thirty areas included in the inventory program Corine biotopes¹¹.

The nature-based route (figure 14) consists of the following points of interest.

The Amvrakikos Gulf, located among the Prefectures of Arta, Preveza, and Aitolokarnania, is distinguished for its great biological, ecological, aesthetic, scientific, geomorphological, and educational value. It is a semi-enclosed sea, consisting of landscapes of unique diversity and amazing differences with bays, tongues of land, coves, channels, capes, and strips, all composing scenery of exquisite beauty.

By crossing an islet, visitors can access the beautiful village of Koronisia (figure 15), which dominates the middle of the Amvrakikos Gulf¹² (Papayannis, Pritchard 2011).

Kopraina used to be an important port of Arta in the Amvrakikos Gulf. There have been references to the port since the Byzantine period, and it was

9. <https://rsis Ramsar.org/ris/61>.

10. <https://www.iucn.org>.

11. <https://www.eea.europa.eu/data-and-maps/data/corine-biotopes>.

12. https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/amvrakikos_en.pdf.

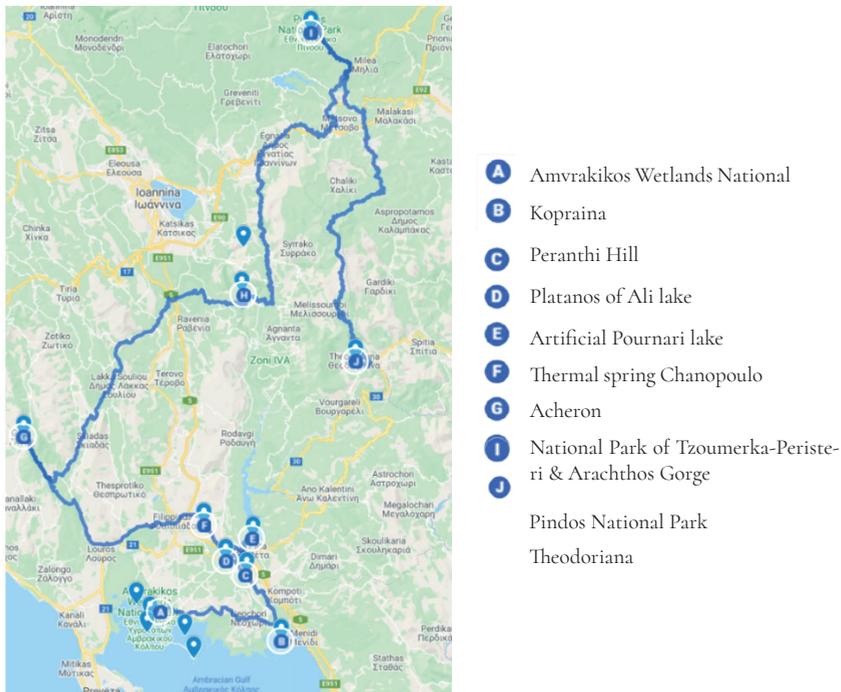


Figure 14. Points of interest of the nature-based route.

the center of intense commercial activity until the beginning of the 20th century. There are also several lagoons in the area of the Amvrakikos Gulf¹³.

The lagoon of Tsokalou is the most remarkable of the 4 lagoons of the Amvrakikos Gulf since its shore consists of broken oyster shells. It hosts one of the very few rookeries of Dalmatian Pelicans that remain in Europe in one of its islets.

There are also the Rodia, Logarou, and Agriliou lagoons that are formed with the alternation of the sea and the land. Their water is brackish, not that deep, and rich in nutrients for birds and fish. The Amvrakikos Gulf's lagoons are also known for eel-farms, which date back to the Byzantine period¹⁴ (Tsirogiannis *et al.* 2015; Nikolaou 2010).

13. <http://www.nskoufas.gr/index.php?>

14. https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/amvrakikos_en.pdf



Figure 15. *Koronisia, Amvrakikos Gulf. Source: Municipality of Arta.*



Figure 16. *Traditional stone lighthouse in Kopraina.*

The river Arachthos is to be found on the eastern side of Epirus. Springing from the Pindos mountain range and flowing into the Amvrakikos Gulf, it is 143 km long. Just over the historic Bridge of Arta, on the left bank of the river Arachthos, the imposing Platanos (Plane Tree) of Arta (figure 18), also known as the Platanos of Ali Pasha is to be found. It is Greece's oldest and most beautiful natural asset that was declared a protected natural monument in 1976.

The hydroelectric dam that was built on the Arachthos river has led to the creation of the uniquely beautiful Pournari Artificial lake (figure 19).

Not far from Arta, in a village named Chanopoulo lies one of the most beautiful places in the area with healing properties from its thermal springs.



Figure 17. *Flamingos in Loga-rou*. Source: Klairi Moustafellou.

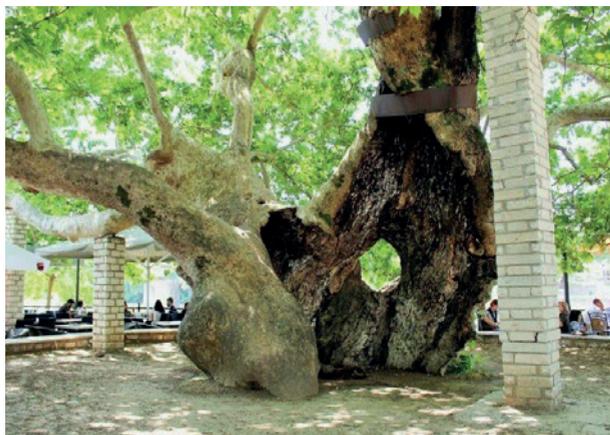


Figure 18. *The imposing Platanos (Plane Tree) of Arta*.

Its rarity lies in the composition of the water, the geomorphology, and the climate of the place. The creation of thermal water is a perpetually natural process resulting from water coming into contact with aquifers that penetrate the rocks of the subsoil, collecting the valuable bio-constituents until it reaches the source of Chanopoulo, at the foot of mount Marathia.

Another main attraction in the region of Epirus is the river Acheron that crosses the prefectures of Ioannina, Thesprotia, and Preveza, before finally flowing into the Ionian Sea, where it forms a delta. Acheron has been characterized as an area of excellent beauty and a source of important information and knowledge in environmental education. Both the Acheron strait and estuary and the wider area belong to the European Natura 2000 Network of



Figure 19. Pournari Lake as seen from the village of Kato Kalentini. Source: Christos Houliaras.

Protected Areas (code GR2140001)¹⁵. Specifically, there are 699 species of flora in the area, of which 449 are found in the delta and 250 in the straits, while in the delta area, there are 19 different types of habitat.

The National Park of Tzoumerka – Peristeri & Arachthos Gorge¹⁶ stretches across the mountainous regions of Ioannina, Arta, and Trikala, in the central part of the Pindos mountain range, including the Arachthos river gorge and the springs of the Acheloos River. Within its varied habitats, there are many rare and endemic plant species. In contrast, many rare and protected species of mammals such as the otter, the brown bear, the wild goat, and the deer can be found in its terrestrial ecosystems.

Visitors' experiences could be enhanced by a visit to the Northern Pindos National Park¹⁷, located between Epirus and the region of Western Macedonia (Ioannina and Grevena). The park has been identified as the natural habitat for bears in Greece, and it is home to many rare, endemic, and endangered

15. <https://www.arcgis.com/apps/MapJournal/index.html?appid=dcaf4a6a959b4c92a8c7572bcd32a78>.

16. <https://www.tzoumerka-park.gr>.

17. <https://discovertzoumerka.com/destinations>.



Figure 20. Springs of Acheron river at Gliki village.

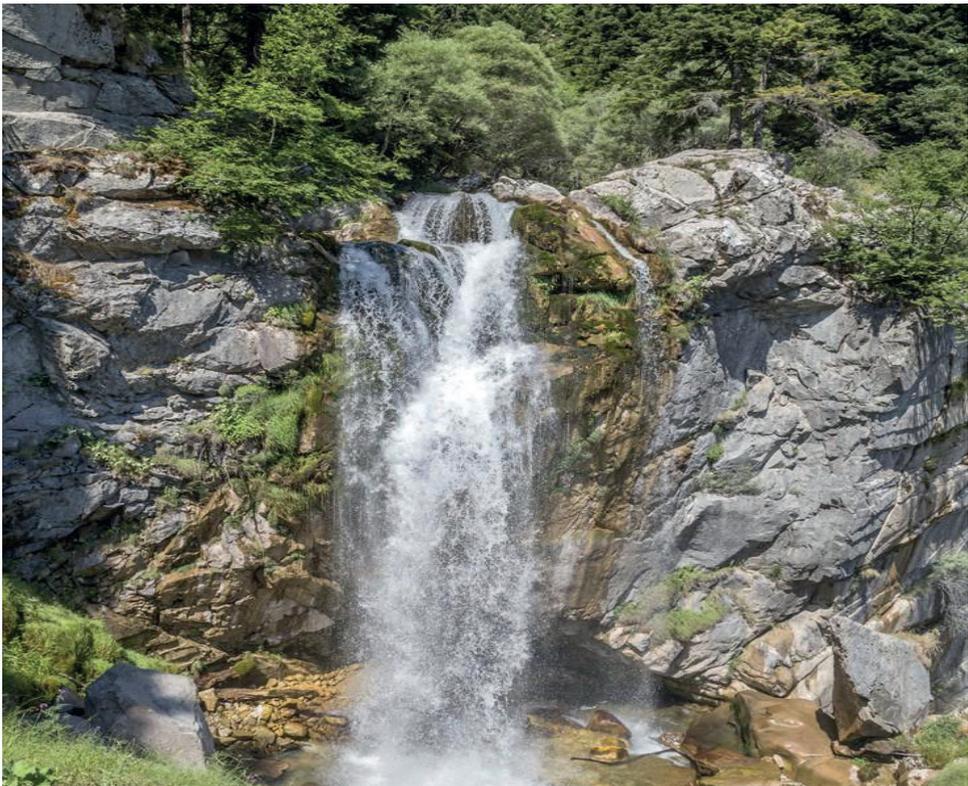


Figure 21. Waterfalls in the village of Theodoriana. Source: <https://theodoriana.com>.

species comprising exceptional biodiversity, which underlines the particular ecological value of the area.

A few kilometers away, in the east of the region of Tzoumerka, there is the village of Theodoriana, encircled by two rivers, the Goura and the White Goura. In the middle of a dark green forest, two stupendous waterfalls fall from 1,300m¹⁸.

4. Key cultural items of the region

Many regular festivals occur in Epirus all year round and are considered an important element of Greek cultural heritage. It is a living tradition that links the past to the present and, in turn, to the future. All villages celebrate their patron saint in the village square with traditional dancing, local food, and wine. The religious festivals of August 15th are the largest religious celebration of summer, and in many areas of Epirus, there are churches to the Dormition of the Virgin Mary.

Throughout Epirus, the traditional workmanship in crafts of all kinds, from stone masonry to the silversmith's delicate art, is admirable. Like those in Zagoria, Metsovo, Syrrako, and Kalarrytes in the Tzoumerka range, the stone architecture of the wonderful unspoiled villages is exceptional. The ubiquitous arched stone bridges such as at Plaka, Konitsa, and, most famously of all, at Arta bear witness to the locals' flair for stone masonry (Birch 2015).

The cultural heritage of a place does not only consist of past and present cultural achievements. The lifestyle of residents and the food culture of everyday life also identify the specific cultural identity of each place. Food consumption is strongly influenced by factors such as the natural environment and culture of a place. Accordingly, gastronomy is considered a form of cultural tourism. The connection between tourism and gastronomy is robust, contributing to tourists' quality of travel experience. During their stay, the tourist could have the opportunity to visit places where food and drink are produced (e.g., wineries, breweries, olive presses, farms, dairies, etc.), watch and learn about the

18. <https://www.discovertzoumerka.com/destinations/%cf%86%cf%85%cf%83%ce%b9%ce%ba%ce%ad%cf%82-%ce%bf%ce%bc%ce%bf%cf%81%cf%86%ce%b9%ce%ad%cf%82/?portfolio-Cats=44%2C42%2C37%2C38%2C45%2C43>.

product value chain, handle a tool, test the product, and eventually purchase it directly from the place where it is produced.

Epirus' particular terrain, mountainous areas, the sea, the climate, and centuries-old history have all played a part in creating delectable traditional dishes and tasty combinations that make up the local cuisine, complementing the region's special cultural identity. Excellent products of the Mediterranean diet are produced in the region of Epirus, such as whole grains, olive oil, olives, yogurt, honey, cheese, fresh vegetables, and fruits. Also, two well-known fishery products are the local shrimps of the Amvrakikos Gulf and its eels. Epirus has a long rich wine tradition and there are many vineyards and wineries that tourists can visit and watch the traditional processing. Additional events of gastronomic interest and celebrations dedicated to specific products, e.g., wine and sardine festivals, are also organized.

5. Opportunities

The region of Epirus is characterized by a unique natural environment with significant geographical diversity and value. Moreover, the rich flora and fauna, the multitude of cultural and religious monuments and events, the local products of the Mediterranean diet, the handicrafts, the special architecture and stone masonry, the high quality of services, and the easy access by land, air, and sea, are ideal conditions for the development of sustainable tourism and enhance the ability to create integrated tourism products.

The characteristics of the Region of Epirus provide a unique opportunity to adopt an advanced model of sustainable tourism. There is great potential for providing diverse tourism products and the area is an ideal touristic destination for all four seasons.

It is proposed that digital touristic marketing be exploited, and that Epirus be promoted through all the available communication channels. Targeted training programs could be designed to enhance the competencies of local entrepreneurs in Epirus and to promote the tangible and intangible cultural assets of the area. Epirus is an area with a rich gastronomic tradition and dozens of local products thus the integration of these in the hotel industry would be a move to improve the promotion process.

6. Conclusions

Cultural and natural heritage has significant economic potential and social impact. It could be considered as the engine and catalyst for regional economic growth because it generates new products and services and so it leads to the creation of new jobs and profit. It also constitutes a significant factor that catalyzes the sustainable development process by attracting financial operations and encouraging novel activities. Moreover, it is appreciated as a new marketing tool by branding a site, place, city, or country to create an identity.

At regional and local level, authorities, related bodies, and stakeholders are focusing on raising touristic quality standards by improving existing infrastructures, services, quality, and environmental performance so that to achieve a better “mix” of tourism with diversified products (e.g., eco-tourism, conference tourism, health spa tourism, religious tourism) and discipline dimensions (e.g., ecological, cultural and rural). Furthermore, they are linking tourism with other sectors to create a robust regional product, and entrepreneurs open to provide new markets. The regional economy benefits from the development and provision of authentic and quality local products and services, unique shopping and culinary experiences, and intensive marketing of the area.

This chapter presents the main cultural and natural heritage assets of the region of Epirus, Greece that could pave the way towards financial growth. It is focusing on the new touristic forms that should be promoted so to further increase the number of visitors in religious and nature-based tourism and the development of new touristic routes. New touristic forms that should be promoted include conference and exhibition tourism, educational tourism, business trips, spa tourism, and special interests’ tourism. This approach has also to ensure proper management of the environmental and cultural resources so that to positively impact local development in terms of economic opportunities and sustainability in general.

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Cultural Route of Traditional Stone Lighthouses along the Ionian Sea

by Polyxeni Moira, Mylonopoulos Dimitrios, Paraskevi Kakaroucha

1. Introduction

The Ionian Sea connects the Adriatic Sea, Southern Italy, and the western regions of Greece. It laps at the Ionian Islands and the western shores of Greece. The climate in the area is mild, while the coastline of both the complex of islands and the mainland displays an interesting geomorphological variety. The whole area has been worldwide known since antiquity and includes a significant number of cultural, natural and man-made, sites and monuments. The Ionian touristic product is based primarily on sea-and-sun model, which has gradually been enriched with special forms of tourism over the past three decades.

One form of alternative tourism that has not been systematically developed either along the Ionian Sea or in the rest of the country is “Lighthouse tourism”, although Greece has one of the longest and most organized lighthouse networks across the world. 144 of the historic stone-built lighthouses all over the country are being characterized as Monuments of Modern Cultural Heritage (an ongoing process). However, the Greek State has not integrated this cultural capital into the tourist offer regularly for a series of reasons being discussed in this paper. A properly prepared and methodically promoted cultural route of traditional lighthouses along the Ionian Sea could showcase the multidimensional interpretation of lighthouses, enhance the Greek tourist product and invigorate bonds among cultures in the Ionian Sea.

2. Geographical definition and environmental characteristics

The Ionian Sea, the deepest part of the Mediterranean Basin, connects the Adriatic Sea, Southern Italy and the western side of Greece. It is located between the Balkan and the Apennine Peninsulas and washes the Heptanese (or Ionian islands) and the occidental shores of Epirus, West Greece and Peloponnese Regions. The six northern Ionian Islands (Corfu, Paxos-Antipaxos, Lefkas, Kefalonia, Ithaka, Zakynthos), including the Diapontia or Othoni Islands (Othoni, Mathraki, Erikoussa, Meganisi, Strofades and some uninhabited islets), are off the west coast of Greece, whilst the seventh one, Kythera (with Antikythera of the same municipality), is opposite the southern edge of the Peloponnese Peninsula and administratively pertains to the Attica Region. The climate in the area is pleasant, with radiant days all year round. It is characterized by mild winters, during which air temperature, rainfall and atmospheric humidity levels are high, while summers are quite cool with long-lasting sunshine and an average sea temperature of 25°C. The landscape of both the complex of islands and the mainland is of high aesthetic and ecological value. It affords a unique geomorphological heterogeneity, ranging from high mountains that lead to rocky and unreachable strands, to vast fertile plains with lush, impressive caves and lagoons, gentle pebble or sandy beaches. The variegated shape of the Ionian Sea coastline is largely the result of the frequent and intense seismic activity, since the most dynamic part of the Hellenic Arc crosses the area. These variations in the environmental structure produce and nourish rich biodiversity in the area. It is noteworthy that many renowned ecosystems, over thirty Natura 2000 sites (around 1/10 of the Greek protected areas), one National Forest and four National Parks are located in this part of Greece (INSETE 2019; *Μοίρα* 2018:28-32).

3. Economic, social and cultural characteristics

The population living in this side of Greece is difficult to be accurately calculated, since: (i) its size fluctuates due to the presence of university students and seasonal workers (e.g. in the primary production or tourism sector) and (ii) the latest data available by the Hellenic Statistical Authority/HSA (2014) refer to the whole acreage of the three Regions (17 Prefectures) encompassed or washed by the Ionian Sea

[according to the 2011 Population-Housing Census: 1.800.000 people=1/6 of total Greek population] (HSA 2020). The four Regions are economically, socially and culturally quite developed and they significantly – although in different ways – contribute to the GVA and per capita GDP of the country [2,5% on average] (HSA 2020). As implied before, the Regions host some of the main higher education and support an efficient transport infrastructure [three national highways and roadways, four ports connecting Greece to Italy, seven civil airports serving domestic and international flights, two military bases] (INSETE 2019).

Most of the Ionian Islands and parts of the west coast of Greece have been inhabited since the Paleolithic Age and have been worldwide known since antiquity through Homer's epic poems and Odysseus' adventures after the Trojan War, the Olympic Games, the Peloponnesian War, the Antikythera Ephebe and Mechanism, the Naval Battle of Actium between Octavian and Marc Antony or the Navarino Gulf where the last major naval battle in history only with sailing ships took place.

Since the 4th century BC Greece (as a whole or parts of the country) had been attacked, conquered, ruled or protected by many nations and empires (e.g. Macedonians, Romans, Normans, Byzantines, Franks, Venetians, Ottomans, British) and plundered by hordes of pirates (Λαζάρη κ.ά. 2019:49 κ.ε.). The Ionian Islands have been “the apple of discord” among the most powerful and influencing nations in every period of their history (Καλογερόπουλος-Στρατής 1995:575). Such historic transitions defined the development and profile of the locales along the Ionian Sea since they have always been on imperialistic and commercial sea routes.

Their recent historic trajectory, particularly their felicitous unification (as the “Septinsular Republic” or “Heptanesian State”), as well as the close interaction of the Ionian Islands with West Europe, distinctively reflect upon their cultural characteristics (architecture, fine arts, gastronomy, language idiom, literature etc.). These features resemble the extrovert European style of life, more than in Epirus, West Greece and Peloponnese that had been conquered and affected by the Ottomans for many centuries in their recent history. The geographical proximity, the peaceful coexistence and the cultural interchange of the Ionian Islands, especially with Italy, resulted in the emergence of the first modern art movement in Greece, known as “Heptanese School” (Χωρέμη-Σπετσιέρη 2011:1 & 101; Δεμέτη 2019: 427-455).

4. Tourist development

The Ionian islands tourist product is based primarily on sea-and-sun model, which over the past three decades has gradually been broadened by special forms of tourism, such as adventure (e.g. trekking, diving), nature, culinary, pilgrimage, disaster, business and educational tourism (INSETE 2019). Until recently, tourism development has had no substantial negative impact on the environment or the reputation of these Regions since there have been only a few cases of violation of law, e.g. construction activity in protected zones (Mylonopoulos *et al.* 2011). Land and coastal zone management restrictions have intercepted environmental pressures associated with an anthropogenic disturbance from tourism and real estate development (Spilanis 2013).

The international flight arrivals at the Regions have reached 15% of the total international passenger traffic recorded throughout Greece in 2018. The most common origins of tourists were the United Kingdom, Germany, Italy, Poland, the Netherlands, France, Austria and Russia. The Ionian coastline is also quite popular for cruise ship visitors [20% of the entire cruise ship arrivals in Greece] (INSETE 2019).

Tourist development in the area under study, especially the Heptanesian part, can be considered as mature, although tourist marketing, management and offer are differentiated among Prefectures. As a result, benefits from tourism are concentrated on one or two islands and some of the coastal locations of the mainland and do not diffuse across the Prefectures. The creation of a transregional, innovative and value-added cultural route of traditional stone lighthouses that involves at least some of the islands and the shores along the Ionian Sea could mitigate inequalities.

Additionally, a strategic partnership with other countries in the Ionian (e.g. Italy) and/or the Adriatic (e.g. Croatia) Sea, which have culturally and touristically highlighted and valorized lighthouses, could strengthen links among cultures, produce reciprocal advantages and subserve the tourist industry of each one of the participating countries. This scenario could be realized e.g. in the context of a “Cultural Route of the Council of Europe” (CoE 2020).

Furthermore, the EU Strategy for the Adriatic-Ionian Region provides numerous opportunities for networking and collaborative projects to connected countries (EU Member-States: Croatia, Greece, Italy, Slovenia and five Acces-

sion Countries: Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia) with similar or complementary priorities and objectives at the macro-regional level. The strategy promotes the connection of cultural tourism with creative industries through the development of art networks (festivals, museums, archeological sites etc.). A lighthouse cultural route might fall under the thematic pillar of “Sustainable Tourism” (European Commission 2020).

5. Lighthouses and lighthouse tourism in Greece

“Lighthouse tourism” is one form of alternative tourism that has not been consistently promoted and developed either along the Ionian Sea or in the rest of the Greek Territory. Since the era of primitive beacons and the archetypal Lighthouse of Alexandria, lighthouses have incorporated and reflected a lot of universal symbols, which make them appealing to people seeking original and sophisticated tourist experiences. Thus, in addition to their purely functional utility as navigational aids, which tends to be abolished, lighthouses occupy a vibrant cultural space (MacDonald 2018:19) and have become a core element or even a competitive advantage of many regional and national tourism development plans globally.

The Hellenic Lighthouse Network (HLN), one of the most extensive and organized systems in the world, includes 1.604 lighthouses, beacons and buoys. The creation and growth of the network corroborate the Greeks’ intertemporal and uninterrupted relationship with the sea, which occurred and flourished due to the crossroads location and the rich geomorphology of the country (15,000km of coastline, almost 10,000 islands and islets). Lighthouses were used in Greece since the Homeric Era, within a rudimentary lighting sequence of signal fires established on strategic or treacherous points. Besides, plain lighthouses and beacons flashed in the most important ports of the Aegean, Myrtoe and Cretan Seas long before 1650 (Χριστοδουλάκη 2014:17; Γρίβα 2015:18; Δάβαρης & Υπηρεσία Φάρων 2020).

Until the 19th century (Greece was still under Turkish Rule), new torches were not installed, because of the rough living conditions and the fear of piracy. Most of the lighthouses in the geographical area nowadays defined as Greek Territory were built between 1822 and 1926, by the British (in areas

under their rule), the French Company of Ottoman Lighthouses, and the newly founded Greek State. During that period, the criteria for the positioning of the lighthouses were based on the requirements of the local populations, the seafarers and the representatives of the European steamship companies. The legislative framework established by the Prime Minister of Greece Charilaos Trikoupis (late 19th century) was crucial for the systematic planning and coordination of the lighthouse network henceforth. Stylianos Lykoudis, a Hellenic Royal Navy officer who served in the Lighthouse Service for almost 30 years, contributed to the expansion of the HLN decisively (during his service, 226 lighthouses were added to the network). World War II had a devastating effect on the HLN because lighthouses were an apparent and high-payoff target during aerial and sea raids (Γρίβα 2015:18; Δάβαρης & Χριστοδουλάκη 2014:17; Ολυμπίτου 2008:8; Παπαδόπουλος 2015:23; Tassopoulou *et al.* 018:341; Υπηρεσία Φάρων 2020).

At present, the HLN is divided into ten areas, following the numbering of the whole Greek Maritime Area (figure 1) and is managed, funded, preserved and retrofitted by the Lighthouse Service, an independent authority supervised by the Hellenic Navy. The Lighthouse Service also collaborates with the Hellenic Navy Hydrographic Service for the publication of the “List of Lights of Hellenic Coasts”, according to which the majority (60%) of the Greek lighthouses are circular, 30% of them are square, and only 7 lighthouses are hexagonal or octagonal. 51 of the 144 austere and delicate traditional stone buildings of the HLN have already been declared Monuments of Modern Cultural Heritage by the Greek Ministry of Culture since they were erected at least 100 years ago. This is an ongoing procedure that is gradually implemented in all historic lighthouses of the country (Δάβαρης & Χριστοδουλάκη 2014:17 & 28; Κακαρούχα 2020:42-49 & 70; Υπηρεσία Φάρων 2020).

In addition to their self-evident, although declining, usefulness for navigation (and air traffic), as well as their importance as part of the country’s heritage, lighthouses encapsulate a variety of universal technological, social, political, psychological and religious symbols construed in multi-level readings (Gabellone, Monte 2019; Nakajima 2014). Although modern lighthouses are «more functional and less picturesque» (Gómez y Patiño 2010:41), over time they have held a significant position in the history of science and technology, since improvements in lighthouses often caused advancement in other fields of

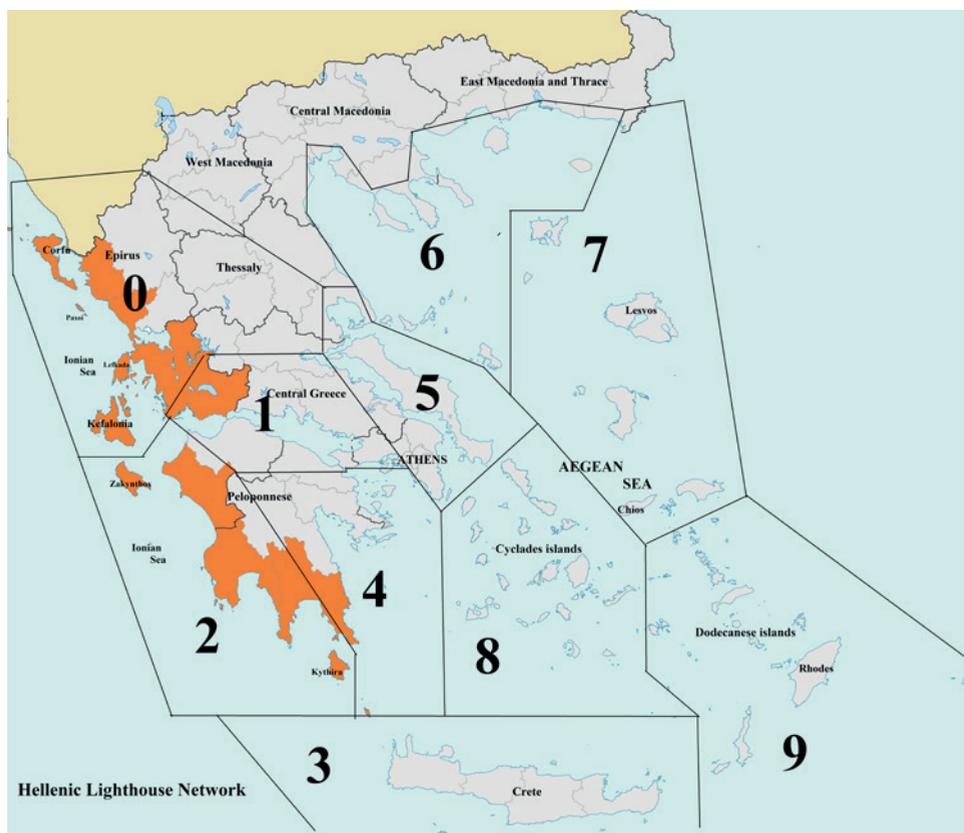


Figure 1. *The Hellenic Lighthouse Network and the research areas 0 and 2* Source: Hellenic Navy. Source-Processing: P. Moira.

human activity. They have been transformed into recognizable landmarks and important carriers of tangible and intangible, social and cultural heritage, too. Lighthouses «occupy a dynamic cultural space» (MacDonald 2018:19), as they absorb and represent the sense of time and place, the collective memory, values, customs, traditions, construction and maintenance techniques, gastronomy and everyday practices. They speak for the people who lived and worked in lighthouses, but also for the areas those people came from, the neighboring plantations and the entire social context (Papayianni, Pachtá 2013:8; Nakajima 2014; Blake 2017:9; Magnani, Pistocchi 2017:125).

For the above-mentioned reasons, lighthouses are surrounded by charm and mystery that stimulates the imagination and creativity of writers, artists and scientists. Likewise, lighthouse attract enthusiasts (e.g. volunteers, supporting associations and clubs, social media groups) and visitors pursuing authentic and detoxicating experiences in order to escape from the hustle and bustle of the modern way of life. While in older times they were shelters for sailors, fishermen and travelers, nowadays lighthouses are “recycled” and “remodeled”, since they are converted into refuges for “intellectual elitist tourism”. Scilicet, lighthouses gain increasing popularity that cannot be overlooked by tourism policy-makers, although their average size and location do not allow massive or intensive use (Gómez, Patiño 2010:43).

Lighthouses are treated by the Greek State with respect and are recognized as an unrivalled part of the Greek intangible and tangible cultural heritage, as stupendous remnants of the country’s industrial past. In fact, this practically means that the utilization of lighthouses as cultural or touristic attractions is rather limited and fragmentary. Lighthouses in Greece are available exclusively for small-scale, non-profit, cultural purposes, predominantly because they still consist a component of the national defense system, despite the continuing progress in navigational systems and aids. Furthermore, the Greek membership in the International Association of Lighthouse Authorities (IALA), in combination with the characterization of traditional lighthouses as modern monuments, imposes specific principles and rules for their maintenance, protection and use, which narrow the perspective of alternative or commercial uses. Law 4278/2014 validates the participation of local authorities, public bodies and NGOs in the cultural use of lighthouse buildings (subject to the prohibition of access to their functional parts) and introduces a sponsorship system that could be put into practice under certain conditions (for a specific period and with the consent and control of the Ministry of Culture). The standards that the above Law sets have not been specified yet, consequently the Lighthouse Service continues being the unique manager of lighthouses in Greece. It is also worth mentioning that, according to a field survey, lighthouse visitors in Greece seem to be quite skeptical about any further or non-conventional use of lighthouses and the private sector involvement in their management (Κακαρούχα 2020:68-81; 123-136).

6. Cultural route of traditional stone lighthouses along the Ionian Sea

In the context described above, suggestions or plans on any cultural route of traditional stone lighthouses along the Ionian Sea or anywhere else in Greece should be made meticulously, in ways that agree with the national legislature and take the particularity of each lighthouse (e.g. history, location, structural condition, lighthouse keeper's presence), visitors' opinions and expectations, local communities' needs or other critical factors into serious consideration. Of course, lighthouse tourism could be combined with other forms of niche mild tourism (e.g. cultural, religious tourism and pilgrimage, wellness, gastronomy, fishing, bird-watching, dark tourism). Thereby, capitalizing lighthouses along with other popular or less famous contiguous cultural resources could showcase the multifaceted interpretation of lighthouses, promote European values and local identities, tighten bonds among cultures and rebrand the Greek tourist product.

Concerning the Ionian Sea lighthouses (figure 2), two of the HLN areas, 0 and 2, refer to the North and South Ionian Sea, respectively, and enclose 27 of the most spectacular and legendary lighthouses constructed 100-200 years ago by British or Greek authorities. The oldest (Sideros, Corfu: 1822) and the newest (Apolytares, Antikethyra: 1926) modern lighthouses of the Hellenic Network are located in these areas (Υπηρεσία Φάρων 2020):

- Area 0. North Ionian Sea:
 1. *Sideros (1822, Corfu)*
 2. *Peristeres (1823, Corfu)*
 3. *Lakka (1825, Paxoi)*
 4. *Panagia (1825, Panagia Islet, Paxoi)*
 5. *Antipaxoi (1906, Antipaxoi)*
 6. *Lefkas (1861, Lefkas)*
 7. *Doukato (1890, Lefkas)*
 8. *Fiskardo (1892, Kefalonia)*
 9. *Dichalia (1907, Kefalonia)*
 10. *Agioi Theodoroi (1825, Kefalonia)*
 11. *Vardianoi (1824, Kefalonia)*
 12. *Gerogompos (1906, Kefalonia)*
 13. *Kastri (1907, Othoni)*

14. *Mourtos* (1884, *Thesprotia*)
15. *Kopraina* (1893, *Arta*)
- Area 2. South Ionian Sea:
 16. *Skinari* (1897, *Zakynthos*)
 17. *Keri* (1925, *Zakynthos*)
 18. *Spathi* (1857, *Kythera*)
 19. *Kapsali* (1853, *Kythera*)
 20. *Apolytares* (1926, *Antikythera*)
 21. *Kafkalida* (1906, *Kafkalida Islet, Ileia*)
 22. *Katakolo* (1865, *Ileia*)
 23. *Sapientza* (1885, *Messinia*)
 24. *Kitries* (1892, *Messinia*)
 25. *Limeni* (1922, *Lakonia*)
 26. *Tainaro* (1887, *Lakonia*)
 27. *Kranai* (1859, *Lakonia*)

Most of the Ionian lighthouses are wreathed by a halo of heroic, lurid or moving stories: corsairs, conquerors, saints, ghosts are the most common protagonists in stories that have been preserved through lighthouse keepers' narrations and the popular tradition. Haunted buildings, life on the edge, eerie figures, family dramas, unfulfilled love affairs, mysterious deaths and heinous crimes are some of the components of the narratives regarding lighthouses. Reality is often intermixed with imagination. Isolation made conditions very importunate for the lighthouse keepers, who invented events that they discovered they had not really happened when in mental alertness and sobriety.

Papadopoulos (2015) cites some of the dismal stories and morbid rumors that are connected to the Ionian lighthouses. Human sacrifices in antiquity (there was a sanctuary of Apollo at the site) and lyric poet Sappho's suicide at Doukato (Lefkas), the shipwreck of the Apostle Paul at Vardiano (Kefalonia) en route to Rome, the ghost ship at Cape Apolytares (Antikythera), the Turkish spy in Mourtos (Thesprotia) are just some of them. In Jules Verne's philhellenic book *The Archipelago on Fire* (1884), some of the most historic lighthouses and beacons of the Ionian Sea (in Antikythera, Tainaro, Oitylo, Methoni) become silent witnesses of events that determined the History of Modern Greece. Several modern poets (e.g. Empeirikos, Elytis, Ritsos) were inspired by



Figure 2. Lighthouses in the Ionian Sea. Source-Processing: P. Kakaroucha, personal archive.

the light and solidity of lighthouses, while contemporary Greek novelists (e.g. Amanatidou, Kourtzi, Patronou-Papapetrou) craft lighthouse stories around the Ionian Sea that captivate their audience.

Many of the Ionian lighthouses are accessible by land, often through inaccessible paths; some of them can be reached only by boat. All of them are located on sites of exceptional beauty, in places neighboring with other points of interest that magnetize sightseers, tourists, artists, nature lovers, athletes and researchers. Promoting the grandeur, the pulchritude and the sturdiness of the lighthouses in a sustainable way, in combination with other cultural resources in their wider area of Greece, the Ionian and/or the Adriatic Sea, and according to high standards (e.g. of the European Council) could become a real challenge. The selection of the Ionian lighthouses that could be included in the proposed route is another difficult task.

7. Identification of the route

For all the reasons explained above, multiple routes should be suggested with each one of them being designed based on dilemmatic criteria: lighthouses in Greece and/or in other countries of the Ionian and the Adriatic Seas; in Area 0 and/or in Area 2; built by the British and/or built by the Greeks; on islands and/or in the mainland; in popular touristic destinations and/or in less known ones; accessible by boat and/or by land; preserved and/or in ruins and so forth. Since the description of alternative lighthouse routes would go beyond the aims and limitations of this study, identifying a specific one that represents largely the long history, the palimpsest of culture and the diversity of the landscape on this part of the Ionian Sea seems prudent. Half of the typical and outstanding lighthouses of Areas 0 & 2 of the HLN are included in the suggested route (figure 3), in order to “illuminate” less-known aspects of this side of Greece and satisfy almost every aim of the visit. Several wonderful narratives and facts accompany those lighthouses (Papadopoulos 2015; Μοίρα 2018; Φάροι της Ελλάδας 2020; Υπηρεσία Φάρων 2020), namely (from North to South):

1. Kastro (Othonoi): It is located on the westernmost point of Greece. It was so important for navigation that the entire island was mentioned as “Fanos” (“Light”) in the nautical charts.
2. Peristeres or Kaparelli (Corfu): It is exactly on the borders of the territorial waters of Greece and Albania and is the only lighthouse of the HLN that had huge urns in the ground for safe water storage.
3. Sideros (Corfu): It was the first modern lighthouse lit in Greece; it was built by the British when the Ionian Islands were under their rule. It is located on a Venetian fortress, one of the most magnificent fortification constructions in Europe. The citadel is separated from the town of Corfu by an artificial fosse.
4. Mourtos (Thesprotia): The lighthouse is associated with an espionage story. After the disclosure about a Turkish lighthouse keeper acting as a spy on behalf of the Ottoman Authorities, all the keepers were replaced by Greeks at the beginning of the 20th century.
5. Panagia or Madonna (Panagia Islet, Paxoi): The lighthouse and the lighthouse keeper’s residence were built in the courtyard of the homonymous



Figure 3. Suggested cultural route of traditional stone lighthouses. Source-Processing: P. Karkaroucha.

monastery dedicated to Holy Mary. In the past, monks supervised the maintenance of the light signal, which flashed from the bell tower of the monastery.

6. Doukato (Lefkas): The area is also known as “Lady’s Cape” or “Sappho’s Jump”, because of an unhistorical tradition according to which Sappho the poet committed suicide after falling in love with a man for the first time. The entire island of Lefkas perhaps owes its name to the white (“lefka”) steep cliffs of the cape (also known as “Lefkata”).

7. Fiskardo (Kefalonia): There are two lighthouse constructions close to each other, the Venetian (16th century) and the modern (late 19th century) one. The latter was severely damaged during the 1953 earthquakes and it was almost completely rebuilt afterwards. Recently, the lighthouse complex was restored by sponsors. In Kefalonia visitors can also enjoy the Drogarati Cave, the entrance of which was revealed when a strong earthquake caused a collapse, the underground Melissani lake, a unique geological phenomenon caused by a mechanical – chemical process of rock dissolution etc.
8. Agioi Theodoroi (Kefalonia): The lighting equipment was initially placed on a windmill, so the lighthouse is also known as “Sea Mill” (“Thalassomylos”). It is regarded an architectural masterpiece, the only one of this kind among the HLN, because it is supported by 24 columns of Doric order that ensure anti-seismic protection.
9. Skinari (Zakynthos): The lighthouse is located at the end of an educational botanical path which is full of representative species of Thermo-Mediterranean flora. The path connects Cape Skinari to Ano Volimes, a traditional village famous for stone-built houses and hand-made embroideries.
10. Katakolo (Ileia): This lighthouse is found in a short distance from Ancient Olympia. Visiting the lighthouse could be combined with a tour to the nearby Museum of Ancient Greek Technology, where a collection of 250 functional ancient Greek models of inventions are exhibited. Katakolo also affords a state-of-the-art marina of large capacity (up to 140 ships).
11. Sapienza (Messinia): Venetians advised sailors to navigate with wisdom (“Navigare con sapienza”) and this recommendation was written on maps where the word “Sapienza” coincided with the island. Nonetheless, a lot of shipwrecks of inestimable archeological value lie at the bottom of the sea. From the top of the lighthouse, one of the few octagonal ones of the country, visitors can observe the heart-shaped contour of the island. 240 acres of Sapienza have been declared “Preserved Monument of Nature” (Natura 2000) by the Greek State due to the endangered species of flora and fauna existing on the island.
12. Tainaro (Lakonia): Cape Tainaro (or Matapas) is the southernmost point of mainland Greece, the Balkan Peninsula and Europe. A trip to the lighthouse could offer trekkers and mythology lovers a memorable experience that amalgamates ancient Greek temples (of Poseidon) and oracles (Death

Oracle to reach the Cave of Hades, where Orpheus descended while looking for Eurydice), Byzantine chapels (of Agioi Asomatoi) and historic naval battles (1941, between the British Royal Navy and the Italian Regia Marina).

13. Apolytares (Antikythera): Apolytares is the latest entry in the Greek catalogue of stone lighthouses and has become a milestone on many trails. The island is worldwide known for the bronze statue of the Ephebe and the astronomical calculating Mechanism. The Russian Admiral Nikolaos Filosofov, who served as a lighthouse keeper in Antikythera, connected his name to the island, too.

8. Management and marketing plan of the route

As indicated before, the Lighthouse Service is the unique manager of the HLN. As a result, any management or marketing planning should be under their control and approval, in coordination with the Greek Ministry of Culture that characterizes stone lighthouses as monuments. In case the legislative framework enables other legal and non-legal authorities to contribute to the cultural and tourist utilization of lighthouses, a transregional network of local authorities and populations, NGOs, academic and research institutions have to be established. Vulnerable cultural heritage needs to be preserved, properly interpreted and promoted with criteria of quality and sustainability, as a result consensus is a prerequisite for the success of any endeavor regarding lighthouses.

If the route expands to include lighthouses in Italy or Croatia, collaboration with public or private sector bodies with an interest and/or jurisdiction over lighthouses, culture and tourism (such as the Italian “Il Mondo Dei Fari” Association or the Croatian state company “Plovput Ltd.”) would give the route a multinational perspective, especially in view of a certification from the Council of Europe.

Virtual multi-media mapping (required especially during the Covid-19 pandemic), eclectic and focused marketing, and social media promoting of the route would render it recognizable to any individual or organized group interested in the fabulous past, the enchanting present and the unforeseen future of the Ionian lighthouses.

9. Conclusion

Lighthouses constitute an inextricable part of both the Greek national defense system and the cultural capital of the country but have not been embedded in the Greek tourist offer yet. In addition to their obvious, although lessening, utilization for navigation and air traffic, lighthouses condense a variety of recognizable symbols that can be interpreted in a myriad of ways.

Besides, all Ionian lighthouses are located on sites of amazing natural beauty and border on other points of interest for sightseers, tourists, artists, nature lovers, athletes and researchers. Identifying and implementing the suggested cultural route, that largely represents the history, the culture and the landscape on this part of the Ionian Sea, could mitigate developmental inequalities among neighboring Regions. Additionally, a transregional, functional, strategically promoted lighthouse route along the Ionian Sea could underline the polysemic meaning of lighthouses, add value to the Greek tourist product and invite cultural synergies across Europe.

Certainly, any management or marketing plans should be under the control and approval of the Greek Lighthouse Service and the Ministry of Culture. In case that the legal framework permits other authorities and individuals to get involved in the cultural and tourist valorization of lighthouses, a concrete and innovative network should be set up.

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A Cultural Route along the Euganean Hills near Venice¹

by Luca Simone Rizzo

1. Introduction

The proposed cultural itinerary involves the central part of the Veneto Region of Italy: more precisely, the area to the south-west of Padua that includes the Euganean Hills and the immediately surrounding foothills. This territory is made up of two entities that present themselves as complementary and interacting: one in which thermalism is prevalent, and one in which both the agricultural economy and natural spaces are relevant. There are numerous points of interest throughout the territory. The route following the foothills, almost elliptic in shape, runs more or less along the boundaries of the Euganean Hills Park (which includes 15 municipalities).

In § 2 we will illustrate the territorial context. Reflections will follow on tourist flows, on tourism policy and on the evolution of the regulatory framework (§ 3). The latter aspects support proposals such as the one we are going to discuss, promoting territorial tourism. In the fourth part (§ 4), we will illustrate the route created: a *fil rouge* that encourages the reader to discover the territory. We will also make some remarks on current promotional efforts (§ 5) and conclude with a few final notes (§ 6).

1. Acknowledgements – a special thank you goes out to: Mattia Bregolin, Pino Cesarotto, Diego Gallo, Cristina Gibellato, Carmen Gudovic, Ernesto Moreggio, Claudia Robiglio, Villa Sceriman.

2. The territorial context

2.1. *The Veneto*

The Veneto is a region of north-eastern Italy, which narrows to the north-east and widens in its central and southern parts. The territory (mountain 29%, hill 15%, plain 56%) passes from altitudes of over 3,000 metres (the Marmolada Group) to just a few metres in the low Adriatic coastal plain of the Polesine. It extends for about 200 km from north to south, and an equal distance from east to west. It includes seven Provinces. From north to south, these are Belluno, Treviso, Venice, Padua, Vicenza, Verona and Rovigo (figure 1). Four of their respective capitals (UNESCO Sites) are well known to international tourism:

- *Venice* [the city built on water *par excellence*: that of Tintoretto and the flowery Gothic style, with prestigious art galleries and world-famous heritage sites (such as St Mark's Basilica and the Doge's Palace)];
- *Padua* (the city of Giotto and Galileo Galilei, as well as of the Basilica of Saint Anthony and the Botanical Gardens);
- *Vicenza* (the city of the architect Andrea Palladio and splendid Venetian villas);
- *Verona* (a fortified city, famous for its connections with Shakespeare and the opera, where the Roman amphitheatre – the Arena – is located).

In the Veneto, from north to south, six macro natural regions can be found:

1. the innermost Alpine region to the north, in the heart of the Dolomites (a World Natural Heritage Site since 2009);
2. the outer-Alpine region, at the southern edge of the previous one;
3. the pre-Alpine region, from 700 to 2,200 m (a long east-west belt);
4. the hilly, subalpine region;
5. the high plain, bounded to the south by a long belt of springs;
6. the low plain, which lies on the border with Emilia Romagna along the river Po.

The whole Region has been inhabited since ancient times. Events over hundreds of years have shaped and left visible traces on the territory. Overall, the Regional Territorial Coordination Plan (PTRC) identified 39 landscape areas (Veneto Region 2012).

Since the 1970s, the Veneto has been the subject of intense – and often disorderly and asphyxiating – building activity, initially mainly in the central strip of its territory. This has in fact encroached on both the major and minor towns, filling their centres and then encircling and expanding them. The built-up area has, however, spread everywhere. Since the '90s, it has also often conquered the countryside (Rizzo *et al.* 2017).

2.2. The Euganean Hills, in the Province of Padua

Isolated in the plain (almost an oasis, and in stark contrast to what we have stated immediately above), there is the Euganean Hills complex (170 km²): a *unicum*, designated in 1989 as a Regional Park and consisting of a hundred volcanic cones between 100 and 600 metres above sea level.

Located on the Venice-Padua-Ferrara-Bologna-Rome thoroughfare, from the sixteenth to the nineteenth century these hills were frequented by merchants and travellers (Baraldo 2018), especially during the Grand Tour. The privileged destination was Arquà Petrarca. Petrarch, who lived here, inspired the foundation of today's "Francesco Petrarca and the Euganean Hills" Literary Park (an important territorial development agency in the area).

From the eighteenth and nineteenth centuries onwards, the Colli Euganei were frequented by geologists (John Strange) and naturalists (who studied the zone's very varied areas of vegetation). Today, one can still admire – depending on the composition of the soils and the different exposures of the slopes, with their frequently changing microclimates – pseudo-Mediterranean maquis, chestnut groves, thermophilic downy oak forests, and the arid grasslands of the sun-drenched *vegri* (with their precious vegetal relics, such as Paduan rue).

The municipalities of the Euganean Hills range from Arquà (with 1,858 residents) to Abano (with 19,827, as of 31/12/2019); some are mainly hilly, others only in part. The geological evolution of the territory is of particular interest for understanding its general development – both past and present – from the points of view of settlements, mining, roads, agriculture and cultural aspects.

Of particular geological significance was the raising of sedimentary marine deposits, affected by two periods of magmatic underwater intrusions – datable to the Upper Eocene and the Lower Oligocene respectively – consisting of rocks of rhyolite, trachyte, latite and basalt. The area, once it had emerged, has been subjected to exogenous agents that have selectively eroded the sedimentary rocks, leaving the magmatic ones visible. These now constitute the numerous more or less conical (especially dome-shaped) apparatuses (see figure 1 in Pellegrini, Sedeà 2005).

In quarries located at Rocca di Monselice, Monte Lospida, Monte Lozzo, Monte Rosso and Monte Grande, trachyte in particular was extracted from the time of the Romans until 1971, the year in which the Veneto regulated mining through Regional Law 1097 of 29/11/1971, for the protection of the natural and environmental assets of the Euganean Hills. The numerous quarries, in fact, were compromising vast areas of the territory, and also causing landscape degradation. This problem had in fact already been highlighted by Adolfo Callegari as long ago as 1936 (Selmin 2017, pp. 101-112).

Due to its mechanical properties and its slip – and freeze-resistant qualities, trachyte has been widely used mainly for the paving of squares, sidewalks and streets (e.g., Saint Mark's Square in Venice, as well as that city's characteristic *calli*). It was also used for walls, towers, doors, castles, and for the external cladding of buildings. This rock has, therefore, become a distinguishing feature of the cities of Veneto and its neighbouring Regions.

The higher parts of the Euganean Hills are now covered by dense woodland (which often opens up into panoramic views) and are crossed by a maze of walking and biking trails; these are very popular and well-illustrated on the social networks (for example, by the Facebook group *Trekking Colli Euganei*). Overall, the mapped paths and roads cover a few hundred kilometres. They are proposed by private individuals and by various bodies, with explanations usually in several languages and with cartographies (also using kmz and GPS).

The territory as a whole is, therefore, characterized by an articulated strip of low and gentle hills, from which the higher rises emerge. It is located in a once marshy plain, which since the sixteenth century has been subjected to continuous works of reclamation, waterway management, and the construction of a dense network of navigational and drainage canals (Cosgrove 1993; Borin, Borello 2013; Novello, McCann 2017; Rizzo, Rizzo 2019).

In this strip of low hills and the immediately underlying plain, wine monoculture prevails, with the Colli Euganei D.O.C./D.O.C.G. The most important urban centres are to be found here, even though the resident population is small, swollen though by hundreds of tourists and those frequenting the spa resorts: on the eastern side – from north to south – there are Abano Terme, Montegrotto, and Battaglia. Then, further south, there is Monselice, and Este to the south-west. More central, but still on the plain, there is the new development of Torreglia and – on the western side of the complex of hills – there are smaller centres such as Cinto Euganeo, Lozzo Atestino, Vò Euganeo and Bastia (where the town hall of the municipality of Rovolon is located). Some of the smaller villages are also worth mentioning, situated in those parts of the plain that penetrate the hilly areas, or lying on the lower slopes: Galzignano, Valsanzibio (to the east), Arquà Petrarca (to the south-east), Fontanafredda, Faedo, Valnogaredo and Carbonara (to the west).

There are tiny hamlets and scattered buildings [farms, holiday farms (*agriturismi*, of which there are more than 60), restaurants] almost everywhere, but above all along and at the end of individual roads that go up and down in the medium-to-high hills (even amid the woody vegetation or spontaneous shrubs). In many cases, these are refurbishments, extensions or renovations of previous buildings of various kinds: farmhouses, villas and the outbuildings attached to them (in the past, these were essentially farms), old taverns, etc.

The area has also been known for more than two thousand years for its thermal waters. Today, on the eastern side of the Hills, Abano Terme, Montegrotto T., Battaglia T., Teolo and Galzignano T. constitute the largest thermal basin in Italy and Europe (Rizzo, Rizzo 2019). The water emerges or is stored at different temperatures. Enriched with various chemical compounds, depending on the rocks with which it comes into contact, the water is used on its own or as a component in the production of therapeutic muds (Cozzi *et al.* 2019).

2.2.1. An account of the zone's historical evolution

Proto-historical finds of populations who settled locally can be found in the important Archaeological Museum at Este. Settlement by the Romans was preceded by those of the Euganeans and the Venetians. In the Middle Ages, an important phenomenon – proved by still-existing artifacts, well preserved or

in decay, located both in the foothills and at high altitudes – was that of (feudal) encastellation, which took place in Este and Monselice as early as the 6th century, and later elsewhere [as we will see when mentioning small fortresses – that are still extant and sometimes now restored – or ruins representing attractions for tourists and excursionists].

In parallel, we should mention religious settlements: parish churches for the care of souls, on the one hand; monasteries and hermitages for those devoted to ascetic life, on the other. For the purpose of adequately designing a *cultural* route, we must refer to two conceptions of what might be construed as a “regular” religious life: monasteries, with an active life in addition to prayer – and, therefore, with easily accessible buildings and adjoining land – and hermitages, separated from “everyday” life, in places with very difficult access. Developed in the Middle Ages, both “conceptions” have lasted for centuries. As another form of “religious piety”, shrines should also be mentioned. These are located at high altitudes or on the base of the hills (such as the Sanctuary of Monte Ortona, at Abano).

In the sixteenth century, there emerged a phenomenon unique anywhere in the world. After the fall of the Lordships of the Carraresi and Scaligeri in the Veneto, their dominions passed to the Republic of Venice. Many nobles (Venetians and Paduans) and ecclesiastics settled in the area under study with their (agricultural) properties, erecting *villas* in all of the municipalities (cf. Istituto Regionale Ville Venete-IRVV) (Cosgrove 1993) (table 1). By way of example, we can mention the branches of the Venetian Contarini family at Valnogaredo di Cinto Euganeo (and at Este and Vò Vecchio) as well as the Paduan Papafava family at Frassanelle di Rovolon.

In the 19th century the elegant homes of men of letters, musicians, painters, ecclesiastics, and professors at the University of Padua were also added (mostly local people or citizens of Padua, with country houses and farms); other previously existing dwellings were also inhabited by illustrious personalities. Writers and poets have dedicated their compositions to the area and its attractions, from the 1st century A.D. (Martial) to the present century (Brugnolo *et al.* 2008)]. Often, these *villas* are embellished with historic gardens. The *villas* have survived to this day, with changes of ownership and use, as well as numerous alterations and extensions; many play host to museums, hospitality facilities, events and weddings.

3. The development of tourism (and relative policies) in the Veneto and the Euganean Hills

3.1. Tourist flows

With five tourist districts – Sea, Art Cities, Lakes, Mountains and Spas – the Veneto Region provides a comprehensive offer: one that in 2019 ensured over 71 million overnights and more than 20 million arrivals – Italian and foreign – with over 62,000 accommodation facilities, of which 2,985 are hotels (Regione Veneto 2018, p. 26). The largest number of visitors are present in the four summer months of June, July, August and September.

Table 1. Villas, country houses and noble dwellings from the 16th to the 19th centuries in the municipalities of the Euganean Hills. Source: Author's processing of IRVV data (<http://irvv.regione.veneto.it/>) updated using various websites.

Municipality	Villas	Open	Museums	Accommodation	Other	Dwellings
Abano Terme	12	3	2	0	0	3
Arquà Petrarca	8	1	2	0	0	4
Baone	8	4	1	1	2	3
Battaglia Terme	4	2	0	1	0	0
Cervarese Santa Croce	9	1	0	1	3	6
Cinto Euganeo	5	2	1	1	0	5
Este	19	4	1	1	1	8
Galzignano Terme	8	1	0	1	1	5
Lozzo Atestino	1	0	0	0	1	0
Monselice	20	5	1	5	3	8
Montegrotto Terme	3	0	0	0	2	1
Rovolon	9	1	0	2	1	7
Teolo	9	2	0	1	0	7
Torreglia	20	2	1	2	2	16
Vo'	9	6	1	3	3	7
<i>Total</i>	<i>144</i>	<i>34</i>	<i>10</i>	<i>19</i>	<i>19</i>	<i>80</i>

Table 2. Municipalities of the Euganean Hills: Tourist Intensity (arrivals/surface area in km²) and Tourist Density (overnights/surface area in km²). Source: data provided by the Veneto Region (2007 and 2019), processed by the A.

Municipality	INTENSITY OF TOURISM			DENSITY OF TOURIST ACTIVITY		
	2007	2012	2019	2007	2012	2019
Abano Terme	15,619	17,359	23,682	84,855	81,703	92,291
Arquà Petrarca	30	119	317	70	552	755
Baone	21	79	194	34	258	525
Battaglia Terme	251	149	31	2,319	1,287	623
Cervarese Santa Croce	-	3	34	-	16	161
Cinto Euganeo	6	6	42	25	39	180
Este	169	288	296	378	599	912
Galzignano Terme	1,135	1,128	2,928	6,050	3,758	6,436
Lozzo Atestino	1	-	-	1	-	9
Monselice	332	346	537	554	666	1,118
Montegrotto Terme	14,010	13,634	15,220	70,653	59,449	57,851
Rovolon	28	39	45	168	254	227
Teolo	343	362	594	2,928	2,482	3,211
Torreglia	151	154	155	308	448	1,050
Vo'	14	20	53	70	131	463

At a national level, the Veneto is the leading tourist region in terms of arrivals (15.4%) and stays (16.3%). Venice – renowned worldwide – is the most sought-after destination, followed by Verona. The Province of Padua – the subject of this study – is the third tourist destination in the Veneto, with over 1.8 million arrivals and 5.5 million overnights. With its historical/artistic attractions, the city of Padua is the third most important city for arts and culture in the Region for tourist flows (with over 700,000 arrivals and more than 2.7 million stays in 2019).

Now, considering the Euganean Hills in greater detail, we provide here a picture of the tourist flows of the 15 municipalities concerned (according to

Table 3. Municipalities of the Euganean Hills: Hotel function rate [(number of beds in hotels/resident population) *100] and Extra-hotel function rate [(number of beds in extra-hotel facilities/resident population) *100]. Source: data provided by the Veneto Region (2007 and 2019), processed by the A.

Municipality	HOTEL FUNCTION RATE (%)			EXTRA-HOTEL FUNCTION RATE (%)			DEFERT'S INDEX (%)		
	2007	2012	2019	2007	2012	2019	2007	2012	2019
Abano Terme	53.5	57.9	54.8	0.7	1.5	2.7	54.2	59.3	57.4
Arquà Petrarca	1.6	1.6	1.6	4.2	8.8	14.1	5.8	10.4	15.8
Baone	-	-	-	4.8	4.9	7.5	4.8	4.9	7.5
Battaglia Terme	3.4	3.6	1.7	0.8	0.9	3.2	4.2	4.4	4.8
Cervarese Santa Croce	-	-	-	0.8	0.8	1.5	0.8	0.8	1.5
Cinto Euganeo	-	-	-	4.5	4.1	6.6	4.5	4.1	6.6
Este	0.8	1.0	1.0	1.2	1.4	1.2	2.1	2.4	2.2
Galzignano Terme	15.5	12.4	12.5	2.6	2.7	2.7	18.1	15.1	15.3
Lozzo Atestino	-	-	-	1.2	2.0	1.8	1.2	2.0	1.8
Monselice	1.2	1.2	1.2	1.4	2.0	2.0	2.6	3.2	3.2
Montegrotto Terme	58.2	52.1	45.3	8.5	8.7	5.2	66.7	60.9	50.5
Rovolon	-	-	-	2.4	3.4	3.2	2.4	3.4	3.2
Teolo	10.9	10.7	7.5	1.1	2.1	3.9	12.0	12.8	11.4
Torreglia	1.2	1.2	1.2	2.7	3.3	3.0	4.0	4.5	4.2
Vo'	-	-	-	7.7	5.7	6.2	7.7	5.7	6.2

the RDP, these are mainly intermediate rural areas and/or rural areas with intensive specialized agriculture).

Only Abano Terme – the most significant in terms of arrivals and overnights – and Este are classified as urbanized areas. From 2007 to 2019 arrivals showed a growing trend, with an increase of 41.2% (more than 860,000 units in 2019). Overnights, on the other hand, have shown a fluctuating trend: from 3.1 million in 2007 to 2.9 million in 2012, reaching 3.2 million in 2019.

In most municipalities, the period examined also shows an increasing trend when we look at the tourist intensity index, the tourist density index and the gross

utilisation rate (table 2). This last figure confirms what can be seen even from on-site evaluations: the hotel function rate together with the (particularly intense) extra-hotel one allows the demand for beds in the territory to be met (table 3).

3.2. The political and regulatory framework

Over the years, tourism growth has been associated with fluid geographies of tourist flows as well as with unusual consumer behaviours. The focus of tourists' interest is now an (increasingly autonomously sought-after) experience. In order to maintain greater control over the process of tourism and its outcomes, for many destinations – both mature and those that are becoming established – it seemed natural to focus on quality tourism.

Anticipating the national policy guidelines contained in the Strategic Tourism Plan for 2017-2022, the Veneto made this choice at first via the R.L. 11/2013, and then with its Strategic Tourism Plan (issued in 2019). Both instruments introduced changes to promote a sustainable, responsible and qualitative evolution of the tourist offer, stimulating all intra-regional tourist systems to improve the organisation of tourism, to innovate and to differentiate the offer in a sustainable way (activating the smaller centres, their widespread heritage and the many actors who “possess” it). For the tourism product to become a factor of competitiveness, the Region underlined the importance of relying on a resource-based and integrated model of tourism development. Aware of the need to opt for a different (economic, touristic and territorial) organisation, the Veneto has grasped the importance of adopting a reticular approach, which stimulates the inclusion of stakeholders and reinforces interdependencies (in order to reduce corporate pressures and fragmentation). The assessment of lines of development – furthermore – should be made by stakeholders and local authorities, both in the public and private sectors (who collaborate in the creation of a heritage-oriented offer).

Far more explicit is the reference to (meta)governance, which – as Cooper and Hall (2008) and Van der Zee and Vanneste (2015) recall – involves the management of several agencies and organizations which, while operating independently from each other, remain linked through their involvement in common policy issues and associated funding and benefits.

The rationale, as set out, aims precisely to promote forms of territorial tourism, which is sustainable and area-wide; the effects – which can be glimpsed, even in the presence of a certain “stickiness” and inertia – should manifest themselves in the future, hampered as they are now by the Covid-19 pandemic. This can also be done through the creation of experiential itineraries such as the one proposed by the author and illustrated below (§ 4) (anchored, therefore, in the narrative and the political frameworks illustrated above).

4. The Euganean Route and its points of interest

Considering carefully the cultural heritage distributed in all of the municipalities, we have chosen – by type – only the most significant and exemplary (also considering the POIs identified within the QNeST project). Below, we will first provide a brief overview of the transport routes approaching the area, and those entering it (road and cycle routes). Later, we will proceed to the actual description of the *route*.

4.1. Roads and bicycle paths

The Euganean Hills are located between three highways:

1. to the north, and running west to east, the A4 “Serenissima” Milan-Venice autostrada which converges, at Verona, with the Brenner A22 (which drains away some traffic from Central Europe. If one is interested in the Euganean Hills, one can reach Vicenza using the A31 or Padua using the A13);
2. to the east, the A13 Padua-Bologna;
3. to the west, the A31 “Valdastico” (which meets the Milan-Venice motorway near Vicenza, heading south).

To the south of the Euganean Hills, the Padana Inferiore SS10 Mantua-Monselice (a state – now Regional – road) winds through the area transversally. It comes from Turin and joins the SS16 towards Padua. One can, therefore, approach the area under study from all four cardinal points (and, in addition,

from various orientations: north-west, south-west, etc.). Located as they are geographically, the Hills – a key advantage, if the prospect is that of territorial and tourist enhancement – are about 10-20 km away from Padua and a hundred from important cities of art and culture (Venice, Verona, Mantua, Ferrara and Bologna).

The sides of the zone, from east to west, are linked by five tortuous transversal roads. Numerous road connections (as well as trails) run between them, in a continuous alternation of repeated rises and falls – often with narrow bends – that allow for frequently changing views of the landscape.

Last but by no means least, we highlight the E2 bike route: a ring of approximately 60 kilometres around the foothills of the Euganean Hills, proposed by the Veneto Region: it runs for a considerable distance along a dedicated road and, for the remaining part, along Provincial or municipal roads.

We suggest that visitors should reach *the proposed route* from the north-west via the Valdastico A31 motorway, and then take the first exit, signposted “Colli Euganei” (turning right at the roundabout towards Rovolon). Then, they should continue for a short distance on the SP38, towards Bastia.

Before describing the *Route* itself, we suggest that readers should carefully study the Euganean Hills road network on the internet, particularly as regards the Provincial roads (SP-Strada Provinciale) [as indicated in figure 1]; in this way, they can gain familiarity with the way roads are named. Our Route, in fact, consists of a sequence of Provincial Road (SP) sections, easily identifiable via road signs and maps on the internet. This is, however, only a suggestion: in this way, the Hills can be approached by means of a closed and complete itinerary through the foothills, (but this may indeed begin – and end – wherever one prefers).

4.2. *The Route as a whole*

The Route from Bastia runs southwards, tracing – broadly speaking – a counter-clockwise elliptical path through the foothills of the Hills (figure 1). The points of interest (POIs) are either located directly on the *route* or can be reached with short outward and return diversions at one of the points on the route. Only occasionally will we suggest POIs that allow entrance into the Hills themselves, leading us to altitudes of a few hundred metres above sea level.



Figure 1. The Veneto Region and the Padua Province in which we find the Euganean Hills. Source: Luca Simone Rizzo.

4.2.1. The Route and the points of interest: the western side

From Bastia, one takes the SP38 until one meets the SP89 at the large round-about at Vò. On the western side, one can immediately admire the gentle, low hills, mostly cultivated with vineyards. These hills are densely punctuated with settlements, farms, wineries, restaurants, trattorias, and *agriturismi*. All the above – whatever their activity – are well signposted.

A few kilometres away we find the municipality of Vò Euganeo, where both the *Consorzio di tutela vini dei Colli Euganei* – with over 100 members – as well as the *Wine Museum* are located (Guy 2015); the latter also contains the offices of the *Biodistretto dei Colli Euganei*.

In the hamlet of Boccon, on the left of the SP89, one finds POI no. 1 *Cà Sceriman*: a Palladian villa with a noteworthy pronaos. Its former stables are now used for tastings of food and wine (the selection of which is wide), equipped as they are with two rooms furnished with polished vintage wood and also offering outdoor spaces (a beautiful farmyard with a large arbour of wisteria).

On the right of the SP89, at Vò Vecchio, one can reach POI no. 2 *Villa Contarini-Giovannelli-Venier*. Its appearance resembles the three-storey Venetian palaces; it is surrounded by historic buildings and includes a church. It now houses the *Landscape Museum* and the *Shoah Museum*. The site is of particular interest also from a hydraulic point of view, due to the canal overlooking the extensively reclaimed plain. Still in the municipality of Vò, but high up in the Hills, one can enjoy the view of Monte Venda (601 m), where the *remains of the Monastery of the Olivetan Monks* can still be seen.

If one continues for a few kilometres, one reaches Lozzo Atestino. After a short detour that encircles the homonymous hill (perfectly conical, but isolated), one arrives at POI no. 3: the *Manor-Castle of Valbona*.

Further on, near the Provincial Road in the municipality of Cinto Euganeo, there is the *Cava Bomba*: an interesting, recently renovated furnace, which houses the Geo-paleontological Museum (POI no. 4), which organises frequent educational and exhibition activities.

4.2.2. The southern side of the Hills

We selected the walled city of Este (Bettella 1983) as POI no. 5, because it sums up all the historical/cultural aspects that characterize the territory. The National Atestino Archaeological Museum (one of the most important in Italy) contains, in fact, precious evidence of the ancient inhabitants of the area. Este also has an unspoilt historical core located in the low hills and underlying plain up to (and just beyond) the bend of the Bisatto Canal (which flows from the northwest and is called – for this short stretch – Canale d'Este). Here we find a high concentration of buildings, from the Middle Ages to the nineteenth century. Among these, the Carraresi Castle (with its walls) stands out, later purchased by a branch of the Mocenigo family. In the area covered by the Este Canal, to the monuments mentioned above we should also add:

- immediately beyond it, the *Treves, Rezzonico, Zillo and Albrizzi Villas*;
- and – in the lower hills, further north – *Villa Cornaro, Villa Contarini degli Scrigni/Vigna Contaregna-Haugwitz* (now *Caporali*), *the Prince's Palace* and *Villa Kunkler* (which played host to Byron and Shelley, “the poet of the Euganean Hills”).

Today, in Este, we also find the headquarters of the Euganean Hills Park. In Baone, we go to Villa Beatrice d'Este, which houses the *Natural History Museum*.

From Este we continue towards the east, at the foot of Monte Castello (318 m) and Monte Cecilia (210 m). From here, we proceed slightly up towards the wide valley of Arquà Petrarca, awash with olive trees (POI no. 6). The mediæval village, built with trachyte and other rocks, contains the *house/museum* – immaculately restored and totally frescoed – of Petrarch (1304-1374), the famous Italian poet who spent the last years of life here, after much wandering through Italy and Europe. Also worth visiting are the Oratory of the Holy Trinity, the Loggia dei Vicari, and various churches and villas; among these is Villa Masiero-Centanin (the location of the *Museum of Antique Pianos* and of considerable musical activity). Many buildings have wine bars and restaurants, which offer local food specialities.

We now descend towards the walled city of Monselice, running along the foot of Monte Ricco. The town developed on the plain, all around the Fortress (151 m). Most of its important buildings (POI no. 7) lie uphill, along the winding Via del Santuario: from the Church of San Paolo (now a museum) to the Cà Marcello-Cini Castle and Villa Nani Mocenigo; the road then changes its name to Via delle Sette Chiese (a sanctuary similar to that of the Sacri Monti, leading up to the Church of San Giorgio and Villa Duodo).

4.2.3. The eastern and northern sides

Still at the foot of Monte Ricco (along the SP73), Monte Calbarina and Monte Piccolo (along the SP25d), we continue north towards Valsanzibio and POI no. 8: *Villa Barbarigo* (another family of noble, wealthy Venetians), now known as Villa Pizzoni Ardemani. The construction works continued throughout the seventeenth century. Many elements of the allegorical garden – the plants, the shady avenues and paths, the fish ponds, the statues, the fountains, the laby-

rinth, the cave, the portal, the monuments – offer an opportunity to make an inner journey and find the meaning of one’s life: they allow one, that is, to act not only as a “Tourist” but also as a “Pilgrim”, making «a double journey: inside the Garden of Valsanzibio and oneself» (Osto 2016, p. 15). From its vantage point high above, Casa Marina may be considered as the environmental centre of the Park.

Leaving just after the golf course, from Valsanzibio we continue along the winding road to Galzignano: a village with a small ornithological and archaeological museum relating to the territory. The road then heads south-eastward (SP25) to Battaglia Terme, located at the confluence of two inland waterways (the Bisatto – coming from the south – and the Battaglia from the north, which joins the Vigenzone to the east and runs into the Venice lagoon). The town houses the original *Museum of Inland Navigation* (POI no. 9), containing boats, equipment and images of the inland water transport system that for centuries has characterized these flat areas (all the way down to the sea).

Just outside the town – further north, along the SP63 – you come to POI no. 10, the mighty complex of *Catajo Castle*: an enchanting, scenic spot, with a garden of delights. It was built gradually from the sixteenth century onwards by the Obizzi family (mercenary leaders with an army of their own). The castle has halls entirely frescoed by Gian Battista Zelotti, who portrayed the illustrious deeds of the family. Later, it was also owned by the imperial house of the Habsburgs, before suffering mixed fortunes. It was recently purchased and restored by the Paduan entrepreneur Sergio Cervellin. It is now open for visits and used for events.

Following the SP63, one arrives at Montegrotto Terme (POI no. 11). The town is an important archaeological area with several ancient sites with *Roman remains*, including baths from that era. On Monte Alto, just a few metres higher up, there is *Villa Draghi* (POI no. 12) with a garden of 32 hectares (also restored and used for events). The SP74 then takes us to Torreglia, a commune mainly in the hills. In its territory, we find many Venetian villas (table 1). As regards the members of the clergy, we should mention the spectacular *Villa dei Vescovi di Padova* at Luvigliano di Torreglia, richly frescoed and now owned by the Fondo Ambiente Italiano (FAI) (Golin *et al.* 2017). It has an impressive stairway at the entrance; embellished with loggias for visitors and guests, the villa is surrounded by a large vineyard.

In Torreglia Alta, we also find the *Villa of Abbott Giuseppe Barbieri* (1774-1852), who dedicated poems to the Euganean Hills. Also in connection with Luvigliano, it is worth remembering an important musician: the composer Cesare Pollini (who originally owned the homonymous villa) (POIs nos. 13, 14 & 15). In Torreglia Alta, we can also find the *Pieve di San Sabino* [POI no. 16 (Marchesi *et al.* 2017)]; higher up, towering over a large wooded area since the beginning of the 16th century, there is the *Camaldolese Hermitage of Mount Rua* (the POI n. 17), a peculiar jumble of buildings within whose walls there are 14 cells/houses for the cloistered monks.

Abano Terme is well known because it offers, in a single municipality, a large concentration of thermal and spa hotels and specialized infrastructures. Many of the hotels have extensive gardens. Some contain beautiful, centuries-old plants; others are actually private botanical gardens that can be visited (for example, that of the Abano Grand Hotel). There is also a site of great cultural interest: the *Amleto and Donato Sartori International Mask Museum* housed in *Villa Savioli* (POI no. 18), which is unusual and indeed unique. Masks and costumes are created here for the most important theatres in the world. About 2000 works are on display, from Greek and Roman ones to those of the *Commedia dell'Arte*. A part of the museum is devoted to installations for the urban “masking” of streets, squares and/or castles, suited to the socio-cultural needs of the chosen area and so creating opportunities for interaction between artists and visitors: a creative game in which the latter can participate. At *Villa Bassi Ratgher* (POI no. 19), on the other hand, a significant testamentary bequest has given rise to a civic museum – with paintings, engravings and more besides. Isolated on a nearby wooded hill, we find the peaceful *Monastery of San Daniele* (POI no. 20), hosting a museum illustrating its eventful history.

It is worth mentioning here the municipality of Teolo, which extends for the most part on hills. One reaches the centre by taking a road with sharp bends. Part of this road connects to the SP89 to Padua. Right at the foot of the Hills, one finds a large monastic complex whose first buildings date back over a thousand years (to the late 11th century): the *Benedictine Abbey of St. Mary of Praglia* (POI no. 21) (Carpanese, Trolese 1985; Ferraro Maccarinelli 2014). This religious site can be visited and consists of four cloisters, two refectories, an ancient library (the friars dedicated themselves to the restoration of ancient

books), a church, a garden of medicinal plants, and other areas. Furthermore, wine is also produced here.

In Cervarese Santa Croce one finds the small but complete *Castello di San Martino della Vaneza*, which houses the *Museum of the River Bacchiglione* (POI no. 22): proof once again of the local interest in the Veneto's inland waterways. A river created by a spring and into which various mountain streams converge, the Bacchiglione flows through Vicenza and Padua; it has a centuries-old history of waterworks in its various canals and flows into the southern part of the lagoon of Venice. One can also admire it from the cycle path that runs alongside it.

Since the thirteenth century, the Papafava dei Carraresi Counts (descendants of the noble "Da Carrara" family) have owned an estate in Frassanelle (a district of Rovolon): a farm located in the lower part of the Hills, which is still in operation and is now also an *agriturismo*. Today, the domain can be visited on foot, together with its various facilities (POI no. 23): in an elevated position, there is the homonymous villa (with its essential, spartan appearance); a large park; various buildings for tourists; and the former cellar (renovated and used for weddings and events, under the porch and on the paved courtyard at the front). From the SP77, one takes the SP38 to end the itinerary in Bastia. Though not directly on our proposed route proposed, a visit to POI no. 24 would make a satisfying addition to one's experience: the *Sanctuary on the Mount of the Madonna* (an isolated but very popular heritage site, also with a long history behind it) (figure 2).

For the benefit of the reader, we summarize below the *route* indicating the Provincial roads as explained above in more detail, assuming that one travels by car and reads the roadside directions:

- The western side of the Hills: A31→ SP38 Bastia → towards the south→ Carbonara→SP89→Vo'→Rivadolmo→Este.
- The southern side: →SP6→ towards the north-east to Baone→↑Arquà Petrarca SP21 ↓SP6→Monselice.
- The eastern side: →SP73→SP 25d →Valsanzibio→GalzignanoSP25→Battaglia Terme →SP63 Montegrotto→ SS250→SP74 to Torreglia →SP 25 to Tramonte→ SP60→ for ↓Abano Terme↑.
- The northern side: SP89 to ↓ Abbazia di Praglia↑→SP77 to Frasselle di Rovolon→SP38 Bastia.



Figure 2. *Points of interest: n. 21 (top left); n. 10 (upper right); n. 8 (below). Source: photos by A. Sambugaro (2019).*

We have noted very lively discussion in the zone regarding how the various actors and bodies (whether individuals or associates, private or public) have equipped and modernized themselves, how they present themselves, and what they propose (see, for example, their websites and social networks).

In the next paragraph we aim to analyse critically whether the network relationships hoped for in the DMO are being strengthened (which is necessary for promoting the Destination as unique and distinctive, and to make it more attractive).

5. Promotional and marketing strategies for the Terme and Colli area

The area has made a major step forward, working to overcome the problem of institutional fragmentation. For example, the two spa tourism promotion agencies have merged into a single entity, extending their ambit to the wider Euganean territory. The Consorzio Terme e Colli Marketing (TCM), which results from this operation, is focusing – and intensifying – its activities. As a result, the institutional structure currently in place – and the associated planning – should be recognised as a point of strength, if we are looking at the development of a community-based Destination.

The continued and dedicated hard work, however, is hardly leading to an appropriate allocation of funding, so that all resources collected (for instance, from tourist taxes) are reinvested in fully developed, shared projects. This undermines the zone's impact, still partly limited in terms of the actual marketing, management and development of dynamic packaging solutions and (high-quality and more select) tourist network products. Overall, therefore, additional efforts should be made to build more effectively on the rich territorial capital available (but which has not yet been adequately activated). This is further confirmed if one considers the widespread tangible and intangible cultural resources on which we focus in this paper.

Further, a more practical, incisive and effective implementation would require refocusing and rationalising – in a limited timeframe, if possible – market positioning strategies as well as associated “tools” (such as business networks and/or product clubs). The latter, at present, do not seem to emphasise explicitly the role of cultural heritage and in part undermine the visibility of the area brand (Terme and Colli).

We should specify here that a website was created in 2019 (<https://www.visitabanomontegrotto.com/>); one that, under a common logo, promotes the 16 municipalities of the Destination Management Organisation “Terme e Colli” (a larger number than those specifically within the territory of the Park). From the interviews conducted, there emerges that the web-portal will be restyled (not only for maximum ease of use and in terms of graphics, but with a sharper focus).

The map shown on the web page, anyhow, locates economic agents throughout the area, highlighting them with a symbol that indicates the activity they carry out. The logo of the DMO [a droplet, partly blue (which recalls the water

of the spas) and partly green (for the Hills)] is used to locate the tourist-cultural resources without differentiating them, by using icons. Hyperlinks associated with such symbols allow for short explanations, to understand what the territory can offer. The analysis of the portal shows some effort, therefore, in terms of territorial valorisation, although this is more weighted towards the area covered by the spa towns.

The domestic and international tourism demand already shows an interest for rural areas, and for increasingly complex and sophisticated experiences (made possible activating the many available resources – spas, nature and sport, food and wine traditions, art and culture: the pillars on which adequately building a destination, with good visibility for consumers, depends). Rather, if one looks at some of its constituent parts – the public institutions as well as stakeholders (e.g., trade associations) – rurality has not yet developed a sufficient sensitivity and tourism culture that allows it to move forward beyond the status quo on this matter.

The private sector members of the partnership mentioned above, as well as those of the “direction cabinet” of the DMO created under the encouragement of Regional laws – especially the economic agents of the Spa region (who, years ago, were definitely reluctant to do so) – seem to have grasped the need to form alliances (as has already been done by other Veneto businesses, outside the area under study); fully aware, as they are, that the development of the tourism sector will have a future only if a correct synthesis of the interests of the parties concerned finds expression at strategic level (and between resources associated with them, to be enhanced in a more harmonious way, in view of tourists’ expectations).

6. Concluding remarks

From a tourism development perspective, the cultural heritage located in the area under study would also allow for different choices to be made vis-à-vis the one exemplified by the proposed route. Based on criteria such as the homogeneous character of the heritage, one could create thematic routes, for example, which:

1. highlight only the historic and majestic villas [selecting some among the 144 spread throughout the territory, also in accordance with different cri-

- teria such as: their architectural style; artistic elements of great beauty and value; the historical reference period; historical events of particular significance; etc.];
2. focus only on museums (there are 19, scattered all around the zone and all different);
 3. focus only on beautiful historic churches, monasteries, sanctuaries and on the Way of Saint Anthony (the second stop, “Padua-Monselice”, of the “Basilica del Santo-La Verna” route);
 4. allow one to explore the typicality of the food and agricultural products, as well as the hospitality associated with it (for example, the 61 *agriturismi*) [trees and crops – we remind the reader – have marked the landscape. They have shaped the identities and the daily life of the people, and fostered social patterns. Unique products and gastronomic traditions bear witness to the above and the history of the area].

As we can see, one thing is clear at present. Due to the sheer force of figures associated with both towns, without the reputation and visibility of Abano and Montegrotto the Hills will find it hard to emerge in the tourism market (either nature-related or cultural). Abano and Montegrotto – now mature destinations – need, though, the Hills to regenerate from a tourist point of view (Page 2019, p. 19). The two components, in turn, still depend on the driving force guaranteed by the brand “Veneto the Land of Venice” (as they are not yet present as stand-alone destinations in the preferential map of tourists, nor of the international operators). The itinerary proposal illustrated by the Author aims precisely to contribute towards presenting the Destination in a more harmonious, integrated and cohesive way: to help seize the opportunities offered by the evolution of Demand (which is favourable to its territorial, economic and human fabric) (Richards 2018).

Post script: we explained in detail our proposal for a complete route that runs all around the Euganean base, stating all directions (SP). It has been structured so that it can embrace, in one solution, all the hills and be uploaded on the web. However, below is also one of the four local routes developed by the QNeST project.

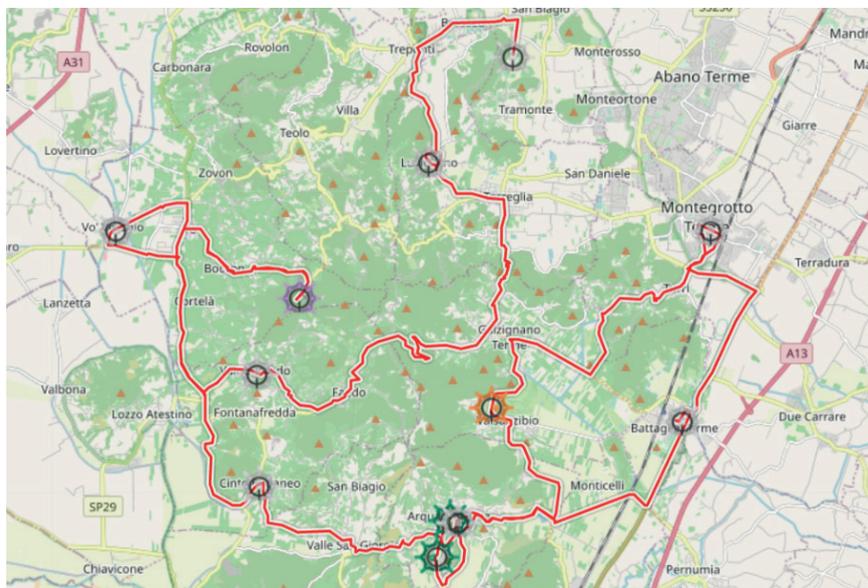


Figure 3. The Eugean Hills: Wine Route of Colli Euganei, one of the four QNeST routes. Source: <https://application.qnest.eu/routes/5ea88522deae3a6f2a751d06>.

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Historical itineraries in the Western Alps

Memory and culture in a case study
of the Valais and Ossola Valleys

by Guido Lucarno

1. Geographical and historical context of the area

Ossola Valley, in the province of Verbano-Cusio-Ossola, is in the northernmost part of Piedmont (Italy). It is wedged between the Swiss Cantons of Valais, to the north-west, and Ticino, to the north-east. The valley, oriented north-south, is drained by the River Toce, which originates in the Riale plateau at an altitude of 1720 m, just below the Gries Pass (2479 m) and the San Giacomo Pass (2308 m). The river flows into Lake Maggiore (193 m) after a course of about 84 km.

The watershed that separates it from the Valais (Rhône River basin) runs north-north-eastwards from Monte Rosa (4634 m), with peaks above 3000 m (Pizzo d'Andolla, 3656 m, M. Leone, 3552 m, M. Cervandone, 3211 m, Blinnehorn, 3374 m). Just a little lower is the watershed on the eastern side of the valley, where the Marchhorn (2962 m), Castel (3128 m) and Basodino (3273 m) peaks are located.

The highest section of the Ossola Valley, shaped by the erosive action of the Quaternary glacier that flowed there during the most recent glacial period, is referred to as the Val Formazza from the name of the municipality located in the northernmost part, which stretches from the sources of the Toce down to an altitude of about 900 m. Further south, it takes the name of Valle Antigorio, which extends to the point where, at an altitude of about 300 m, it broadens into a wide alluvial plain, where the town of Domodossola is located.

Throughout the area, there are many traces of the Pleistocene glaciation, such as valleys with a typical U-shaped profile, flanked by extensive alluvial

fans and numerous lakes of various sizes¹. Some glaciers persist at higher altitudes: the biggest is the Monte Rosa glacier; other smaller ones are located in the upper Val Formazza (Hohsand, Gries, Siedel, Ban)². The landscape is characterised by large valley basins, rich in pastures and coniferous woods, alternating with steep slopes, with waterfalls, deep and narrow gorges, terraces and thick moraine deposits crossed by short streams flowing from high valleys on both sides of the river. In this environment, since the time of Roman colonisation, there has been a path linking the Po Valley and the Rhone Valley, leading from here towards the central Swiss plateau.

In historical times, the Leponzi, a Protoceltic population, lived in Ossola; they were subdued by the Roman Empire in 14 AD, and Caesar, Strabo, Pliny the Elder and Titus Livius cite them in their historical works. In the early Middle Ages came the Lombards and the Franks; in the thirteenth century, the territory became the property of the Visconti family, followed by the Sforzas and, finally, in the sixteenth century, the Borromeos. After the Peace of Aachen (1748), the west bank of Lake Maggiore and the Ossola Valley were given to the Duchy of Savoy, whose history they then shared until the establishment of the Kingdom of Sardinia and the Kingdom of Italy. However, the most important chapter in the history of the upper Ossola Valley is the Walser colonisation: seven centuries later the Walser people are still present in the area and have preserved significant aspects of their original cultural heritage³.

2. History of the population: the Walser colonisation

The Walser are an Alemannic population who originally dwelt between the Danube and the right bank of the Rhine. In the 6th century AD, they migrated

1. The Ossola region has many lakes: the topographical map shows about eighty of them, some of which have been modified or included within artificial reservoirs connected to hydroelectric plants.

2. There are numerous locations where the environment still shows spectacular signs of fluvio-glacial modelling. For example, the gorges in the Uriezzo basin, enclosed between the Devero and Toce rivers, were shaped by the flow of melt waters, and today they represent one of the most evocative natural destinations. They are a series of sub-circular cavities, connected to each other by narrow passages adapted for walking tours. The Baceno canyon, near Silogno, consists of a ravine with overhanging walls carved by the waters of the Devero over the millenia.

3. For a broader introductory description of the territory and the history of this province, see Lucarno 2006, pp. 15-24; for a geological description, see Castiglioni 1958.

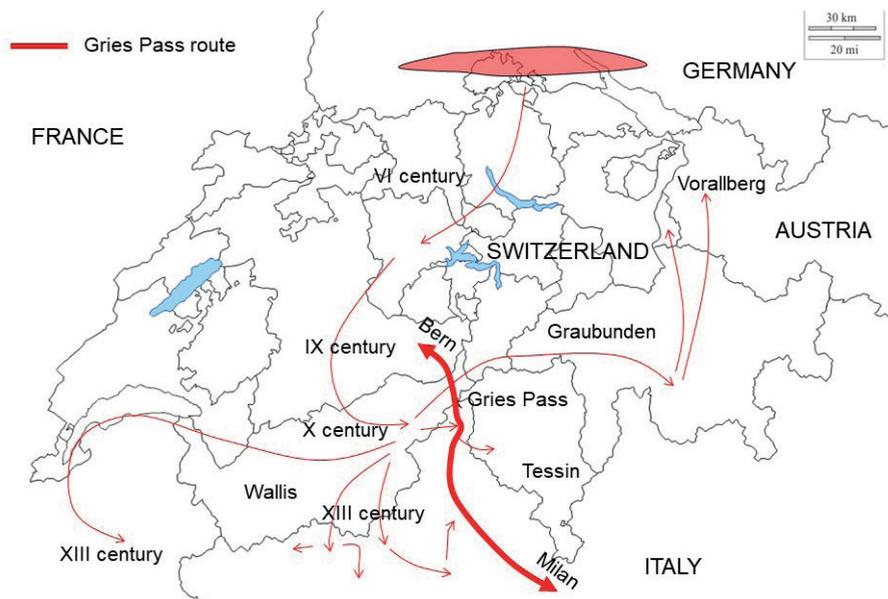


Figure 1. *The migrations of the Walser communities in the Middle Ages and the Gries Pass route.*

towards the Swiss plateau and in the 9th century they moved towards the heart of the Alps (Rizzi 2015, pp. 23-27), founding small communities scattered across Savoy and Vorarlberg. In the 10th and 11th centuries, a colony was established in Goms, the upper Rhone Valley (Rizzi 2004, p. 11), the *Vallis Poenina* of the Romans, then simply called Vallis or Wallis, hence the toponym Valais and the Walser appellation of this people (Mortarotti 1979, p. 25). Finally, in the 12th and 13th centuries, various groups migrated to valleys south of the Alps, where they colonised part of the Aosta Valley (Ayas and Gressoney Valleys, Sesia and Ossola Valleys (Formazza, Macugnaga) and the Ticino Valley (Bosco Gurin)⁴ (figure 1).

In the Antigorio-Formazza Valley, the object of this research, the population is believed to have arrived in the late 12th and early 13th centuries (Rizzi 2004, p. 31). Here, the local feudal lords welcomed the new settlers, who agreed to lease uncultivated and inhospitable lands at high altitudes: the lords granted

4. The first official document in Walser history dates back to 1253; it relates to the foundation of a church-hospice in the colony of Bosco Gurin in the Rovana Valley (Crosa Lenz 2003, p. 4; Rizzi 1993, p. 66).

them an exemption from the obligation to provide servile labour and the right to maintain autonomous tribunals and administrative organisation (Rizzi 1993, pp. 49-55, 65-66). The villages were in fact governed by an Amman (a sort of mayor), a representative of the community chosen by the population and recognised by the feudal lord as responsible for the administration of civil and criminal justice (Crosa Lenz 2003, p. 81).

Colonisation permanently repopulated valleys where mountain pastures had previously been used only in summer. Due to their relative isolation, the Walser people preserved their culture over the centuries, including their language of origin (*Titsch*), and introduced Germanic place names that largely replaced the pre-existing Romance-influenced toponymy. Their distinctive culture, very different from what prevailed in the other Alpine areas of Piedmont, was preserved intact until the beginning of the twentieth century, when the introduction of new infrastructure (artificial reservoirs and hydroelectric plants) and quarrying brought Italian-speaking populations from other regions to this valley and changed its demographic structure. This immigration caused a progressive cultural assimilation and the abandonment of traditional agriculture, characterised by the cultivation of rye, cereals, potatoes and hemp, and livestock farming, which supplied meat, milk and dairy products. The increase in tourism, which today constitutes the valley's leading economic sector, has also contributed to this process.

Today however, following the immigration of the mid-20th century, there has been a slow, inexorable exodus, which has led to a progressive decrease in the population that is still ongoing. From 2006 to 2021, the four municipalities of the Antigorio-Formazza Valley (from north to south: Formazza, Premia, Baceno and Crodo) saw their populations decrease from 3,478 to 3,274 inhabitants (-6.2%): the current population density is 9.3 inhabitants / sq km, falling to 3.4 inhabitants / sq km in the municipality of Formazza⁵.

3. Tourism in the Antigorio-Formazza Valley

Today tourism is the main economic resource of the Antigorio-Formazza Valley. The attractions derive from the mountain environment and the climate,

5. Source: Provincial Administration of Verbano-Cusio-Ossola.

which give rise to two distinct seasons of visitor attendance: winter, when the area is suitable for alpine and cross-country skiing, and summer, when temperatures are 10–12 °C lower than in the cities in the Po Valley and the area is perfect for trekking in the high mountains.

The few cultural assets of any importance consist of traditional religious buildings and museums showcasing local history. Today the most significant tangible cultural heritage consists of the architecture of the rural buildings inherited from the Walser colonisation, characterised by houses arranged in small villages, generally at altitudes above 1200 m. The buildings are two or three storeys high. The ground floor, built of stone, is used as a warehouse and sometimes even a granary. The upper floors are made with sturdy wooden beams interlocking with each other at the corners of the building in accordance with the system known as *Blockbau*. The roof is covered with tiles of heavy serizzo stone, a local granite (Rizzi 2015, pp. 369–396). Residential buildings and service structures, including those in shared use (churches, ovens, barns, granaries), represent the most distinctive feature of the anthropic landscape, perfectly integrated with the Alpine natural environment, and they can also be considered a tourist attraction (figure 2).

The presence of tourist accommodation facilities is not significant: in the four municipalities there are 675 beds (0.47% of the provincial total), which before the pandemic recorded 66,643 overnight stays per year (2.4% of the provincial total)⁶. Tourists are attracted to the province above all by the landscape, climate and cultural heritage along the shores of Lake Maggiore and Lake Orta, which are frequented mainly by foreign visitors in the summer season. On the other hand, the mountain environment mainly attracts tourists from the northern Italian regions. For this reason, in the first phase of the pandemic emergency, the mountains and the valley areas did not suffer so much from the drop in overnight stays. Some locations even recorded an increase in tourists thanks to the presence of many Italian visitors who decided to spend their summer holidays in national locations instead of travelling abroad (Lucarno, publication in progress).

6. Data from the 2016 database. Source: Tourism Department of the Province of Verbano-Cusio-Ossola.



Figure 2. Typical “Blockbau” Walser house (Ossola Valley, 2005).

4. Walser heritage along the historical routes: the Gries Pass

In ancient times, Alpine passes connected Italy with the transalpine regions of the Roman Empire; some of them had already been frequented since the Bronze Age, as evidenced by the discovery of hunters’ camps at high altitudes. The Walsers used the passes of the Pennine and Lepontine Alps during their migration towards Italian regions, especially the Gries Pass, which separates the Formazza Valley from Valais. This road continued to be frequented even after the Middle Ages, keeping the Walser of the Ossola Valley in contact with their communities of origin north of the Alps, but above all allowing commercial traffic (and sometimes even the passage of armies) between the cities of the Po Valley and the Germanic world.

From the Riale hamlet (1740 m), which today can be reached by motor vehicles, the mule track leads along the artificial reservoir of Morasco (1815 m).

Via a rather steep stretch, it then crosses the entire Gries valley and reaches the Bettelmatt plain, where, at an altitude of 2110 m, there is one of seven mountain pastures that produce a fine local cheese. In this section of the valley, part of the mule track still has the ancient stone pavement that facilitated the transit of caravans of pack animals in medieval times. Other steep paths lead up to the Gries Pass, which is located on the border between Italy and Switzerland⁷. After skirting another artificial reservoir, the Griessee (2386 m), the path remains at high altitude until it reaches the Novena / Nufenenpass (2480 m), on the watershed that separates the upper Rhone Valley (Canton Valais) from the Bedretto Valley (Canton Ticino). From here, ancient roads once led to Bern (via the Grimsel Pass) and the Lake Geneva region. A north-east route through the Gotthard Pass led to the Canton of Zurich, Lake Constance and Bavaria. The route crosses the characteristic stone bridge of Ladstaffel, built in 1749, where many years ago the Formazza caravan drivers built the Chapel of San Nicolao, an *ex-voto* oratory, to give thanks for escaping the danger posed during one of their crossings by adverse weather conditions and avalanches⁸.

The success of the Gries Pass route began in the late Middle Ages: on August 12th, 1397, the representatives of the localities of Bern, Interlaken, the Hasli and Ossola Valleys and Goms met in Münster, the capital of Goms, in the Rhone Valley. They established a «ten-year agreement for the construction, maintenance and safety of the road to *Bomat* [Formazza] and Ossola» which would allow easier merchant transit on the route between Milan and the Swiss plateau (Rizzi 2015, pp. 160-161). The transit of goods was subject to the payment of tolls that allowed the maintenance of the infrastructure and guaranteed some margin of wealth to the local communities. The interest in the construction of a road documented by the Münster Convention derived from the fact that there was already intense traffic of goods through the pass, with textiles, tools, salt, cereals, wine, paper and spices heading from south to north, and cheeses, leather, cattle and fabrics being transported from Germany to Italy. On the Ossola side, the town of Domodossola became a hub of transalpine traffic, including smuggling, since it was not easy to check all the goods that passed

7. The rocks deposited as greyish sandstone by the Quaternary glacier near Gries Pass are called *Kries* in the Walser language, hence the current toponym.

8. *Val Formazza*, trekking map at a scale of 1:25,000, Novara, Geo4Map s.r.l., 2019; <https://www.vitossola.it/itineraries/trekking-via-del-gries-riale-passo-del-gries-ulrichen>.

through and to collect the established duties and tolls. The inhabitants of the valley also profited from the traffic by supplying logistical services to the caravans, including inns for wayfarers and mule drivers and stables and fodder for the animals. This route was used for centuries by travellers, some of whom were illustrious figures who left traces of their passage or wrote travel notes, such as the musician Richard Wagner, the Swiss scientist Horace-Bénédict de Saussure, cardinal Matteo Schiner, the bishop of Sion and Novara, the Bernese naturalist Albrecht von Haller, the Swiss philosopher Karl Viktor von Bonstetten and the American mountain climber William AB Coolidge (Rizzi 2015, pp. 164-180, Coolidge 1990). Although the traffic was intense, navigating the Gries pass, even during the summer months, continued to present problems arising from the unstable climatic conditions and the physical challenges of the route. Until two centuries ago, the highest section of the route consisted of a track across the glacier, which was made even more hazardous by the presence of crevasses and the persistent danger of the ice disintegrating, in addition to rock falls and avalanches. For this reason, communications were often interrupted for long periods in winter.

After the opening in 1805 of the Simplon road between Brig and Domodossola, commissioned by Napoleon Bonaparte to allow the passage of artillery, the Gries route fell into disuse and was definitively abandoned after the construction of the San Gottardo railway (1882). Today the ancient mule track is a marked path, walked only in summer by herders and mountain climbers. Near the pass, at an altitude of 1450 m, a refuge chapel was built in 1964, in memory of an unfortunate excursion by a group of young scouts from Milan, during which three boys lost their lives due to a sudden storm. In 2014, the structure was restored and transformed into an unattended bivouac of the Italian Alpine Club (CAI)⁹.

5. The Gries Pass today

After the upgrading of the Simplon and Gotthard road and railway routes, Val Formazza was excluded from the modernisation of infrastructure connecting

9. Source: *Mount City. Vivere la montagna tra zero e ottomila*: <https://mountcity.it/2014/07/1088/grande-festa-in-val-formazza-per-linaugurazione-ufficiale-del-bivacco-del-gries>.

Italy and Switzerland. None of its passes towards the cantons of Valais and Ticino are now crossed by roads: Val Formazza has a single access route from the south. Consequently, tourism development in Formazza and the other hamlets cannot expect the arrival of people directly from Switzerland, except for mountaineers who stop in the alpine refuges or stay briefly in the hotels at the bottom of the valley.

This limits the tourist development prospects of the Formazza Valley, but it has preserved its environmental characteristics, reducing road traffic, pollution and the occurrence of over-tourism, which are all frequent in other Alpine locations. At the same time, due precisely to the lack of modern road infrastructure, the medieval route of the Gries Pass is an item of intangible cultural heritage that continues to convey all the charm of its historical past. Its traces are still perceptible in the pavement of the mule track; in the possibility of walking in the footsteps of the ancient caravans and smugglers who trod this path seven centuries ago; and in the structures of the mountain pastures, still in operation, which once provided logistical assistance to caravans and pack mules.

In the municipality of Formazza, where the Walser population is still large enough to have kept the use of its ancient Germanic language in everyday exchanges among its inhabitants, most of the cultural characteristics of the landscape are still preserved. There are numerous buildings, constructed centuries ago in accordance with the Blockbau technique, which are still inhabited, and in the villages scattered along the valley floor there are churches and oratories, often with valuable frescoes from the 16th and 18th centuries, as well as historic buildings, such as the fortified *Steinhaus* of 1569. This was once the residence of the Amman, head of the village, notary and administrator of justice: the caravans stopped here to enable inspection of the goods and to pay duties and tolls. These material cultural assets, alongside others of an intangible nature, such as the distinctive local Walser cuisine, today constitute attractive tourist resources and are key to the development of slow, non-invasive and environmentally friendly forms of visit. Even historical routes such as the Gries Pass road can become a resource: to attract tourists however, it must be suitably exploited, providing information to the public about its history and its past significance in the economy of the valley. In addition, it must be supported by

commemorative events that enable visitors to relive the images and emotions of the past.

In 2002, this process of recovering historical memory led to the enhancement of 12 cultural itineraries of national interest in Switzerland, including one from Lucerne to Domodossola, passing through the Gries Pass, called the *Sbrinz Route*. For about two decades, every summer the itinerary has been retraced by a caravan of mules and goods that also stops in Formazza. The event entails the participation of costumed characters who lead a caravan of mules along the mule tracks of the ancient itinerary, stopping at the mountain pastures, places of worship and villages that once saw consignments of cheese produced in the Sbrinz region being shipped to Italian markets.

This initiative is promoted by the Sbrinz Route Association, which can be contacted via its website¹⁰ and is especially popular among Swiss hikers. It proposes travel tour packages that include accommodation in various facilities along the route and logistical services for transfer to and from the starting and end points of the journey. The aim is to raise awareness (and encourage purchases) of local products such as typical cheeses, to develop knowledge of the territory and to promote slow and sustainable tourism with minimal environmental impact. For the locations along the route, such as the Ossola Walser settlements, this is an opportunity to develop economic activities that can stop widespread mountain depopulation by supporting the local economy. It also strengthens the centuries-old cultural ties between the Walser population of Ossola and those of the Valais and other Swiss regions affected by the medieval colonisation described above.

Today, the twinnings and the events to commemorate a historical period that ended over a century ago involve more and more foreign visitors, especially German-speakers, in the discovery of a geographical area frequented mainly by Italian tourists. Among the attractions of a gastronomic character, the very fine Bettelmatt cheese is produced exclusively in Val Formazza. It is named after a stretch of mountain pasture located on the Italian side of the ancient route and is thus closely linked to the itinerary of the Gries Pass. More and more hikers stop at the mountain pastures of the upper Val Formazza to buy

10. <http://www.sbrinz-route.ch/home.html>. The organisation is based in Stans, in the Canton of Nidwald.

dairy products. They also enjoy listening to the shepherds explaining how life unfolds in a mountain pasture and describing the production phases of the cheese. The special grasses of the pastures give rise to properties and flavours that make Bettelmatt cheese unique and popular with expert gourmets. Another typical agricultural product of the Formazza Valley is a particular potato cultivar that is now protected by product specification. Its characteristics also make it a sought-after product for the preparation of local specialities. It is typically sold during a trade fair in Formazza in October, after the potato harvest. On this occasion, the last tourists of the season come to the valley to buy the product and enjoy the Walser dishes, based on potatoes and cheese, in local restaurants.

Finally, the community today is proposing the rediscovery of the Walser language and culture. The *Titsch* place names are currently being studied in order to recover the indigenous toponymy, which could enhance the brand of the local tourist district (Lucarno 2021).

6. Conclusion

For centuries, the historical itineraries on the Alpine passes saw the intertwining of relationships between peoples that determined the history of Europe. These were difficult, dangerous routes, especially in winter, sometimes impracticable enough to isolate the communities that lived at the highest altitudes of the Alpine valleys. The routes were restricted to those who were physically able to deal with them, and the transport of goods was entrusted to professionals.

The rediscovery and presentation to the public of medieval itineraries across the Alps represents the final frontier of slow and environmentally friendly forms of tourism. In this area, other forms of tourism have hitherto prevailed, including the ski resorts, which have seen over-construction and the creation of infrastructure with a high environmental impact, devastating the natural environment and accelerating the decline of traditional agricultural activities. In order to remedy the damage caused to the ecosystem and the effects of excessive anthropogenic pressure on the territory, these practices require contin-

uous mitigation and forced environmental regeneration, representing a typical example of weak sustainability¹¹.

The historical itineraries walked by tourists are sustainable as they do not use motor vehicles and do not involve energy consumption, polluting emissions or construction of new infrastructure. The growth of this type of tourism leads to increased accommodation and catering facilities, supports the opening of cultural venues and activities (museums, events), creates new jobs and reasons to remain among a population otherwise forced to emigrate and ensures a continuing human presence in the area, indispensable for the maintenance of anthropogenic structures and the natural environment, a task once performed by farmers.

They are also cultural proposals that involve the application and combination of strategies at different scales. The *Sbrinz Route* Association disseminates historical information on the web about the cultural heritage of mountain routes in western Switzerland, arousing the interest of a broad and transnational audience. This generates a desire to go trekking and motivates thousands of people who love the mountains to enjoy a short holiday centred not only on the physical attractions of the territory, but also on its cultural heritage (history and traditions). On a local scale, the villages along the itineraries offer improved hospitality and organise events and meetings between cross-border communities, as well as promoting the sale of agricultural products from the region. This form of synergy between initiatives on different scales and the shared interest in promoting the territory are helping to preserve the cultural characteristics of the Walser people, who would otherwise be destined to lose their ancestral identity and to be assimilated within their respective countries.

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Accessible QNeST tourism routes in the province of Pesaro and Urbino¹

by Laura Annibali, Davide Frulla, Valentina Castronuovo

1. The Province of Pesaro-Urbino: geographical, socio-economic and tourism contexts

Situated in the northern part of the Marche region, the Province of Pesaro-Urbino borders Emilia-Romagna and the Republic of San Marino to the north and is bounded by the Adriatic Sea to the east, the Cesano river to the south and the Apennines to the west (figure 1).

The population of the province, which is spread over 52 municipalities and has an above-average ageing index, is concentrated mainly in the coastal and hilly areas, which are characterised by a particularly varied morphology: although the province contains all the most typical aspects of the Marche landscape – mainly low and sandy coasts, gently rolling hills covered with crops and mountainous areas rich in vegetation – it also has some distinctive features, including the broad uplands between the ridges of the hills and the unusual shapes of the rocks (crags, potholes, gorges and pillars), especially in the Montefeltro area, the result of geological and climatic processes over the millennia. The province's wide band of hills is interrupted at some points by fairly high elevations, such as the limestone Cesane massif (648 metres), which dominates the historic town of Fossombrone from the north, and Mount San Bartolo (555 metres), which is perfectly integrated into the gently rolling landscape that surrounds it.

In much of the province, farming and livestock breeding, together with the industrial agri-food processing sector, are still important sources of income:

1. Our thanks to Mr Davide Frulla, Head of the European Project Office – Municipality of Fano, Lead Partner of the WONDER Project.

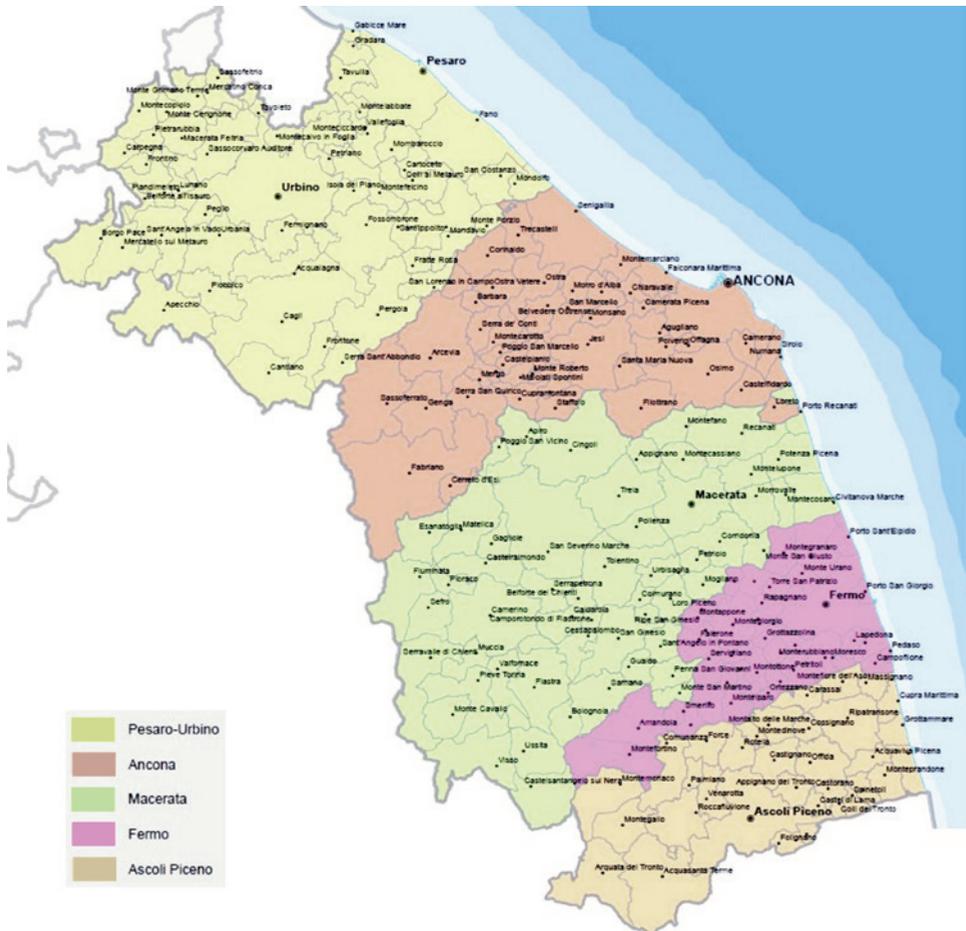


Figure 1. Political map of provinces in the Marche Region. Source: Office for Protection, Management and Regional planning – Regional cartographic and territorial information system.

the production of cereals, fodder, grapes and, to a lesser extent, olives, vegetables and fruit is well developed, from the coast to the inland hills. However, as in most of the region, the secondary and tertiary sectors are the most important sources of income and employment. The furniture sector, for which the province is internationally renowned, is particularly active, as are the electronics, mechanics, shipbuilding, paper, rubber, plastics, clothing and footwear sectors. The Marche region has a gross domestic product of more than 42

billion euros (2019), about 2.4% of the national total, with a model historically characterised by three features (Cdp 2021): a flair for manufacturing with few equals in Italy, as evidenced by the presence of the country's highest proportion of people employed in manufacturing (24.4% in 2018); a well-developed "district" structure, made up of 19 economic districts active in various manufacturing sectors (wood and furniture, textiles and clothing, leather, footwear, mechanics, etc.), which represent 13.5% of Italian economic districts; polycentric production, characterised by a distribution of businesses that is more homogeneous than most other Italian regions. Indeed, about three quarters of the enterprises in the area are distributed almost equally between the provinces of Ancona (28%), Pesaro-Urbino (24%) and Macerata (22%). Ascoli and Fermo account for 12% and 14% (Cdp 2021).

The Marche region plays an important role in the country's tourist economy, thanks above all to a variety of attractions and a more 'hidden' specialisation in the cultural, gastronomic and nature spheres, capable of offering tourists a unique concentration of experiences.

Tourism activities in the region generate an added value of 1.4 billion euros, about 3.5% of regional GDP (Cdp 2021). In addition, the sector has more than 9,000 accommodation businesses (hotels, bars, restaurants, agri-tourism establishments) employing around 45,000 people, or 7.2% of the regional workforce. Although the region gets only 2% of national tourists and 10% of tourists visiting the Central Italy area, the absolute value of arrivals exceeds 10 million, including almost 2 million foreign visitors, with 29% of tourists concentrated in the province of Pesaro-Urbino (2019) (Cdp 2021). Although the covid19 pandemic has negatively affected the province's tourist flows (-38.5% in arrivals and -29% in overnight stays), the drop is less severe than the national average, which for 2020 was -57.6% in arrivals and -52.3% in overnight stays compared to 2019 (figure 2).

Marche was ranked as the second-best region to travel in by the Lonely Planet's Best in Travel 2020 ranking, thanks to its wide – but still not fully exploited – repertoire of tourist attractions (Alfano *et al.* 2022).

The ranking was justified by a diversified and rich range of tourism goods and services concentrated in a single territory, from the artistic and cultural segment, which includes archaeological sites, historic cities and ancient villages, to food and wine and religious sites, as well as the more traditional seaside

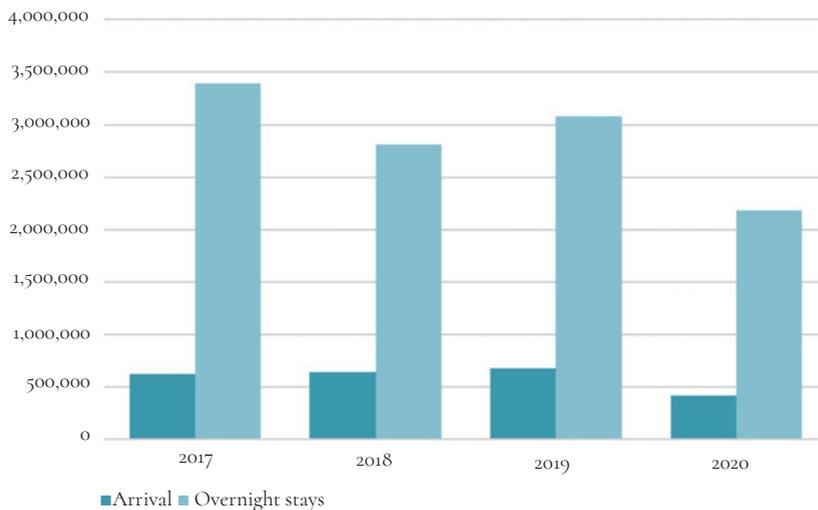


Figure 2. Arrivals and overnight stays 2017-2020 in the Province of Pesaro-Urbino. Source: our presentation based on ISTAT data.

resorts. In this sense, the Marche region was among the first in Italy to recognise the importance of itinerant and experiential tourism, which is able to offer visitors a variety of solutions depending on their location.

In terms of cultural heritage and environmental resources, the area can be likened to an open-air museum, partly already organised and partly yet to be built and promoted. It is a region that boasts stories, characters, biographies and natural and cultural sites. Here we find literati, musicians and artists, from Gioacchino Rossini (the 150th anniversary of his death was celebrated in 2018) to Giovan Battista Pergolesi, from Bramante and Raffaello Sanzio to Giacomo Leopardi, not to mention the various local rulers who were patrons of artists like Piero della Francesca, Titian and Rubens. Marche hosts a network of historic towns and cities, with 70 accessible theatres, castles and fortresses. It also has 500 town squares, restored or undergoing restoration (many of which host historical re-enactments), 90 abbeys and sanctuaries and 200 Romanesque churches. There are many unique landscapes and architectural and historical sites, starting with Urbino, whose old town is a UNESCO heritage site, the birthplace of Raphael and a city which, together with Florence, represents the Italian Renaissance. In the hinterland of Pesaro lies one of the spiritual places

celebrated by Dante Alighieri: the Monastery of Fonte Avellana. A little further to the north, you come across the Furlo Pass, crossed by the ancient Via Flaminia: a small but evocative canyon. The Castle of Gradara, where the story of Paolo and Francesca from Canto V of Dante's *Inferno* is set, is another well-known site. For lovers of religious tourism there is Loreto and the Abbey of Fiastra. In the same area, we find the URBS Salvia Archaeological Park, with remains from the 2nd century BC, the largest archaeological area in the Marche region. There is also an abundance of nature: about 8% of the region, almost 90,000 hectares, lies within parks and protected areas, including two Natural Reserves, four Regional Parks and two National Parks.

2. Accessible QNeST tourism routes. The Pesaro-Urbino Provincial Framework

QNeST promotes the development of an innovative concept of sustainable tourism in the Adriatic-Ionian Region by creating synergies and transnational cooperation networks in order to share and make the most of good practices; to improve transnational awareness of the tourism potential; to disseminate marketing techniques and innovative methods to meet the shifts in tourist demand; to promote bottom-up communication for tourism; to provide support for new initiatives, including a quality brand at the Adriatic-Ionian level.

Particularly interesting has been the development, in connection with the QNeST project, of tools and routes with which to promote accessible tourism in the Adriatic-Ionian area and in the Province of Pesaro-Urbino in particular.

Accessible and sustainable tourism represents an opportunity to protect and enhance the right of every human being to discover and explore, sharing traditions and experiences, but it is also an opportunity for regional development at various levels (employment, landscape, rights), as well as representing a market with undeclared but growing demand.

On a more general level, investment in accessible tourism enables experimentation, eco-sustainable approaches to development and new forms of regional governance. In accordance with the holistic approach that QNeST seeks to promote, policy and system planning combine hybridisation (cooperation between profit and non-profit enterprises, public and private sectors, service

providers and research/training institutions, volunteer work and professionalism, etc.), participation and the protection of individual rights related to wellness and the promotion of well-being and sustainable development.

The identification and promotion of accessible tourism routes require the establishment of a framework of accessibility and quality indicators (table 1).

This involves seeing the region as a system of relational, professional, infrastructural, cultural, organisational and symbolic connections and interactions. Epistemologically speaking, these interactions concern the relationship between individual subjects (an end-user of a service or an operator), groups, organisations and services, at the inter-organisational and systemic levels. The cognitive process is in continuous evolution (social constructivism). This is not only the specialised product of reflections carried out by elite experts, but is the result of collective learning, the participatory construction of content and methods, which calls into question the system of regional players interested in quality.

At this stage, we limited ourselves to drawing up a scheme that considered the entrepreneur's point of view of a hospitality structure (and not, for example, the point of view of a public administrator or a citizen with special needs).

On the basis of the above-described indicators and in collaboration with the main tourism stakeholders of the Province of Pesaro-Urbino (representing coastal and inland areas), the QNeST project saw the organisation of three local training workshops and one local pilot workshop aimed at the identification of "new" accessible tourism routes.

From this collaborative effort, four routes were identified and promoted through the QNeST project platform, app and mapping tools.

3. The Marche QNeST routes

3.1. *Family emotions route: from Fano to Acqualagna – Carpegna*

This is an emotional journey, dedicated to families, enabling them to discover the province's attractions, with their colours, art, nature, stories and delights. These include the Fano Family-friendly destination, introduced and regulated

Table 1. QNeST conceptual Framework for designing accessible tourism routes in the Province of Pesaro-Urbino. Source: Our presentation.

Area	Quality criterion	Examples of key indicators
Local accessibility policies	Political and institutional measures by municipalities, at an inter-municipal, network or regional level	<ul style="list-style-type: none"> - Knowledge of political and regulatory acts concerning tourism and accessibility - Approach to updating and sharing among operators of the structure/service
	Presence of departments and dedicated officials	<ul style="list-style-type: none"> - Knowledge of the key figures at the regional and regional level, from both the political and technical points of view - Capacity for representation and direct communication (lobbying)
	Ability to understand and activate the network model	<ul style="list-style-type: none"> - Existence of horizontal forms of cooperation (between structures and services) and vertical forms of cooperation (between services, structures and stakeholders with different mandates: e.g. hoteliers, voluntary associations, local authorities) - Existence of multi-stakeholder networks aimed at activating integrated services and developing common entrepreneurial and policy strategies - Mapping of bottlenecks that determine the failure to develop cooperation or networks
Regional planning of accessibility in the tourism sector	Presence, quality and capacity for implementation of local and regional strategic plans, intervention programs, dedicated resources, management methods, procedures and issues affecting accessibility	<ul style="list-style-type: none"> - Knowledge of regional and local plans to promote common services and projects for accessible and sustainable tourism - Level of direct participation in the plan - Capacity for implementation of plans and effective transformation into measures and projects
	Existence of specialised services dedicated to accessibility	<ul style="list-style-type: none"> - Description of directly managed accessibility services (infrastructural characteristics, access, hospitality, etc.) - Identification and mapping of critical issues and solutions - Dedicated organisational structure - Dedicated resources - Type of service (private, public, network, hybrid, etc.) - Service description available in at least English
Projects and services activated or in the process of activation	Capacity for connection and integration	<ul style="list-style-type: none"> - Description of services dedicated to accessibility and managed in collaboration with other companies - Mapping of bottlenecks and critical issues - Dedicated organisational structure - Type of service (private, public, network, hybrid, etc.)
	Ability to innovate and co-design production	<ul style="list-style-type: none"> - Level of innovation in services - Ability to respond to real and emerging needs of customers - Resources dedicated to experimental services
Infrastructure of sites supporting accessibility in the tourism sector	Location	<ul style="list-style-type: none"> - Presence of hospitality spaces and structures designed to accommodate people with special needs
	Diet	<ul style="list-style-type: none"> - Preparation of agri-food goods and catering services attentive to health and specific needs (allergies, ethical choices, etc.)
	Additional infrastructure	<ul style="list-style-type: none"> - Presence of tools, technologies and other resources with which to respond to special needs concerning access to wellness services, support and healthcare
	Economic policies of businesses and networks	<ul style="list-style-type: none"> - Presence of modular strategies for access to services considering costs and investments - Connection between players with goods and services whose prices can be modulated (low-cost and high-end)
	Identification of networks, movement flows, use of space and local heritage	<ul style="list-style-type: none"> - Knowledge of dedicated public and private transport - Presence of direct relationships with transport providers - Method of access to public transport by the customer with special needs - Knowledge of local events and local heritage for accessible and sustainable tourist visits - Ability to engage in events and initiatives concerning local heritage (specialist and otherwise)

	Presence of specialised players	<ul style="list-style-type: none"> - Direct contact with communication and promotion agencies - Development of own promotion strategies - Characteristics of the various forms of promotion used
Communication campaigns	Presence of systematic communication campaigns transversely involving several players	<ul style="list-style-type: none"> - Participation in regional, network and area campaigns - Type of campaign - Type of user concerned
	Presence and effectiveness of connections with other players at an international level (promoters, intermediaries, user associations, etc.)	<ul style="list-style-type: none"> - Type of local players and stakeholders with whom to promote multi-stakeholder events at the national and international level - Type of communication - Quality of cooperation and communication / promotion (impact)
Data on flows and dedicated research	Production of public and private analyses and surveys of the sector: continuity, quality, impact on projects	<ul style="list-style-type: none"> - Logging of flows of customers with special needs - Knowledge of research and specialised surveys on the subject carried out at the regional or supra-regional level by universities, trade associations, social enterprises, etc. - Capacity for implementation - Staff refresher courses and sharing
ICT	Use and development of ICT	<ul style="list-style-type: none"> - Use of promotional web platforms - Multilingual portal - Portal accessibility levels and quality (exhaustiveness) of the information produced - Domotic solutions
Large-scale institutional agreements	Presence of synergies among the various stakeholders to promote goods and services	<ul style="list-style-type: none"> - Knowledge of pacts and networks based on bottom-up logic and multiple stakeholders - Participation levels - Common activities
Local and regional stakeholders (institutions, profit and non-profit enterprises)	Identification of levels and methods of integration / cooperation with other players in the accessible hospitality system	<ul style="list-style-type: none"> - Relationship between the hospitality structure and the other stakeholders (common activities, membership of networks, cooperation, etc.) - Identification of integrated activities - Methods and tools for monitoring and evaluating supplementary services and activated projects - Ability to promote cultural initiatives and initiatives in favour of accessibility in the local community
	Existence of a monitoring and evaluation system co-designed by stakeholders	<ul style="list-style-type: none"> - Existence of monitoring and evaluation tools for activities - Types of tool used for monitoring and evaluation of services - Possible presence of tools and processes shared with other players / networks to ensure the quality of services offered to people with special needs
Monitoring and evaluation	Applicability and scalability	<ul style="list-style-type: none"> - Possibility of exporting or sharing services with other operators (dissemination, training, information, planning)
	Relationship between product outcomes and the re-design of policies and services	<ul style="list-style-type: none"> - Existence of comparison tables with trade associations and local and regional institutional points of reference - Production of shared political and strategic materials and choices

within the new Tourism Strategic Plan 2020-2024 recently adopted by the city of Fano.

Since 1991 Fano is the “Città delle bambine e dei bambini” and its “Children’s Committee” been providing suggestions and information for the development of the city, with particular regard to younger visitors.

Fano is the ideal seaside resort, having received numerous awards for its clean sea (EU Blue Flag), safe shallow waters and quiet beach life (Fano has been awarded the Italian Green Flag as a guarantee of its hygiene, cleanliness and safety for children. The award is given by SIPPS – Italian Society of Preventive and Social Paediatrics).

This family/child-friendly approach extends to sustainable mobility, beaches, restaurants, neighbourhoods, culture and outdoor activities, and it is designed first and foremost to meet the needs of children and consequently those of visitors.

Fano continues to plan and improve the range of tourism goods and services that it offers to this specific and valuable target, an approach that has also been adopted at the regional and international levels. The Municipality of Fano is currently the lead local public authority in charge of promoting the Marche Regional network named “Sustainable cities and friends of children and adolescents”. It is also the lead partner of the WONDER project for “Child Friendly Destinations” (co-funded by the ADRION Programme – cod. 1090) (figure 3).

The WONDER project involves 10 cities in the Adriatic-Ionian area in activities to develop and share a new approach to child-friendly tourist destinations. The overall objective is to increase and enlarge the attractiveness and competitiveness of destinations by means of a child-friendly approach. In the city of Fano in particular the WONDER project’s activities, local restaurants, cultural and social organisations, hotels, lifeguards and beach operators have all adopted a common unified protocol, presenting themselves as a unique network investing in high quality targeted at children and their families.

Although the international and national tourist market is already a target of tourism goods and services for families and children, the WONDER project is based not only on the tourist operators’ needs and interests but mainly on the idea of a sustainable city suitable for children and consequently for all. Furthermore, it implies a new approach to customer care and sustainability

for a more integrated, ethical and inclusive way to host tourists and take care of citizens.

To this end, the WONDER project has also been integrated into ADRION Cluster 3 “Towards sustainability in cultural and natural tourism destinations”, and specifically the 3rd sub-thematic cluster named “Innovation through new methodological approaches and models and ADRION branding”. This cluster addresses the many aspects of tourism, such as sustainable water management in coastal areas, common branding, revitalisation of non-tourist areas of minor relevance, promotion of local agri-food sectors, digitalisation of cultural heritage and innovative approaches to tourism management. This thematic cluster focuses on the promotion of innovative models and new methods to boost sustainable tourism in the Adriatic-Ionian area as well as to develop ADRION branding.

3.2. Emotions with no barriers: from Fano to Acqualagna Carpegna

The route is designed for all types of tourism, with a particular focus on physical and sensory stimuli, disabled people and the elderly. In any case, it is designed for those who seek sensations and emotions connected to nature and



Figure 3. WONDER Project. Event in Fano. Source: European Project Office – Municipality of Fano.

the landscape. A series of accessible routes now enables enjoyment of natural sites, popular and peasant traditions, a system of museums and the beaches, making the panorama rich and varied.

Nature routes are also accessible to people with reduced mobility using a “Joelette”, a single-wheeled wheelchair, available thanks to the “Io Includo” Association. Io Includo designs and proposes new tourist itineraries characterised by a focus on accessibility, cultural landscapes, the artistic and human resources of the territory, the involvement of local communities and tourism’s “experiential” aspect, with the aim of involving all the senses in a satisfactory experience. Using the Joelette, everyone can take a walk on Monte Pietralata and admire its breathtaking views. It is possible to stroll along the banks of the Candigliano River and experience the mysterious adventure of the Lorenzo Mannozi-Torini Museum, where everything comes alive. The itinerary through the natural environment and the museum spaces is accessible with a stroller and a wheelchair. A decisive role is also played by the accommodation facilities. There are 25 bathing establishments that have special chairs that allow access to the sea for people with disabilities. Moreover, in the Archaeological Park of Suasa, an ancient settlement dated to the Roman Republican era, the residence of a senatorial family and the Domus Coiedii are accessible and usable for people with physical disabilities. Other projects to further improve this accessibility and extend it to people with visual impairments are also in progress. Likewise, the Alvaro Casagrande Archaeological Museum, located in a historic Renaissance building, is accessible and has a tactile section that will be further expanded and improved. Lastly, in the Municipality of Acqualagna there is an accessible truffle museum and in the Municipality of Sant’Angelo there is an accessible Domus Aurea.

3.3. Experience the territory: from Pesaro to Gabicce Gradara – Carpegna

From the San Bartolo natural park on the Adriatic coast to the famous Gradara Castle and on to the Carpegna peaks, there are villages, palaces, museums and countryside offering excellent food and wine. This itinerary skilfully combines perception and sensory stimuli. Both are intended as gateways to the combined discovery of nature, the landscape and emotions. This is also an itinerary for everyone, which extends from Pesaro to San Bartolo and Gradara.

It may be seen as an interdisciplinary route incorporating acoustic physics and music, where children work together to create original instruments. Chunks of wood, canes, blades of grass, stones and recycled material, if properly used, can create amazing wind and percussion instruments, giving life to a multitude of sounds. The lush hills of Pesaro's hinterland are the backdrop to an experience that is unusual today, to be enjoyed together with one's children.

Bunches of red grapes from the "Conventino di Monteciccardo" organic winery await our little grape-pickers, who are involved in the whole production chain, from the harvest to press, where the grapes are crushed with the feet. The children can also taste the fresh must, enabling them to benefit from the fruits of their work. While the children continue their activities independently, their parents can enjoy an in-depth visit, with tasting of excellent oils and fine wines.

Gradara Castle hosts various tourist services for families such as the Magic Castle, itinerant fairy tales and workshops with local artisans aimed at children and families. There is also medieval and Renaissance-themed entertainment, including formal and / or popular dances, concerts of ancient music, knightly duels, poetry readings and scenes from plays – many with performers and artists in historical costume, accompanying and enhancing every occasion.

The municipality of Pesaro offers many services for families with children: the "White Midnight", the new Water Park on the town beach and "Stradomenica" at the Miralfiore park. On the "BimbiPesaro" Facebook page, one can find many experiences and activities dedicated to families. Parco San Bartolo also organises events for families, such as trekking, picnics, trips to the castle, walks in medieval villages, workshops for children surrounded by nature and listening to birdsong.

3.4. Gira-Sole – together in the Territory: from Pesaro to Gabicce Gradara – Carpegna

Accessibility means planning routes for everyone: this is the common thread of this itinerary, where associations, public administrations, nature reserves and tourism operators come together to create an itinerary with restaurants that have menus suitable for people with reading difficulties, museums that are accessible to people with sensory disabilities, nature trails with *joellettes* for peo-

ple with physical disabilities and urban parks made accessible for everyone. In this itinerary, the various museums, natural areas and landscapes that characterise the area of Pesaro, San Bartolo and Gradara are juxtaposed with services for the blind in Braille and visits to vineyards for people in wheelchairs, in addition to accessible and multisensory events with enhanced communication.

At the Municipality of Pesaro it is possible to visit the Rossini House Museum, which has information in Braille, the Rossini Theatre, the Ducal Palace and the “Domus Aurea”. The hills of San Bartolo and its vineyards can also be visited by people with physical disabilities thanks to the Joelette. This service makes it possible to follow paths that are not accessible to normal wheelchairs and confirms the Park’s commitment to barrier-free tourism. In the same area, a swing with a platform has been installed and a special wheelchair trail is available.

Like most medieval villages, Gradara presents serious access issues, especially for people with motor disabilities. However, during the year, for example on the occasion of the International Day of Persons with Disabilities (December 3), accessible and multisensory events and itineraries are offered. Furthermore, the “Siloso” Social Shop in Gradara offers the products of local social cooperatives made by youths affected by physical and mental disabilities.

4. Conclusions

The QNeST partnership is based on the cooperation of various types of organisation active in several Adriatic regions. The QNeST partnership is also supported by associated organisations with specific skills, regional representation and close connections with target groups interested in the project’s outcomes (Czernek 2013). Specifically, in the Marche region, the cooperation of the Labirinto Social Cooperative (IT) and the Northern Marche Integrated Social Economy District has enabled the development of pre-existing accessible experiences and the networking of stakeholders. The intangible and tangible heritage and ongoing projects along the proposed routes have oriented the range of regional tourism goods and services towards the sustainable use of the area covered by the QNeST project (figure 4).

The presentation of the itineraries in the Marche region and more precisely in the province of Pesaro-Urbino that are being promoted within the QNeST

Project also aims to contribute to discussion of the strategic importance of the destination intended as a regional system able to meet the complex needs of the contemporary tourist in an era of profound transformations. The four sustainable and accessible routes are therefore a mirror of resilience to the changes affecting the national tourism market. The existing activities enable a representation in qualitative terms of new tourist segments that converge in the destinations of interest, increasing the tourist potential of the entire region. In this regard, there is both opportunity and a need for coordinated regional governance (i.e. Destination Management Organisations DMOs), which would oversee the network of internal and external relations in order to make these complex tourism products more dynamic.

It is in this perspective that the new 2021-2023 regional plan (Regione Marche 2021) should be seen. Launched with a view to full subsidiarity, a common and shared strategy, it is based on strong and responsible cooperation, leading to the identification of an organisational model that enhances the skills of all and contributes to the development of a new culture of tourism enterprise.

The pursuit of these goals, through the development of a vigorous reform process that also reviews roles and the methods of intervention, is the neces-



Figure 4. *The QNeST Networks in the Marche Region. Source: our presentation.*

sary prerequisite for the concrete creation of a modern and aggregated tourism system for the region, and specifically for the creation of a tourist destination in the Marche Region that is able to compete with other more prestigious locations.

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Puglia region

Landscape, nature and cultural routes

by Anna Trono

1. The Region

The Puglia region forms the most eastern part of the Italian mainland, jutting out between the Adriatic and the Ionian seas towards Albania and Greece, thus forming a “bridge” between Europe and the countries of the eastern Mediterranean. The territory of the region is geographically attractive to human settlement, combining the hilly areas (Gargano, Subappennino Dauno, Murgia Alta and the sub-region of the Serre) with extensive and rich plains (Tavoliere, Premurgia and Tavoliere Salentino), which account for 53.7 per cent of the regional territory (see figure 1). The region has an area of 19,345 km² (7,469 square miles) and a population of about 4 million. Puglia is *economically dynamic and rich in history and culture*. It is a region with significant historical, architectural and cultural heritage and a variety of natural resources including a significant number of parks and protected areas, which constitute an integrated system of great importance for the conservation of the fauna of the Mediterranean basin, particularly birds. Among the most important are the *Gargano* and *Alta Murgia* National Parks and the “Dune Costiere [coastal dunes] da Torre Canne e Torre S. Leonardo” Regional Natural Park in the Valle d’Itria.

People are attracted to the region by its rich cultural heritage, its beautiful rural landscape dotted with dry stone walls and monuments, and the thriving historic centres of its towns, together with the strength of its traditions, the industriousness of its inhabitants and its multiform economy. The economic fabric of Puglia is characterised by heavy industry in the city of Taranto on the Ionian Sea (which has had a dramatic social, economic

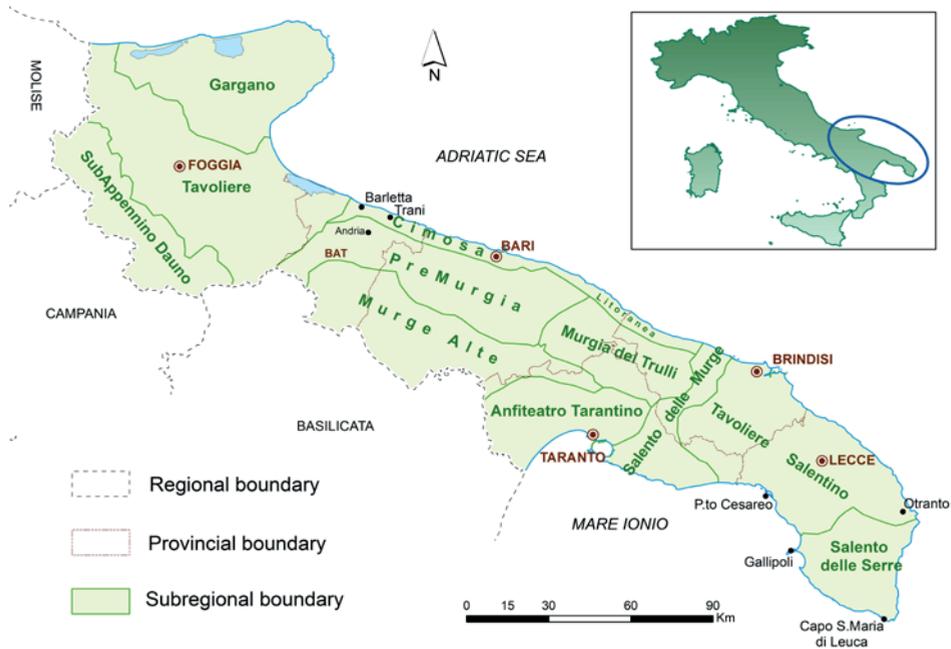


Figure 1. *The Puglia region. Source: our presentation.*

and environmental impact) and a number of small-to-medium-sized companies (SMEs). Many of the latter operate in the food-processing sector, often associated with specialised agriculture, with an optimum combination of resources and opportunities for the region. Tourism is a growing sector, producing double the added value of the agriculture and food processing sectors.

The 2001 reform of Italian Constitutional Law increased multi-level governance, conferring on local councils all the administrative functions that are not otherwise reserved to higher levels of government. Regional administrations are now responsible for policy making in the areas of scientific and technological research and support for innovation in industrial sectors, although they must continue to observe fundamental principles established by national law.

2. Cultural heritage items in the pilot areas (Gargano, Murgia dei Trulli with Valle d'Itria and the Northern Salento)

The landscapes, shaped over time by the “living peoples” that inhabited and continue to inhabit the Puglia region, constitute primary heritage (environmental, regional, urban, social and cultural) and the main element attesting to the identity of the places chosen as pilot areas (figure 2).

The Gargano peninsula is one of the most attractive coastal regions in southern Italy, due to several factors including its imposing monumental terraced hillsides and the exceptional scenic beauty of the steep southern slopes, typically associated with almonds, olives and small vineyards on the lower terraces.

The Gargano has many parks and protected areas, both terrestrial and marine, mainly found along its 784 kilometres of coastline and around the Tremiti Islands. Given the status of a marine reserve (encompassing the coastal area of the islands of San Domino, San Nicola, Capraia, Cretaccio and Pianosa) by

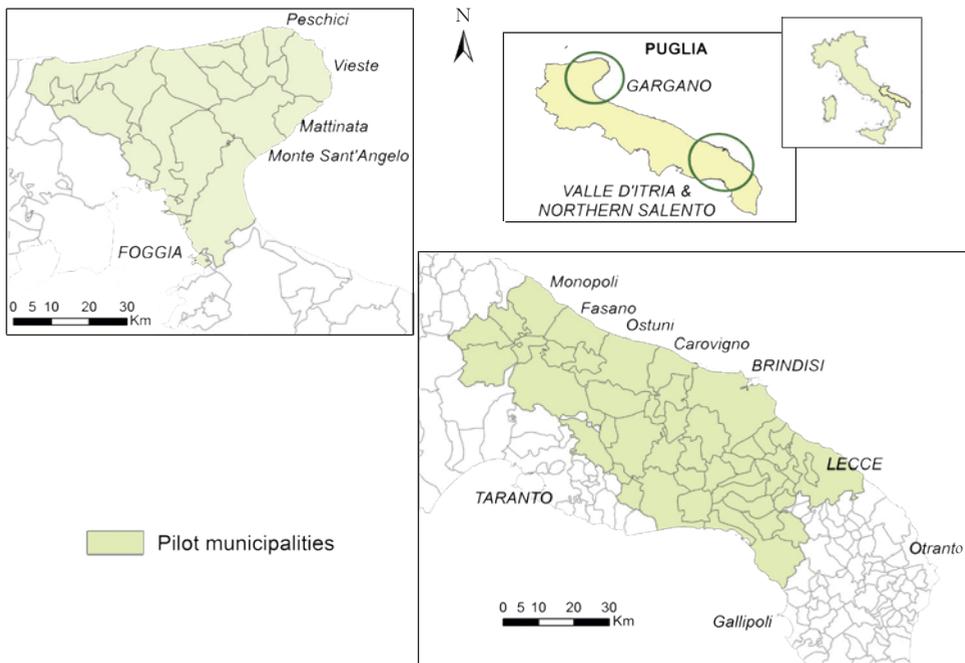


Figure 2. Pilot areas. Source: our presentation.

the Ministerial Decree of 14 July 1989, the islands are one of the most beautiful natural habitats in the whole of the Mediterranean. In 1996, the islands became part of the Gargano National Park, which includes various areas of interest such as the coastal areas with beaches and marine caves, the wetlands such as the lakes of Varano and Lesina and the marshes of Sfinale and Fratarolo. In-land there are the extensive beech forests of the Umbra Natural Forest Reserve – a protected area recognised in 2017 by UNESCO as world natural heritage belonging to the “Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe”.

Together with Castel del Monte and Alberobello, the Sanctuary of Monte Sant’Angelo in the Gargano is one of three UNESCO cultural heritage sites in Puglia.

The area of the Valle d’Itria (in the Murgia dei Trulli subregion) in the northern Salento is one of the most famous and best-loved parts of Puglia (figure 3).

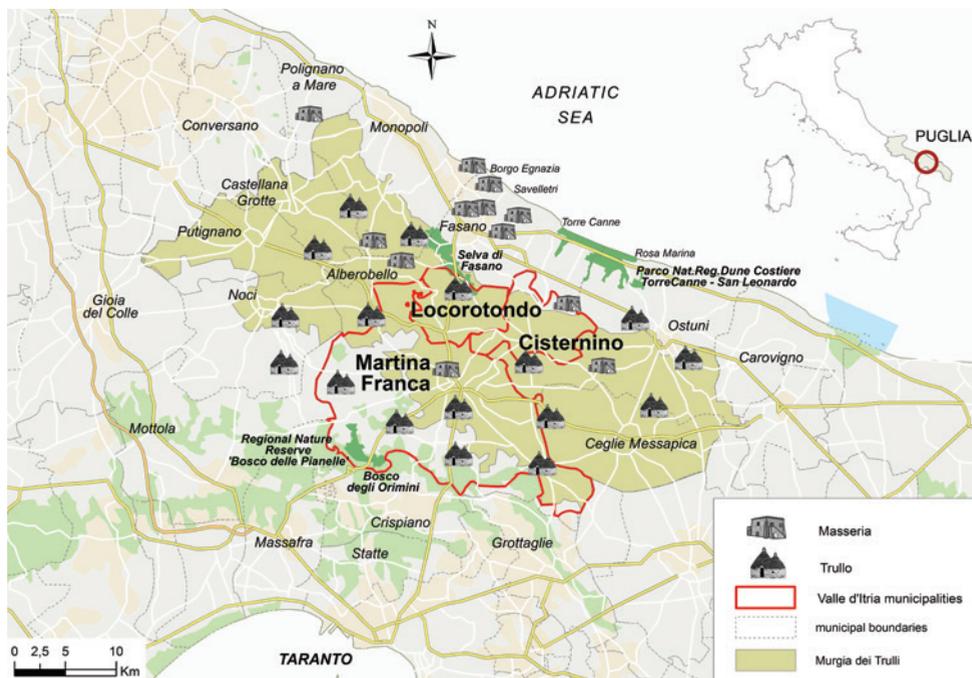


Figure 3. The Valle d’Itria in the Murgia dei Trulli subregion. Source: our presentation.

Near the Valle d'Itria is the “Dune costiere da Torre Canne a Torre San Leonardo” Regional Natural Park, a protected natural area located in the municipalities of Ostuni and Fasano, characterised by beautiful beaches and sand dunes covered in Mediterranean maquis vegetation. Adjacent to the park is the Torre Guaceto Nature Reserve, an area of interest which includes wetlands and a marine protected area of great beauty.

Continuing southwards, in the province of Lecce is the Le Cesine State Nature Reserve, a protected area managed by the WWF characterised by marshes and a range of habitats including dunes, drainage channels, woods and Mediterranean maquis. Of great importance in both natural and cultural terms is the marine protected area of Porto Cesareo.

The history of this project pilot area is marked by a succession of cultures and civilisations, visible in its cathedrals and castles, the exuberant baroque of the northern Salento (especially the city of Lecce) and its more sober variant in Martina Franca.

It is also evident in the distinctive conical rural dwellings known as “trulli”, the rock-cut chambers painted with exquisite frescoes, the fortified farmhouses (*masserie*), mansions, churches, cathedrals and chapels, as well as the considerable range of food-and-wine products. Together, these assets potentially constitute the strategic elements of an “organised regional system”. This entails public and private operators and local communities acting to improve the competitiveness of the regional tourism sector by means of a series of tools for sharing, cooperation and communication, as well as innovation and creativity. What is striking is the area’s many cultural stratifications and its ability to conserve them, absorb them and reconfigure them. The distinctive features of a large part of this pilot area are rurality and reciprocal cultural influence: they include tangible assets in terms of architecture, cultural landscapes and settlement patterns, but they can also be seen in the intangible dimension of a slow pace of life and regular celebrations. The area’s “material culture”, just like its traditions, rites, practices and customs, clearly shows the complexity of the relations which, in the course of history, have linked people, production processes, environments, ideas and artefacts.

Indeed, handicraft is a significant economic resource in the pilot areas. Ceramics, papier-mâché, embroidery, wrought iron, glass and mosaics are just some of the craft skills but they represent another factor of attraction for the

region, which combines the qualities of its “regional capital” with the hospitality of its family businesses, which represent a large percentage of the tourism companies operating in the area.

3. Local Mediterranean food products in pilot areas

Agriculture is a very important economic sector in the pilot areas. Indeed, the latter are famous for their vineyards and olive groves, which, along with wheat, form a Mediterranean triad that has been a distinctive feature of agriculture in the region since ancient times and now benefits from innovation and the use of branding.

The geographical and environmental continuity of the *Murgia dei Trulli* with the *Valle d'Itria* and the *Northern Salento* corresponds to a cultural, social and economic continuum that encompasses the unique features of the inland areas and a coastal area rich in ancient architectural elements, crafts and food production. Here, viticulture is becoming more and more specialised and has been awarded certificates of origin such as the “Denominazione di Origine Controllata” (DOC) and “Indicazione Geografica Tipica” (IGT).

This pilot area is now beginning to shake off its reputation as a producer of wines used only for blending, with a wealth of wineries to discover. Each one is different, with its own history, and many have gained international recognition, including the producers of “Primitivo di Manduria”, “Doc-Locorotondo and Martina” and “Negroamaro” (with a Park for Negroamaro and the two Doc wines based on this variety, *Squinzano and Salice Salentino*). The vineyards in the pilot area share the land with extensive olive groves. Indeed, the area is also a key player in the production of extra-virgin olive oil certified by Protected designations of origin (*DOP Colline di Brindisi, DOP Terre Tarantine and DOP Terra d'Otranto*), all characterised by specific forms of cultivation, natural beauty and landscape features.

The cultural and landscape aspects of the centuries-old olive groves and vineyards of the pilot areas have been safeguarded by creating extensive oases of protected olive grove landscapes. Oil mills, vineyards, wineries and farms (both individual and associated) are becoming an important resource for the development of tourism in this pilot area. Wine-tasting tours and festivals are an important expression of gastronomic tourism and are highly popular with

tourists. Together with meals in restaurants, festivals and events dedicated to food specialities, such as *The Festa del Vino Novello* in Leverano, represent the most frequent target of tourist spending. There is an increase in specialised events, which serve a variety of purposes, including the promotion of tourism, the enhancement of a place's image and the celebration of group and place identity. The most extraordinary and famous events in this pilot area are: the Festival della Valle d'Itria (music), the Focara di Sant'Antonio Abate (Bonfire) in Novoli and the Carnevale di Putignano, one of the oldest carnivals in the world, with its floats bearing spectacular papier-mâché figures.

Numerous events also take place in the Gargano. Of the many concerts, shows and food fairs, very popular among tourists is the "Carpino Folk Festival", a cultural event based on the documentation of the oral memory of stories, songs and dances, which express the local and regional intangible folk and musical heritage, "contaminated" with other the sounds of other cultures.

4. Tourism

Tourism in Puglia began to take off in the late 1970s, driven by the growth of families staying in holiday homes by the sea. This period saw the start of mass tourism, responsible for high tourist intensity dominated by bathing tourism, mainly composed of Italians. In the absence of regulation, the result was a wave of speculative construction with grave environmental consequences and infrastructural transformations, especially in the towns along the coasts of the Salento and the Gargano.

In 2016, Puglia was in the top ten Italian regions in terms of tourist numbers, seeing increases in arrivals (+ 39.1%) and presences (+ 88.7%). Although tourist interest in the region fell dramatically from 2019 to 2020 (-34.4%) due to the Covid-19 pandemic, the sector remains strong, as shown in 2021 by the references to Puglia in international publications such as National Geographic, Lonely Planet and the New York Times, which consider it to be one of the most important tourist destinations in the world due to its cultural riches and optimal management of natural resources.

Tourism is particularly lively in the two project pilot areas, which in 2019 accounted for 64.7% of tourist presences, with high tourist density (>510) and

more than 2,700,000 overnight stays, 36.5% of which were by foreign visitors (figure 4).

The pandemic was responsible for the collapse of the sector in 2019-2020, with presences down by 35.2% (41% in the Salento/Murgia dei Trulli-Valle d'Itria and 21.7% in the Gargano), causing great damage to the towns of interest to international tourism in the Gargano and Valle d'Itria (figure 5). Since then, the project pilot areas have largely recovered, although they are still weak in terms of the presence of foreigners.

The warmth of the local population and above all the beauty of Puglia's coastline continue to attract visitors, as shown by the number of presences and arrivals seen in 2020, with a preference for coastal districts, evident from the indices of tourist intensity and pressure (figures 6-9).

While tourists are mainly drawn to the bathing and coastal resorts of the Gargano (Rodi Garganico, Peschici and Vieste) and the northern Salento (Carovigno, Porto Cesareo), it is also true that the city of Lecce attracts many visitors thanks to the beauty of its historic buildings and its rich cultural heritage, which is also a feature of many towns in the Murgia dei Trulli and Valle d'Itria. The latter is characterised by distinctive landscape, unique and evocative, with alternating valleys, hills and karst formations, dotted with white *masseria* farmhouses and dry-stone structures with conical roofs (*trulli*). In 2019 the area accounted for 20% of Puglia's tourists and it remains the focus of strong interest, as shown by the index of tourist density of 2020 (figure 10).

Specifically, high tourist density is seen in Alberobello, a UNESCO world heritage site since 1996, followed by Monopoli, Fasano and Carovigno, which are also characterised by a high percentage of foreigners.

Now a quality tourism destination, the Murgia dei Trulli and Valle d'Itria are characterised by a medium-to-high market position, with a preference for the coastal districts. Their strong point is sustainable tourism, respectful of the environment, making the most of their cultural, artistic, historic and environmental attractions. They are seeking to develop a culture of hospitality and to acquire the skills necessary for the evolution of the market. The Murgia dei Trulli and Valle d'Itria are characterised by a focus on quality, developing new forms of tourism (food-and-wine, creative, religious and experiential, exemplified by the Via Francigena walking route) and the use of spaces in such a way as to avoid speculation and comply with the rules of sustainability.

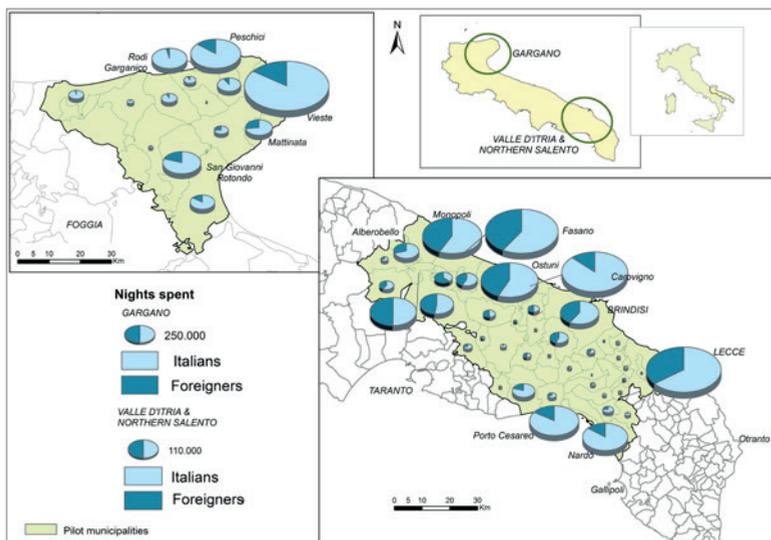


Figure 4. Nights spent at tourist accommodation establishments in the year 2019. Source: our presentation based on data from Istat.

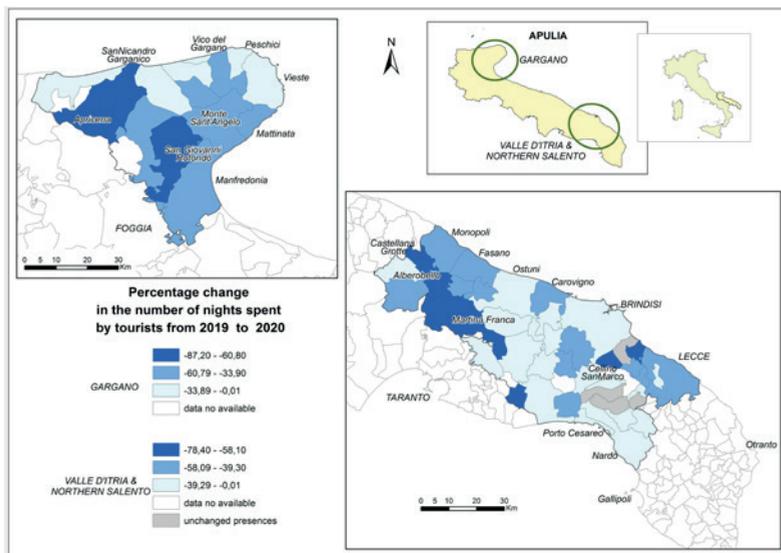


Figure 5. Variation (%) in Nights Spent in QNeST areas (2019-2020). Source: our presentation based on data from Istat.

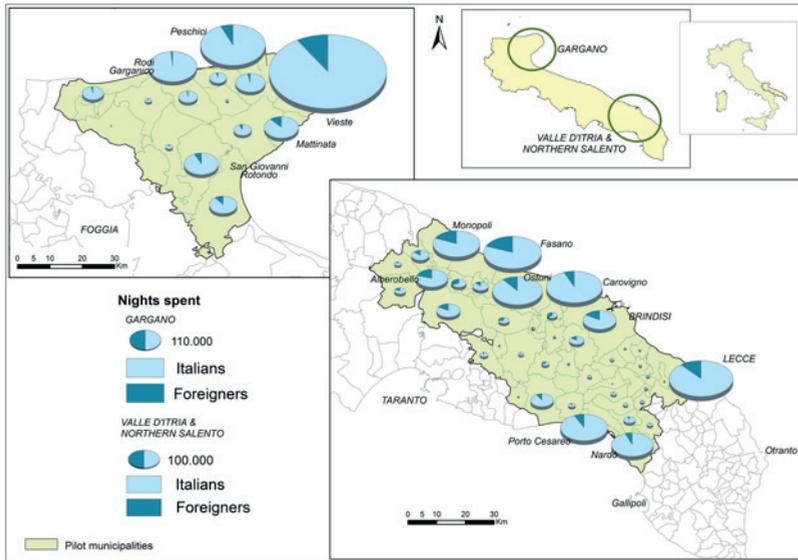


Figure 6. Nights spent at tourist accommodation establishments in pilot areas in 2020. Source: our presentation based on data from Istat.

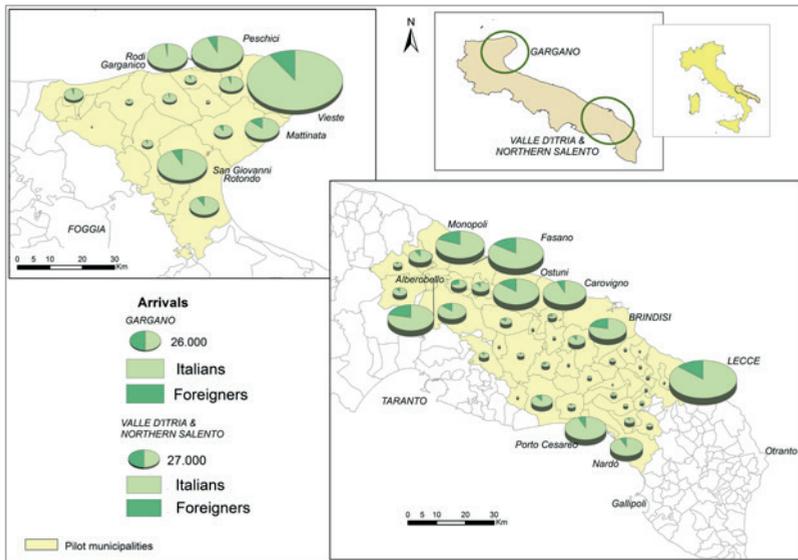


Figure 7. Arrivals in pilot areas in 2020. Source: our presentation based on data from Istat.

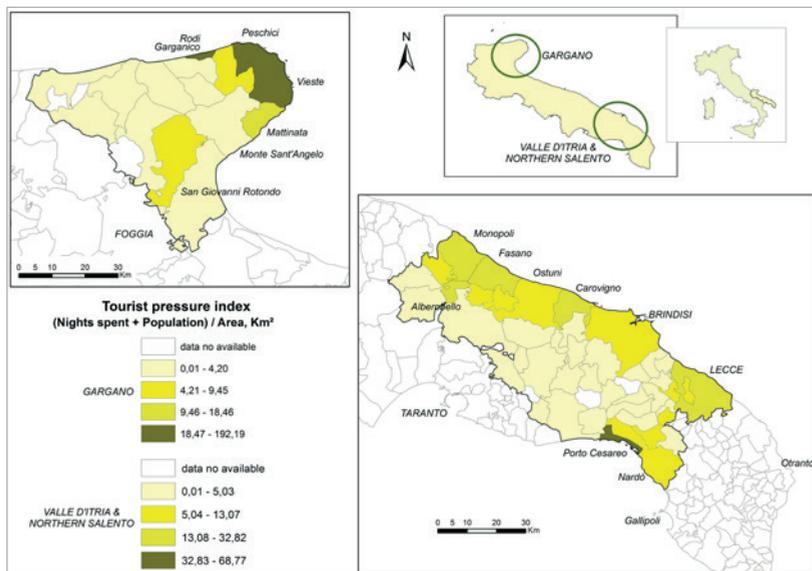


Figure 8. Tourist pressure index. Source: our presentation based on data from Istat.

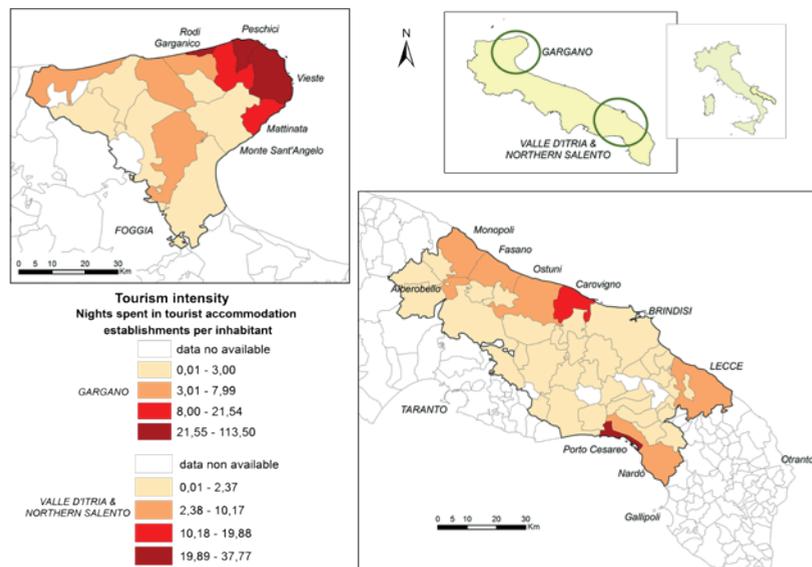


Figure 9. Index of tourist intensity. Source: our presentation based on data from Istat.

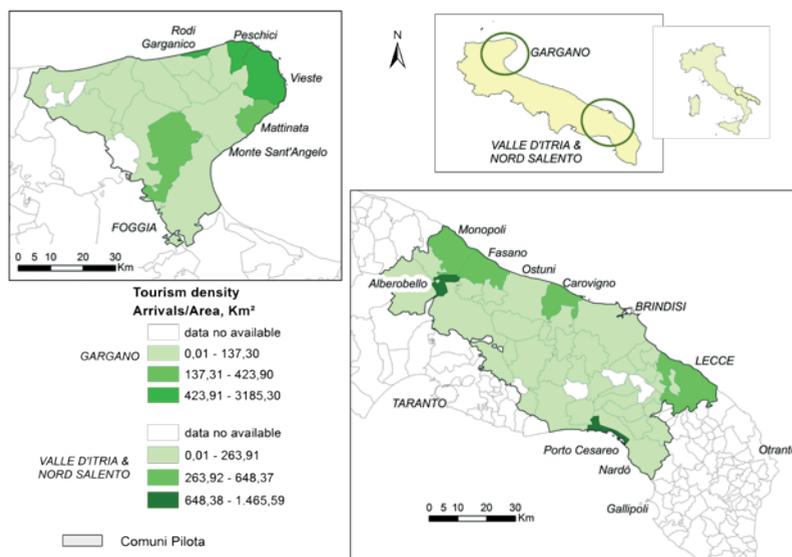


Figure 10. *Tourism density*. Source: our presentation based on data from Istat.

The sandy beaches are the chosen destination for numerous tourists, who mostly gravitate to the two large bathing resorts of Savellettri and Torre Canne (in the Municipality of Fasano), leaving other stretches of coastline largely deserted. Fasano has the highest number of luxury hotels – with all the services required by a demanding clientèle – in Puglia. Of the sixteen 5-star superior structures in Puglia, five are in the municipal territory of Fasano, which has the highest tourist density and average length of stay. Particularly renowned are the Hotel Borgo Egnazia and the Antica Masseria San Domenico, situated in Savellettri di Fasano.

In the Northern Salento, apart from the city of Lecce, the municipalities with the highest tourist density, highest percentage of foreign tourists and longest average stay are those along the coast, where tourist flows are highly seasonal and international tourism accounts for only a small percentage.

This is a form of mass tourism with a strong environmental impact, characterised by an ever greater assault on the beaches and a general neglect of the environment and the quality of services. This type of tourism follows the traditional industrial model of the three Ss – Sun Sea and Sand.

In the pilot areas, Porto Cesareo (Northern Salento) and Vieste and Peschici (Gargano) are the most popular destinations and the worst examples of overcrowding and uncontrolled tourism. Tourism to these resorts has surged over the past few years and residents complain that it is making life intolerable (figures 9 and 10).

Despite the uniformity of building styles, which tends to obscure everything with its banality, ugliness and lack of nuance, the coastline of the northern Salento retains considerable environmental and cultural value, with its beaches, marine parks and protected areas.

The same is true of the Gargano subregion, the home of sustainable tourism thanks to its two famous UNESCO sites. i.e. the Foresta Umbra with its majestic beeches and avifauna and Monte Sant'Angelo, an ancient pilgrimage destination.

The growth of accommodation structures in the inland rural parts of the pilot areas points however to a reversal of the trend, marked by greater attention to forms of tourism focused on the quality of both demand and supply, and to the use of spaces for tourism purposes that excludes speculative construction while fulfilling the criteria of sustainability.

Of all the areas, the Valle d'Itria shows the possibility of investing in a tourism in which quality is the key element of its material and immaterial cultural heritage, which, along with hotel and catering services characterised by medium-to-high market positioning, favours de-seasonalisation. Probably linked to this successful experience is Puglia's Regional Strategic Plan for Tourism, considering that the range of goods and services on offer need to be improved by investing in local tourist products: culture, sport and well-being, food-and-wine and MICE (meetings, incentives, congresses, events). Internationalisation (not just in promotion and training) and the quality of hospitality are also strategic objectives, given the need to guarantee open structures and tourist attractions, based on cooperation between public institutions and private operators.

5. The Routes

Travelling through the pilot areas it is possible to discover the “pillars” of local cultural heritage. Visitors can follow nature trails and walks in addition to the cultural routes of the QNeST project. Interesting natural and cultural itin-

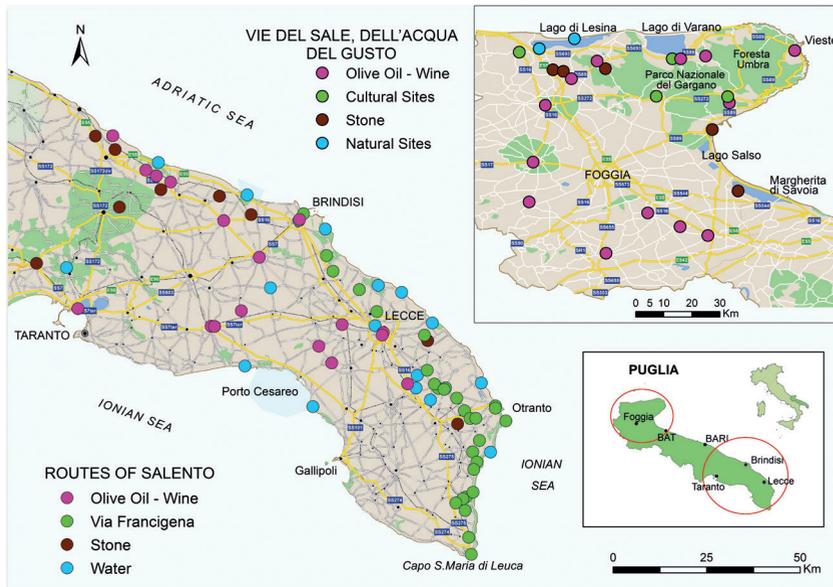


Figure 11. *The QNeST routes. Source: our presentation.*

eraries are being developed in these areas. Using existing routes, whole or in part, they include linear, grid-based and spiral permutations, often extending towards the cape at the end of the Salento peninsula (figure 11).

There are also historic communication routes and their associated heritage items, which reflect long-standing relationships and reciprocal influences among diverse cultural groups. They are linked to a clearly defined thematic area, bringing together cultural heritage resources located in a single point and/or area or aligned along an axis, in a systemic interaction of cultural, economic and social elements.

6. The “Vie del sale, dell’acqua e del gusto” in the Gargano

The route entitled “Vie del sale, dell’ acqua e del gusto” (“Salt, Water and Flavour”) includes the area around the lagoons and inland parts of the Gargano peninsula and begins in the coastal part of the Tavoliere plain (figure 12).



Figure 12. *The Salt, Water and Flavour routes in the Gargano.* Source: our presentation.

It is a “slow path” with a focus on nature and food-and-wine products, important resources for quality tourism. It crosses an area famous for the natural beauty of the Lésina and Varano lagoons and the extraordinary beech forests of the Foresta Umbra in the Gargano National Park. The area is also rich in extraordinary landscapes, with indented and rocky coasts, high cliffs and sandy beaches. Archaeological sites and historical, natural, ethnographic and palaeontological museums highlight the region’s cultural complexity, while the local gastronomy further enriches the experience with traditional local dishes made with ingredients from land and sea, accompanied by good local wine, such as the renowned Moscato and Nero di Troia. The habitats of the two lagoons are magnificent.

Lésina lagoon, a treasure trove of biodiversity, is renowned for its commercial fishing (mainly eels) and the numerous bird species that nest there, such

as gulls, flamingos, kingfishers and marsh harriers. Of interest are the Natural History Museum and the Ethnographic Museum, which preserves local traditions, customs and beliefs. A few kilometres from Lake Lésina on the banks of the River Fortore stands the splendid Abbey of Santa Maria di Ripalta, built by the Cistercians in the 13th century and one of the oldest places of worship in the Gargano, a destination for religious itineraries and pilgrimages.

A short distance away along the northern coast of the Gargano is the coastal lake of Varano, the largest in southern Italy, known for its natural attractions and the beautiful villages of Cagnano Varano, Carpino and Ischitella. A boat trip enables visitors to admire the extraordinary landscape, rich in centuries-old olive trees, caves and natural springs. On the eastern shore of the lake stands the small church of SS. Annunziata, which houses a beautiful 14th-century crucifix, a symbol of the devotion of the area and neighbouring towns. Hiking and horse-riding itineraries are a good way to enjoy the varied and fascinating aspects of the dense beech forest of the Foresta Umbra, and local farms offer the chance to taste lake oysters, oil and cheese. Two inland villages are of medieval origin: San Nicandro Garganico and Apricena. The former, dating back to the Norman era, is known for its old town; the latter for the presence of archaeological sites of inestimable value. These include the excavations in the Pirro Nord district, which have unearthed fossils dating back to the Upper Villafranchian period and stone artefacts, evidence of the earliest human presence in Europe. These two karst and clay areas have given rise to intense quarrying of stone and world-famous marbles.

Vines and olives dominate cultivation in the Gargano, distinguishing it from the Tavoliere plain, traditionally characterised by arable crops, cereals and vegetables. Well-known producers of DOP extra virgin olive oil operate in the Carpino plain and the municipalities of Cagnano Varano, San Nicandro Garganico, Vieste and Monte Sant'Angelo. World-famous fine wines are produced in Orta Nova, Lucera, Cerignola, Ascoli Satriano, Stornara, San Severo and Apricena. The short supply chain vineyards are characterised by the red wine varieties of Merlot, Syrah, Montepulciano, Petit Verdou and the indigenous DOP Nero di Troia, while the whites include Bombino, Trebbiano, Moscato and Falanghina.

The cultural attractions include the UNESCO site of the Sanctuary of San Michele Arcangelo in Monte Sant'Angelo and the Sanctuary of Santa Maria



Figure 13. Sanctuary of San Pio in San Giovanni Rotondo. Source: photo by Anna Trono.

delle Grazie (also known as the Sanctuary of San Pio) in San Giovanni Rotondo, a monument to the pilgrimages of yesterday and today, recently enriched by a big new sanctuary designed by Renzo Piano (figure 13).

7. The Oil Olive and Wine Route

Puglia is the land of the vine and the olive tree, which, together with wheat, represent agriculture's distinctive triptych. This route aims to showcase the tangible and intangible cultural heritage linked to the two products and their manufacturing processes, which have marked time and space in this part of the world (figure 14). Knowledge that has been handed down over the centuries is now revived in a modern key in today's wine and oil, excellent products that

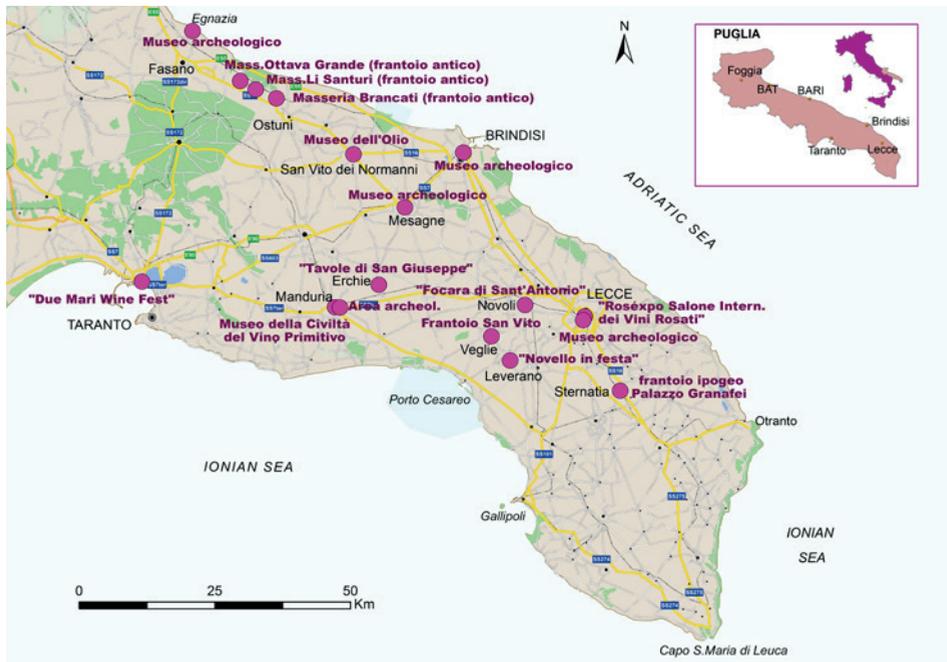


Figure 14. *The Olive Oil and Wine Route*. Source: our presentation.

identify and distinguish the territory. It is difficult to say exactly when the two crops were introduced. It is true that olive groves and vineyards have been a feature of the agricultural landscape of Puglia since ancient times, giving rise to large-scale production and trade as early as the Roman period, when the areas around Brindisi and Lecce played a significant role.

Olive-growing grew surprisingly well in the Middle Ages, starting in the 12th century; in the 14th and 15th centuries, its impact on Puglia was such that it was one of the main sectors of the regional economy; its oil was sold throughout the Mediterranean basin. In general, the olive groves stretched uninterrupted from Otranto to Brindisi, while in the area further south they were found in pockets known as *chiusurelle*. In the ports of Brindisi, Gallipoli and San Cataldo (Lecce), a flourishing oil trade developed, with Venetian, Genoese, Florentine, Neapolitan, Greek and Albanian merchants acting as commercial intermediaries.



Figure 15. *The olive trees in pilot area. Source: photo by Anna Trono.*

In the 18th century, foreign travellers who visited this land and wrote down their impressions of local customs and agriculture were struck by the incredible extent of the olive groves and the imposing size of the trees. At the end of the 19th century, the Salento was the leading olive-growing area in Puglia, accounting for more than half of the total area under olives. This supremacy, however, was not matched by an optimal system for the processing and transformation of the olives, which took place in complex structures (*trappeti*), often underground, almost all of which were excavated in the rock or carved out of it and covered by barrel vaults. The cave-style *trappeti* were a response to the atavistic conviction that the longer the olives were kept warm, the more oil they produced. This however was a mediocre oil, known as *lampante* and used for industrial purposes (wool, soap, lighting). Everything, from the vats with the large millstones to the “Calabrian” or “Genoese” presses, the decantation wells and the large storage tanks, was arranged to form an assembly line, operated

by *trappitari* and the animals that lived in symbiosis in these dark caverns. Notable in the pilot area are the ancient oil mills of the Masserie Ottava Grande (Fasano), Brancasi and Li Santuri (Ostuni), and those located in the old towns of Veglie (in Largo San Vito) and Sternatia (the underground chamber in Palazzo Granafei).

The lack of entrepreneurship, the inadequacy of the merchant class and the persistence of feudal structures led to a crisis in olive-growing and the abandonment of the underground oil mills, many of which have now been restored and made accessible.

Until a few years ago, and before the destruction of the Salento's olive-growing heritage by the *Xylella fastidiosa* bacterium, the dominant cultivars were Ogliarola Salentina and Cellina di Nardò. The former was the more delicate variety, less resistant to adverse conditions and disease, which had found its ideal environment in the southern Salento, where it was cultivated on rocky soil, with a relatively constant crop and a high yield in oil. The hardier Cellina di Nardò was grown on deep soils (often poorly drained); it sometimes grew to a great size and produced a large quantity of fruit, albeit with an average oil yield.

Vines were widely grown in ancient Greek colonies and among the Messapians, the Salento's indigenous inhabitants, as demonstrated for example by palaeobotanical studies. Paintings on ceramic vessels now kept in the museums of Mesagne, Brindisi, Egnazia, Lecce and the necropolis of Manduria depict scenes of banquets, orgiastic dances and Bacchanalia, while coins found in Brindisi and Ugento bear symbols of wine. In the following centuries, the vine gradually occupied new spaces, sometimes in association with the olive tree, but it was only at the end of the 19th century that it began to play a more significant role due to the increased demand for wines used for blending, with high alcohol content and intense colour. Such wines were purchased by luxury wine-makers based in Italy's northern regions, who were seeking to adapt to the crisis in French wine production caused by phylloxera. As wine-growing intensified, vineyards became more specialised and adopted new cultivation techniques (espalier and head-training), while modern wineries were built. Whereas in the past, production was mainly for self-consumption, over the course of time it has become more and more commercially oriented. The expansion of markets, the availability of processing facilities and the increased

value of specific grapes following the granting of DOC (Denominazione di Origine Controllata) and IGT (Indicazione Geografica Tipica) status have intensified the trend towards specialisation. The evolution of viticulture has seen the introduction of new varieties (such as Sangiovese, Montepulciano, Trebbiano and Pinot Grigio) and the rediscovery of existing ones (white and black Malvasia), although the contribution of the indigenous Salento grape varieties Negroamaro and Primitivo has been fundamental for the production of top-quality red and rosé wines. The progress of the wine industry has given rise to a wide assortment of wine products, able to satisfy various consumer preferences, and to excellent product quality, suitable for a medium-to-high market segment.

Within the focus areas, oenology has strengthened the ties with the local areas and their cultural characteristics. This is showcased for example in the Museum of Primitivo Wine Civilization in Manduria, housed in the local Producers' Winery, where everyday farming and wine-making processes represent shared heritage and a set of values for the future. Themed promotional events have also helped to promote the local wine product and extol its qualities.

8. The Route of the Via Francigena

Following the ancient Roman route of the Via Trajana Calabria, the Via Francigena Salentina runs along the eastern side of the southern end of Puglia, from Brindisi to Otranto. The route, which crosses local devotional routes, continues to Santa Maria di Leuca, an important pilgrimage destination in the modern era, and winds along the gentle slopes of the Serre Salentine.

The first stop on the route is Brindisi, a city of Messapian origin that played an important role in Roman times. The city offers valuable evidence of the presence of Knightly Orders in the Church of Santa Maria del Casale, the site of the trial of the Templars in the Kingdom of Naples in 1310, and in the circular Temple of San Giovanni al Sepolcro, an interesting reproduction of the *Anastasis* of the Holy Sepulchre in Jerusalem, owned by the Order of the Jerusalemites.

From Brindisi to Lecce, the landscape is of considerable natural and cultural interest: lush vineyards, which make this land famous for the production



Figure 16. *The route of the Via Francigena. Source: The route was drawn by Fabio Mitrotti.*

of DOC wines, alternate with large areas of pasture and centuries-old olive groves mixed with oaks and carobs, a legacy of the ancient forest of Lecce. After passing the Bosco di Tramazzone wood and the archaeological site of Valesio in farmland near Torchiariolo, before reaching Lecce it is worth visiting two places of worship much frequented by medieval pilgrims: the Italo-Greek abbey of Santa Maria di Cerrate and the church of Santa Maria d'Aurio (both dating to the 12th century).

In addition to the “graceful follies” of Baroque art, Lecce contains Messapi-an and Roman remains. The soft local stone has been carved for centuries by skilled local stonemasons and today Lecce is considered one of Italy’s most beautiful and elegant cities.

Leaving Lecce and the nearby fortified village of Acaya, with its famous 16th-century castle, the route crosses one of the most interesting elements of the Salento’s cultural and tourism panorama: Grecia Salentina, with its rich natural and cultural heritage (linguistic, musical, archaeological, architectural and artistic). The remains of the ancient Calimera woods with the small church of San Vito, the 600-metre-long cart tracks between Martano and Carpigna-



Figure 17. *Santa Maria di Cerrate*. Source: photo by Loretta Martella.

no Salentino, the medieval farmhouse of Apigliano (now an archaeological park) and the numerous places of worship and resting places for pilgrims (such as the Cistercian Monastery, the Sanctuary of the Madonna della Grotta and the crypt of Santa Cristina in Carpignano Salentino) represent only a small part of the local heritage. Turning towards Otranto and following the ancient pilgrims' route, one comes across the fortified farmstead of Torcito, in the countryside of Cannole, the masseria Anfiano, built after the abandonment of the medieval farmhouse of the same name, and the Sanctuary of the Madonna di Montevergine (Palmariggi), still today the destination of continuous pilgrimages. Crossing the Parco Megalitico (Megalithic Park) with its dolmens and menhirs (such as the Stabile dolmen and the San Paolo menhir), leaving behind the Quattromacine farm and the "Trappitello del Duca" underground oil mill, the route crosses the Idro Valley and arrives in Otranto, the city of the Holy Martyrs. A melting pot of cultures and ethnic groups, Otranto encapsulates the intertwining of East and West, with the Byzantine church of San Pietro, the ruins of the monastery of San Nicola di Casole (a cultural centre with its own *schola scriptoria*) and the cathedral with its floor mosaic (1163-1165 AD)

depicting the tree of life, emanating from which are biblical, mythological, historical and literary episodes. The remains of 800 saints, beheaded following the siege of 1480, are preserved here, while on the site of their martyrdom, the Hill of Minerva, stands the Sanctuary of Santa Maria dei Martiri. The beauty of Otranto's coastline is revealed in all its splendour at the foot of the Punta Palascìa lighthouse, at the easternmost point of Italy. The route outlined so far largely follows the Via Trajana consular road, and is based on the journey undertaken in 333 AD by the Anonymous Pilgrim of Bordeaux, with some deviations and variations imposed by the current pattern of infrastructure and settlement. From Otranto to Santa Maria di Leuca, the path takes on a new centrality in geographical terms, following a sub-coastal route that seems to bind land and sea. From Otranto, the route travels through a hinterland pulsating with culture and traditions that are still alive, ending at the basilica and sanctuary of Santa Maria de Finibus Terrae in Leuca. This is the site of the legendary arrival in Italy of the Apostle Peter, an event that transformed the primitive temple of the goddess Minerva into a Christian church.

9. The Stone Route

The ancient and profound relationship between human beings and the land has unfolded in the various ways in which stone has been processed. Using blocks hewn from quarries or boulders taken directly from the soil, it speaks to us from remote epochs of human activities conducted over time and across space that have given rise to specific features of the landscape, including rock-cut settlements and dry-stone structures (figure 18). The aim of this route is to bring out the active role of stone, thoroughly humanised by human effort, which carries within itself historical, social and aesthetic values, awareness of which today is greater than in the past due to the increased sensitivity towards environmental, landscape and cultural issues.

Rock-cut settlements have taken on considerable dimensions in Puglia. With a range of characteristics depending on the geological properties, located mostly in the ravines known as *lame* (karst formations generated by intense hydraulic erosion) or on steep rocky slopes, this form of settlement is one of the most fascinating attestations of medieval cultural heritage. The iconographic decoration of the



Figure 18. *The Stone Route*. Source: our presentation.

places of worship, with its two-dimensional images typical of Byzantine painting, is remarkable. The settlements on the eastern side of the pilot area, excavated in the so-called “lame” (Parco delle Gravine), are more limited in size and layout.

In the pilot area of the Murgia dei Trulli and Valle d'Itria, the rock-cut settlements are small and of an agricultural nature, centred on a place of worship. In Fasano, along the provincial road leading to Savellettri, the Rock-Cut Park of Lama d'Antico, San Giovanni and San Lorenzo in the Sarzano district hosts one of the most significant examples, complete with churches and a rock village. The sanctuary of San Biagio di Ostuni, located along the road known as the Strada dei Colli, is also interesting and has a very unusual appearance: built in the 12th century, the interior is fashioned from a cavity, while the façade is entirely built against the rock face. A crypt dedicated to the Armenian saint is also found in a complex rock settlement in San Vito dei Normanni, close to the Via Trajana, on the road to Brindisi, near the Masseria Jannuzzo, in the centre of a series of caves excavated along the course of the Royal Canal. The

iconography on the walls and vault is remarkable. In the Carovigno area, the Sanctuary of Sant'Angelo de Luco, now known as Santa Maria di Belvedere di Carovigno, is built over two caves formerly used for the cult of the Virgin Mary. Entering the province of Lecce, in the present-day town of Carpignano Salentino is the crypt of Santa Cristina, with the most ancient Byzantine frescoes in a rock-cut settlement in the Salento. The iconography dates to 959 AD and is accompanied by long inscriptions that also indicate the crypt's funerary function.

The practical nature of stone is also reflected in the elaborate dry-stone forms. Trulli and trulli-like constructions dot the rural areas of the Murgia and the Salento, while endless labyrinths of dry-stone walls, with their various and complex textures, criss-cross the landscape. The relationship between human beings and the environment is formalised in the "landscape of stone", more rural heritage than "minor art", with its strict and archaic rules and its social and economic dynamics. Famous throughout the world, the most significant showcase of the trulli of the southern Murgia is the town of Alberobello, but they are also found in Fasano, Locorotondo, Martina Franca, Cisternino, Ceglie Messapica and throughout the Valle d'Itria. In the Salento on the other hand, there are trulliform buildings in the shape of truncated cones or truncated pyramids, which were traditionally used as temporary or seasonal shelters. Known as *furnieddhu* or *caseddhu*, they can have one or more levels, be small or monumental, and are found singly or in groups. The greatest concentrations of these shelters are found in the municipalities of Surbo, Vernole and Melendugno, as well as those of Grecìa Salento, and they include monumental structures such as the "paiaroni" of Acaya and Acquarica di Lecce. In contrast, they are much rarer in the plain of Copertino, Leverano, Salice Salentino, Veglie, Carmiano and Monteroni, an area traditionally planted with vines and dominated by the large "masseria" estates.

Puglia is the only Italian region apart from Sardinia characterised by the presence of megaliths. The Salento has the highest density of these monuments, carved from *pietra leccese* stone. They consist of long monolithic prisms (menhirs), of doubtful function and epoch, and megalithic structures (dolmens) composed of two or more vertical stone slabs supporting an architrave made up of one or more horizontal slabs, whose dimensions vary from place to place (figure 19). They are believed to have been used for funerary and burial rites.

A characteristic and widespread feature is the dry-stone walls, high and low, single and double curtain and of varying thickness, depending on the type of property they are used to delimit. They include the walls known as “paralupi”, high with a row of jutting stones near the top, which served to protect crops and livestock from wild animals. Built using techniques handed down from generation to generation, they are the fruit of expertise developed by peasant farmers, the unwitting exponents of a fully-fledged art, also recognised by UNESCO as world heritage.

10. The Water Route

The aim of the “Water Paths” is to rediscover the rich and varied cultural and natural heritage made up of parks, wetlands, protected natural and marine areas,



Figure 19. Dolmen Stabile o *Quattromacine* (Giuggianello). Source: photo by Gianni Carluccio.

historical and archaeological sites, ancient and recent baths and spas, stretches of the Aqedotto Pugliese cycle paths and areas linked to fishing (figure 20).

The route includes a large number of *parks and wetlands* that were set up to conserve and protect areas of particular natural and landscape value. The Parco Regionale delle Dune Costiere da Torre Canne a Torre San Leonardo (Coastal Dunes Regional Park) is located in the municipalities of Fasano and Ostuni. The park hosts halophilous vegetation, dunes covered in Mediterranean maquis, wetlands in the areas behind the dunes and the Grande, Piccolo and Morello rivers, a resting place for migratory aquatic birds. In addition, there are large expanses of centuries-old olive groves, with numerous examples of monumental olive trees.

Dominated by the imposing Aragonese tower, *the Torre Guaceto Marine Protected Area*, which is part of the Blue Parks Network, has special features linked to sustainable fishing, the conservation and public use of the area and eco-friendly mobility.

Along the coast north of Lecce lie the “Bosco e Paludi di Rauccio” Regional Nature Park and the Acquatina Basin. In the Vernole area there is the Le Cesine State Nature Reserve, an extraordinary and complex mosaic of habi-



Figure 20. *The Water Route*. Source: our presentation.

tats with an exceptional “biodiversity system”. To the north of Otranto, the coastline is characterised by the presence of two lakes, Alimini Grande and Alimini Piccolo, connected by a channel. In Alimini Grande, fed by the sea and freshwater springs, the salinity is similar to that of the sea; Alimini Piccolo, also known as Fontanelle, is replenished by the groundwater, which in turn originates from a series of springs inland.

Ancient salt pans are also a valuable form of heritage. In Brindisi, between Capo di Torre Cavallo and Punta della Contessa, lies the “Saline e Stagni di Punta della Contessa” Regional Natural Park.

There is much historical evidence linked to water, used for everyday public and private needs and for its therapeutic properties. An example is the so-called “pozzelle”, excavated and lined with dry-stone walls arranged in concentric circles. They were used as cisterns for collecting rainwater, needed for domestic and agricultural purposes in an area with little fresh water. They are very common in the Salento, particularly in the traditionally Hellenophone area of Grecia Salentina.

Public use of water is also indicated by the Roman-era baths. Such a structure, accessible by means of temporary walkways, can be visited at the Egnatia Archaeological Park. Egnatia, located on the Via Trajana, was an important port and trading centre in ancient times, with origins dating back to the 15th century BC. Indeed, it is precisely at the staging posts along the ancient road that other interesting complexes can be found, such as those of Valesio in the territory of Torchiarolo and Malvindi in Mesagne. The late Middle Ages and the Renaissance saw the installation of “*ninfei*” (fountains) in the city of Lecce, some of which have now disappeared. These private baths located in noble residences, sometimes open to public use, consisted of tanks or basins hollowed out of the rock, typically in “green” contexts, and offered a cool refuge during the hot summer days. Examples include the *ninfeo* of the Torre di Belloluogo, owned by Countess Maria d’Enghien, and the *Ninfeo delle Fate*, which reflects the cultural climate of the Renaissance. By the beginning of the 16th century, the therapeutic properties of the sulphurous waters of Santa Cesarea Terme, an established spa and renowned seaside resort to the south of Otranto, also famous for its beautiful landscapes and eclectic architecture, were already widely known.

The “Water Paths” can also be travelled in connection with the cycle paths of the Aquedotto Pugliese (completed in 1939), which run through 110 kilo-

metres of sun-drenched countryside, vineyards and olive groves between the Valle d'Itria and the Salento. From Alberobello, the cycle route crosses the Murgia dei Trulli and the Salento, reaching the monumental steps of Capo Santa Maria di Leuca, the end point of the aqueduct and site of the Sanctuary of the Madonna di finibus terrae.

11. Conclusions

This chapter has presented the regional characteristics and assets of the pilot areas in Puglia, which offer rich cultural and natural heritage, the main foundation of long-lasting tourist attraction.

The pilot areas have succeeded in seizing the opportunities arising from their great regional potential. Local entrepreneurs and development agencies have launched numerous initiatives and projects to provide high-level cultural services and activities that enable tourists to enjoy their stay and produce sustainable development. These initiatives often benefit from EU structural funds, following a logic of integration between the various municipalities. These projects concern the preservation and promotion of parks and protected areas, rural development and the creation of an integrated system to promote environmental and historical-cultural heritage, activating a process of cooperation between institutions and the region. An important contribution to rural and coastal development has been made by the Local Action Groups (LAGs) (e.g. those of the Valle d'Itria, Terra dei Messapi SRL, Terre del Primitivo and Valle della Cupa in the northern Salento). As part of the LEADER Community Initiative Programme, they have invested in culture, the environment and the products of the land and sea, seeking to combine the protection of the landscape with local traditions. *Integration, sustainability and networking* are the three key words of a strategy based on an economy strongly characterised by agriculture and crafts, which has implemented decisive initiatives to promote rural food-and-wine tourism, as well as policies aimed at sustainable tourism in the pilot areas.

Among the planning tools adopted in the Valle d'Itria, the "Murgia dei Trulli from the sea to the Valle d'Itria" Environmental and Cultural System (SAC) deserves special mention. Of interest for the future are the tourism promotion strategies envisaged by the Cultural Strategic Plans adopted for the promotion of

cultural heritage. These include *PiiiL Cultura in Puglia* (which envisages measures in the field of cultural policies, with the cooperation of businesses, institutions, citizens, artists and operators) and the Region's Tourism Strategic Plan, *Puglia 365 2016-2025*, with the participation of local authorities, MIBACT, employers' associations, trade unions, stakeholders, local opinion leaders, universities and Puglia Local Action Groups (LAGs). By means of shared and participatory tourism policies, this strategy will enable the pilot areas and the whole of Puglia to promote the product, optimise hospitality, improve training and enhance services and infrastructure, "weaving a public/private relationship that will finally create a system for the tourism and cultural sector in Puglia".

The creation of local tourism systems (such as *Valle d'Itria*, *Puglia Imperiale*, *Sistema Turistico Salento*) will also provide an important opportunity to create a complex but compact regional system that is competitive in terms of tourism and the economy.

Many initiatives have been launched spontaneously by both private and public figures, aimed at the recovery of natural and cultural heritage and the appropriate use of the rural areas involved. This process has presumably been accelerated by the provision of environmental and cultural goods and services by some players, clearly modifying the scale of social values in some communities in terms of the perceived "systemic" quality and the "social-collective" character of certain assets.

The project pilot areas aim to promote a positive reading of the territory, giving local communities an opportunity to appreciate the beauty of their localities more fully and to further improve them. Observing the behaviour of those who live and work in the areas under consideration, it can be seen that the traditional systems for managing the areas to be protected have become obsolete, and are being replaced by the activation of new tools for sustainable heritage management. However, proper governance of places can only take place by involving, informing and encouraging the local communities, tourists and operators who are directly and indirectly affected. The adoption of participation has triggered a virtuous circle within the pilot areas that will ensure the long-term preservation and proper use of regional resources. This process has also brought about a new way of looking at these resources, raising interest in their protection and management and laying the foundations for a sustainable regional policy, greater awareness and a reversal of previous economic,

environmental and cultural trends. The growth of information and communication technologies (ICT) has influenced and helped tourism management in various ways. New approaches based on online communication have seen exponential development, including websites for tourism service providers, social media platforms, blogs, mobile platforms and many others.

The routes illustrated in this chapter (which lie in these areas but in some cases extend beyond them into other areas of the Salento) enable the tourist to get to know the region, visiting farmhouses, underground olive presses and old aquaculture facilities while admiring centuries-old olive trees and marvellous vineyards, tasting local wines and food.

The creation and promotion of these routes, potentially sponsored by enterprises that have acquired the QNeST brand as a guarantee of the quality of goods and services on offer, will enable the “evolved” and “refined” cultural tourist, who likes to observe, discover and experiment, to visit less well-known areas and to purchase non-standardised products, blending in with – and to some small degree almost becoming one of – the inhabitants of the destination. However, they will also activate a system of quality sustainable tourism on a broader regional scale, linking up with the other four itineraries of the Adriatic-Ionian Region proposed by the QNeST project. They represent fertile ground for the application and extension of the historical and cultural values of the area, in a process of lasting sustainable development and in line with the fundamental principles of a united Europe and the European Union’s EUSAIR strategy.

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The Experience of Montenegro

Indigenous Cultural Routes as a new Approach To Sustainable Tourism

by Ljiljana Belada, Andjela Gajevic, Valentina Castronuovo

1. Introduction

The objective of the QNeST Project – Quality Network for Sustainable Tourism – funded under the Adriatic-Ionian Programme Interreg V-B Transnational 2014-2020, Axis II SO 2.1 and co-funded by ERFD and IPA II – is to promote for tourism purposes the local cultural heritage (nature, art, handicraft, food, traditions, rites, practices and customs) of the Adriatic-Ionian Region and enhance their accessibility.

Among the results of this project is the construction of an Adriatic-Ionian network of operators active in the promotion of sustainable tourism and the creation of a “quality brand” which aims to fulfil the tourism development potential of the cultural, historical and natural heritage of underdeveloped geographical areas. Moreover, the project seeks to promote the traditional products of specific geographical areas, emphasising traditional food products such as fish, wine and olive oil, and to create production chains of small producers from specific areas.

The Directorate for the Development of Small and Medium Sized Enterprises (DDSME), a QNeST Project Partner, was established with the aim of helping SMEs in Montenegro, improving their financial and economic sustainability and strengthening their competitiveness. Special attention is paid to the promotion of ecologically active initiatives, developing available services and creating and connecting a quality network of operators that are directly or indirectly connected with the tourism sector. As part of the Project, the DDSME contributed to the overall objectives via support for tourism-oriented

SMEs in order to increase their performance and that of the entire country in the long term.

To this end, the Directorate took part in the group of experts appointed to provide tools for the assignment of the Quality Brand and in the sustainable tourism cross-training activities addressed to the project partners, in order to create an “incubator of knowledge and awareness of sustainable tourism” (WPT₁).

The goal of the QNeST quality brand was to stimulate an active positive attitude towards the promotion of sustainable development and cultural heritage, especially in terms of accessibility. Furthermore, the project concerned the capitalisation and implementation of existing cultural routes in the project area and the formulation of new itineraries (WPT₃), allowing, at the same time, the creation of local and interregional itineraries. In terms of Local Routes, Montenegro has identified 4 itineraries linked to the “Capital Cetinje and Lake Skadar” cluster. Moreover, it has identified 3 Trans-regional Itineraries that include several elements linked to various project drivers such as Wine; Olive Oil; Travellers, Merchants and Pilgrims; Dry Stone; and Water. These are characterised by quality members, points of interest, local initiatives and traditional events. Based on a methodological formulation, in terms of sustainability, the tourist routes are included in the transnational QNeST network and have become part of the brand.

After an initial examination of the geographical and tourism characteristics of the Montenegrin regions affected by the QNeST project, the chapter focuses on the proposed itineraries defined in the project phase and on their replicability and sustainability, focusing on the strengths and weaknesses of common planning.

2. The “Capital Cetinje and Lake Skadar” cluster: cultural and natural heritage and traditional crafts

Montenegro is a relatively new tourist destination and its attractiveness is based on small scattered locations sensitive to aggressive forms of tourism.

According to data from the Statistical Office of Montenegro, from 2015 to 2019, arrivals grew by around 54.4% and overnight stays by 30.7%, demon-

strating a growth in attention towards the destination. In line with the global trend, these flows fell sharply in 2020 compared to 2019, with 83.2% fewer arrivals and 83.1% fewer overnight stays (figure 1).

Despite the exceptional diversity of tourism goods and services on offer in the coastal region, the potential development of alternative forms of tourism in the country is to be found in its natural and cultural attractions (European Commission 2016). Due to its climate, its natural and cultural resources and its geographical position, Montenegro is an ideal area for the implementation of the concept of sustainable development. Forest and vegetation cover 59.9% of the territory. Currently, 7.7% of its territory (almost 14,000 square metres) is protected, among which there are five national parks (Ministry of Ecology, Spatial Planning and Urban Development 2008).

To date, the strategic use of the tourism potential of cultural and natural heritage is estimated to account for around 75% of the total (European Commission 2016). The National Montenegrin Tourism Development Strategy has divided the territory into six tourist clusters including “Capital Cetinje and Lake Skadar”, of interest to the transnational QNeST project. The national strategic document emphasises that the natural and cultural assets of these

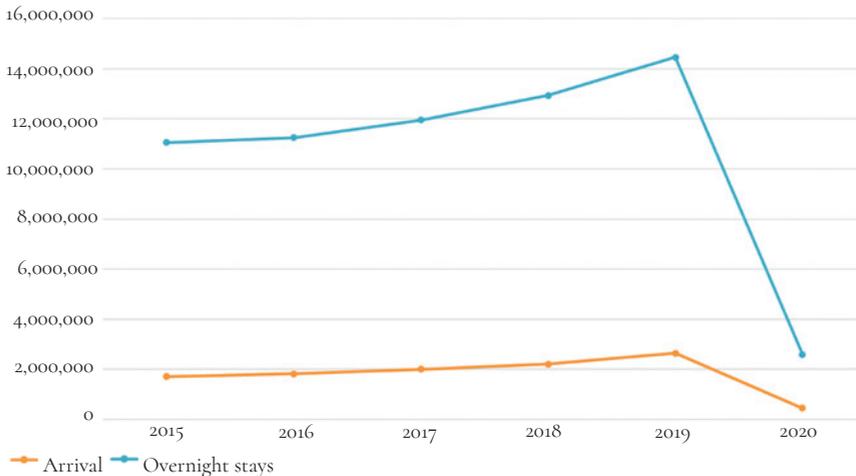


Figure 1. Arrivals and overnight stays in Montenegro (2015-2020). Source: our presentation based on data from the Statistical Office of Montenegro.

protected areas will contribute to the economic development of local communities via increased revenues and new employment opportunities.

The fourth cluster is famous for its history and extraordinary natural beauty hidden in the two national parks of “Lovćen” and “Lake Skadar” and in the old royal capital Cetinje (Ministry of Ecology, Spatial Planning and Urban Development 2008).

The government is committed to making Cetinje and the Lake Skadar region an example of best practices for sustainable tourism, based on protection and care for nature and the preservation of local identity. This implies the promotion of ecological activities (e.g. solar boat trips, hiking & biking) and the improvement of management plans for the national parks, especially spatial plans and location studies (Ministry of Ecology, Spatial Planning and Urban Development 2008). Finally, the strategy envisages the involvement and training of the local population in tourist product development and marketing.

Lake Skadar is the largest lake in the Balkan Peninsula with an area of 354 km² to 505.8 km², and a depth of 8 to 12 metres.

About two thirds of the lake belongs to Montenegro and the rest to Albania. The lake was declared a national park in 1983, while in 1989 it received IBA status (Area of international importance for birds). In 1995 the lake was added to the Ramsar list of Wetlands of International Importance. The territory of Lake Skadar covers three municipalities: Podgorica, Bar and Cetinje.

The Old Royal Capital Cetinje is situated in a karst plain (Cetinje field) of about 7km², with an average height above sea level of 671m. It is 12 km (7 mi) from the Adriatic Sea and 15 km (9 mi) from Lake Skadar. In 1952, Lovćen National Park near Cetinje was proclaimed. It is famous for the village of Njeguši with the historical houses of the Montenegrin Petrović dynasty and, on Jezerski vrh, the grandiose mausoleum dedicated to the poet and Bishop Petar II Petrović Njegoš.

A special aspect of the culture and traditions of the area is storytelling by the local inhabitants. The diverse cultural and historical heritage, including archaeological sites, forts, medieval monasteries, churches and traditional rural architecture, indicate that the Lake Skadar region was an important historical, economic and cultural centre (Vujović *et al.* 2019). Of the many archaeological sites on the shores of the lake, the current excavations are focused on sites from the Illyrian-Hellenistic and Roman periods, in addition to research into medieval sacred architecture.

The most important and representative cultural and historical assets of the National Park are the monasteries from the 14th and 15th centuries (the period of the Balšić and Crnojević dynasties) and the fortification complexes from the period of Ottoman domination.

Specific folk architecture, including old rural buildings, fishermen's huts and residential buildings, stone bridges and watermills, characterise a cultural landscape of special architectural value.

Cetinje is the old royal capital, the historical and cultural centre of the country. In a small town, extraordinary sites can be visited: old embassies, museums, national libraries, the printing house of Crnojevići (1492-1496) and four great Christian relics: the Filerimos (Mother of God Icon), the reliquary of St. Peter of Cetinje, St. John the Baptist's hand and part of the True Cross of Christ. The city is also famous for the nation's greatest political leader, philosopher and poet, Petar II Petrović Njegoš.

Traditional craft products are not adequately represented and have not been transferred to the younger generations due to the problem of depopulation. Still, there is small-scale traditional carpentry, basket weaving, knitting of peasant costumes, embroidery, facilities for serving food, production of natural soaps, etc. (Vujović *et al* 2019).

The local population of the area is mostly active in farming (beekeeping, livestock breeding, medicinal herbs, wine and brandy production, olives and olive oil, etc.), fishing and tourism. While some households produce only for their own needs, for others agriculture is their primary source of income.

Beekeeping has a long and extensive tradition in the country, with about 2,533 holdings involved in beekeeping and 50,024 honey bee colonies, or 20 honey bee colonies per household on average. Total annual honey production ranges from 300 to 500 tons, but only a small share of this is marketed through retailers, as it is mostly sold through green markets or via so-called doorstep selling.

Farmers from the area of Cetinje produce high-quality honey and provide a diversified range of goods and services for guests, such as the Honey Trails & Tales. During apiary visits, hosts serve honey with homemade bread.

The Lake Skadar region is famous for wine routes, bringing tourists to local wine producers, who, along with traditional agricultural products (mostly homemade cheese, ham and olives), offer vineyard visits, wine tasting and

shopping opportunities in an informal atmosphere (Vujović *et al.* 2019). The tourists are especially interested in wines made from autochthonous grape varieties (Vranac, Krstac, Kratošija). The wine routes are marked with tourist information boards and signposts, and promotional material is also provided in the form of brochures and maps and information about producers, distributed through local tourist organisations, web portals, hotels and other providers of tourist services.

There are around 3200 ha of olive groves in Montenegro with about 450,000 productive trees, 88% of the total number of trees (almost 500,000). They are mainly autochthonous varieties (70%) grown on family farms, which are fragmented into groves of 0.2-2.0 ha. New olive groves account for approximately 10% of the total olive crop and are increasing.

In summary, the country's natural beauties are overwhelming and the presence of many ruined stone houses, old fishing villages, fortresses and monasteries all over the Skadar region confirms its historical and cultural significance.

Based on the identification of four tourist routes, in accordance with the European intervention framework, the chapter provides useful solutions for planning sustainable and resilient tourism for the "Capital Cetinje and Lake Skadar" cluster and for the whole country.

3. The Montenegrin QNeST routes

In accordance with the project's objectives and with the aim of co-designing an open tourist system along the Adriatic and Ionian routes to Macedonia and Eastern Thrace, Montenegro has identified local and trans-regional routes, paying particular attention to regional features, accessibility and well-being. With the aim of contributing to the creation of sustainable quality tourism and the promotion of food and wine activities related to the Mediterranean Diet (in particular the olive oil, wine and fish supply chains), 4 local and 3 trans-regional itineraries were identified in the "Capital Cetinje and Lake Skadar" pilot area. The routes are partly overlapping, the trans-regional itineraries showing elements of continuity with the other project partner countries.

"Creativity" is a hallmark of the itinerary system, driving the improvement of all of its components and enabling the achievement of higher operational

standards, whose extension and application can also be envisaged in other regional contexts (Messineo 2011).

The target areas of Lake Skadar and the Old Royal Capitol of Cetinje, along with Mount Lovćen, are listed in the Law on National Parks of Montenegro (Official Gazette of Montenegro No. 36/16). The Law sets out its boundaries, the public interest affecting the land, the activities that can be performed in the area and environmental protection measures to be applied, as well as guidelines for managing the area and other important issues affecting regions protected by the state and the law. Thus, the target area for this single route/cluster is made up of two separate National Parks with protected status, and this entire area is therefore regulated for tourism and ecological purposes.

3.1. *The local routes*

Lake Skadar National Park

The best way to visit Lake Skadar is by boat, starting from the centre of Lake Skadar National Park (figure 2), which also enables visitors to enjoy bird watching. The route continues with a visit to one of the many family wineries nearby.

While tasting home made products and good wine, the historic and cultural importance of the region is introduced to visitors. The diverse and rich cultural and historical heritage includes archaeological sites, forts, medieval monasteries and churches.

Lake Skadar – Virpazar

From Virpazar, the main gateway to Lake Skadar, visitors can travel by boat to ten Orthodox Monasteries. Their positions on tiny islands, on steep hill slopes or in the middle of marshland, make them rather inaccessible otherwise. The Wine and Bleak Festival is held every year in Virpazar. During the festival, people gather to taste dried and fresh grilled bleak (a lake fish) and wines from local producers. The visitors can taste and buy excellent award-winning wines from the Crmnica Region.

Lovćen National Park

Mount Lovćen straddles 3 municipalities: Kotor, Cetinje and Budva. The route via the serpentine road up from Kotor towards Cetinje is one of the most sce-



Figure 2. *Lake Skadar National Park, Žabljak Crnojevića*. Source: photo by Dusko Mihailovic.

nic in the country. Lovćen is best known for the Mausoleum of Montenegro's most famous ruler, the poet and bishop, Petar II Petrović Njegoš.

On the slope of Mount Lovćen is Njeguši Village, a quiet place that has become a tourist town, famous for being the birthplace of Njegoš, but also for its food and wine.

A trip to Njeguši guarantees gastronomic pleasure and stunning sites.

Cetinje, Royal Capital

A visit to Cetinje Royal Capital is a trip into the glorious history of this Balkan country. 12 different embassies operated here. Even today, the former em-

bassies are accompanied by impressive buildings such as Cetinje monastery with its rich treasury, the former Government House, the Zetski dom Theatre, Biljarda (the residence of Montenegrin rulers) and the Palace of King Nikola.

This route thus showcases the most important museum material on the political, military and cultural history of Montenegro. The visit ends with the Lipska Cave, an adventure that offers a unique experience of an underground world with a fascinating variety of karst features. The main characteristics of the above-mentioned itineraries are described, considering the main factors that influenced their creation and the public and private strategies to adopt in order to ensure their future. Moreover, the itineraries' potential as driving forces of local development, by means of the propulsive role of local businesses, local communities and government organisations, is explored.

3.2. *Trans-regional Itineraries*

Boat Route

Most of the boat trips around Lake Skadar begin in Virpazar. There are several types of cruise – from 2 to 6 hours, including various forms of entertainment and sites.

The trips typically include a visit to the most picturesque corners of the Lake, such as the village of Karuč, where the winter home of Bishop Petar I Petrović Njegoš, a famous historical and architectural monument built in the early 19th century, is located; or the Crnojevića River, with its beautiful views. A trip might also include a visit to the ancient fortress of Žabljak Crnojevića and the monastery of Kom, which differs from other monasteries built on the islands due to its inaccessibility.

Unique bird watching tours can be enjoyed on Lake Skadar as it abounds with over 280 different species of birds. There are three protected areas around the lake where you can do bird watching: Pancevo oka, Crni zar and Manastirska tapija.

Fishing for extraordinary, rare and tasty types of freshwater fish is another unmissable activity on Lake Skadar as it is the largest freshwater basin in South-East Europe.

A visit to Lake Skadar could also include a kayaking tour.

Wine & Dine Route

The proposed route is a journey through the area's excellent food and wine. The local population of this cluster is active in agriculture (beekeeping, gathering medicinal herbs, wine and brandy, olives and olive oil, etc.) and tourism, especially hospitality. Homes and mini-farms function as small family hotels and restaurants, providing guests with full accommodation and catering services and traditional cuisine, and they also organise various tourist activities in the surroundings. Lake Skadar wine tasting and gastronomy tours are authentic local experiences that include visits to the very best local wine producers and home-made meals, all of whom adhere to centuries-old organic principles. Everything on the dining table is home-grown, home-reared, home-made or home-caught.

The Montenegrin part of Lake Skadar is part of the cross-border Ethno-gastronomic region of Lake Skadar, uniting restaurants and market traders with local producers and workshops from Montenegro and Albania.

In Donji Murići village in the Krajina district, the old-fashioned and traditional olive processing methods are presented by means of historical evidence, such as old oil mills, original parts of the old presses and stone amphorae. The olives are composed of domestic autochthonous varieties, and are divided into two coastal sub-areas.

In addition to domestic olive oil, honey, meat, mushrooms, cheese and olives, the restaurants in the old fishing settlements offer mostly local wine and fish specialties (such as carp, eel, trout, pike).

The Lake Skadar region is famous for its wine routes, bringing tourists to local wine producers and offering vineyard visits and wine tasting (Vranac, Krstac, Kratošija).

The Lake Skadar region has some of the most naturally fertile soil in Europe and is home to an incredible 111 wineries, most of which are boutique-style and family-run. Organic produce is grown in abundance in the surrounding valleys and the area is also home to Montenegro's signature Vranac grape.

The wine producers in this region have won various awards, and nearby there is Europe's single largest vineyard, belonging to Plantaze, Montenegro's largest wine producer.

Virpazar, the gateway to Lake Skadar, is home to the traditional annual festival of local wines and bleak, a lake fish. Local wine producers present their wines, providing an excellent opportunity to taste some.

As well as wine, a specialty of Montenegrin cuisine from this area is Njeguši prosciutto, which enjoys protected status. In order to better understand what kind of delicacy this is, how it is made and served and what its origins are, first we must journey to Njeguši prosciutto's place of birth – the historical village of Njeguši. The entire area around Njeguši is suitable for agriculture and the production of healthy organic foods, which is why this place has always been popular, hosting camps, workshops, picnics and adventures in the genuinely beautiful natural landscape.

Cultural and historical heritage Route

The Lake Skadar Region has a rich and diverse cultural and historical heritage from various epochs. Traces of the first human communities appear in the Palaeolithic period, while archaeological finds from a cave on the shore of Lake Skadar constitute the first traces of spiritual life from the Neolithic period. The monumental heritage of the Middle Ages is the best preserved, architecturally the most important and stylistically the most authentic. Under the influence of various political and social developments, the Lake Skadar region saw the mutual interference of stylistic and architectural influences.

Of the many archaeological sites on the shores of the lake, the current excavations are focused on sites from the Illyrian-Hellenistic and Roman periods, in addition to research into medieval sacred architecture.

The most important and representative cultural and historical assets of the National Park are the monasteries from the 14th and 15th centuries (the period of the Balšić and Crnojević dynasties) and the fortification complexes from the period of Ottoman domination.

Specific folk architecture, including old rural buildings, fishermen's huts and residential buildings, stone bridges and watermills, characterise a cultural landscape of special architectural value. The ruins and remains of old buildings and fortresses indicate the construction of various types of fortifications and smaller urban settlements.

The wider Lake Skadar area represents one of the most significant regions in terms of the development of civilisation in Montenegro, and it is the area where the first forms of spirituality, literacy and cultural development appeared.

The cultural and historical importance of the islands on Lake Skadar is enormous. On these islands there are many monasteries, churches and sacred

monuments. Numerous fortifications on the islands, built by the Turks and later by the Montenegrins, bear witness to the frequent fighting between these nations. The oldest monastery, Starčevo, was founded in the 14th century by the humble ascetic Makarije, after whom the island was named Starčeva gorica. On the shores of the lake there are two small towns – old urban settlements, with distinctive architecture – Virpazar and Rijeka Crnojevića.

As the many civilisations and rulers shaped this region over the centuries, the living conditions, tools and behaviour of the population also changed. The small local “Pelikan” hotel has therefore collected a number of old tools and opened a small museum to keep the memory of the area’s traditions and history alive.

4. The sustainability of the new routes with regard to networks and government policies

The Montenegrin QNeST routes provide a concrete opportunity to build and promote a quality tourist and cultural product, which will also help to boost development in hitherto marginal areas, often excluded from traditional competitive strategies or large tourism circuits, supporting integration of the regional goods and services on offer.

Cultural routes and itineraries are a solution but they require a strategic approach to their construction and the associated range of tourism goods and services.

In the construction of cultural routes and associated tourism, it was thus necessary to assess the means for their creation. In the first place this concerned the regional base (the mapping of cultural and natural heritage, traditional crafts, accommodation structures, restaurants, transport infrastructure, services, communications and intermediation of tourism goods and services). Secondly, it was necessary to establish and evaluate what resources were available (cultural, natural, economic and structural) for the construction of the routes (figure 3).

The routes’ design also entailed the involvement of the community and local stakeholders (including entrepreneurial associations), in addition to that of the public authorities at various levels of administration and government, in

establishing the strategies to be adopted to support and promote the cultural routes (Torres Bernier 2006; Trono 2019).

The good geographical position and accessibility of the region, its great potential for the development of various products based on natural and cultural heritage and a rich gastronomic tradition all make the strategy used by Montenegro strong and feasible. Nonetheless, factors such as limited investment in cultural heritage at the national and local levels, unfavourable demographic trends and depopulation and limited accessibility for persons with disabilities constitute major challenges for the central government.

There are opportunities to enhance connectivity with tourism-generating countries (currently based on the national road network and airports, as well as the proximity of Dubrovnik and Tirana) and to access EU funding for the development of tourism, agriculture and the protection and appropriate exploitation of cultural heritage. However, these are being undermined by a lack of cooperation between local service providers, the disappearance of crafts due to the depopulation of villages and pollution, all of which are affecting the area of Lake Skadar (Vodenska 2018).



Figure 3. The QNeST Vision (Brand Members – Stakeholders – Points of interest – Traditional events) in Montenegro. Source: our presentation.

According to Montenegro's National Strategy for Sustainable Development for the period up to 2030, the development of cultural routes, as a way to both enhance the appropriate exploitation of natural and cultural resources and support economic activities and social well-being, is essential for the achievement of local sustainability objectives.

One of the operational goals of Montenegro's National Strategy for the Development of Micro, Small and Medium-sized Enterprises in the period 2018-2022 is "further development of existing clusters and formation of new ones", and the following measures are to be applied:

1. continuation of activities for the formation of new clusters;
2. improving the capacity of existing sectoral clusters;
3. formation of vertical clusters, with an emphasis on the tourism and agriculture sectors;
4. connection of clusters with scientific research institutions.

Based on these and other goals and measures, the Ministry of Economic Development has developed several support programs for innovative, ecological and employment-oriented initiatives, as well as programmes for cluster development. Support measures are implemented annually and include financial and non-financial support.

In this way, Montenegro is achieving, despite the attendant difficulties, continuous, inclusive, equally balanced and sustainable economic development at a regional level, together with full and productive employment and dignified labour for all. The combined achievement of these two major goals of preserving natural resources and generating strong economic development is enabled by a regional approach and the creation of local geographical and sectoral routes. Thus the concept of sustainable economic growth is affirmed and it includes health, education, a healthy environment, sustainable natural resources, socially responsible policies, social inclusion and good governance.

5. Conclusions

The environmental, economic and social aspects of development in Montenegro in the last few decades indicate that the welfare of future generations can be compromised not only by the quantitative and qualitative degradation of natural resources, but also by the shrinking availability of other resources (including human resources as a precondition of development and economic capital).

On the basis of its own experience and the lessons learned, as well as the experiences of key international players who are setting a course for sustainability via global dialogue, the overall condition of Montenegrin national resources was characterised in the QNeST project by a four-dimensional view of development: human, social, natural and economic.

Full implementation and achievement of these development concepts is under way at the local, regional and national levels, and the creation of micro-locations for development, such as sectoral or geographical routes, means that this approach is adapted to local needs.

About 20% of the population is now engaged in tourism as an additional activity. Homes, restaurants and small hotels provide accommodation services and traditional cuisine, and they organise various outdoor tourist activities.

For the successful management of national parks and the achievement of sustainable tourism, a higher level of interaction and cooperation is necessary, enhancing feelings of shared identity between cultural, historical and geographical areas, such as the area of Lake Skadar, and the local community. Mutual support and the cooperation of the local community will contribute to the preservation of cultural heritage and tradition, as well as to the improvement and appropriate economic exploitation of the educational, health, recreational, tourism and other assets of the protected areas and tourist routes.

The direction taken by Montenegro is to develop sustainable tourism while respecting the socio-cultural authenticity of the host communities, ensuring viable, long-term economic operations and providing socio-economic benefits to all stakeholders, including stable employment, income-earning opportunities and social services, thereby contributing to the alleviation of poverty.

This requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires

constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary.

In this sense, cultural routes translate into an opportunity for integrated enhancement of the many economies involved, as well as an element helping to activate virtuous processes, capable of giving new impetus to the proper transformation of the territory.

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Slovene Istria¹

A sustainable “green” destination
in the making, traversed by a cultural route

di Raffaella Gabriella Rizzo, Luca Simone Rizzo

1. Introduction

Slovenia, with around two million inhabitants and an area of just over 20,000 km², is a relatively small country that is mainly mountainous or hilly, with a portion of plain in the east, towards the border with Hungary. It has had over a thousand years of dramatic and turbulent history. Despite repeated destruction, as well as recent extended land use, it has maintained numerous pre-existing historic territorial configurations and large areas of countryside, to the extent that it is often referred to and marketed as “Green Slovenia”. Overall, it is a very varied nation, and, at the same time, it is rich in resources and tourist attractions of different kinds. Slovenia – which is almost rectangular in shape, with a protuberance in the northeast in the Drava and Mura Statistical Regions – constitutes, within Europe, an important crossroads for transit towards:

- the East, with Hungary and the rest of Eastern Europe;
- the South, with Croatia and the Balkans;
- the North, with Austria and Central Europe;
- the West, with Italy.

1. Though with a unity of purpose, Raffaella Gabriella Rizzo wrote paragraphs 3.1.1, 3.1.3, 4, 6, 7 and Luca Simone Rizzo paragraphs 1, 2, 3.1.2, 3.1.4. and 5.

This position is confirmed by foreign tourism, which has developed greatly since the Second World War.

Practically all of Slovenia is on dry land. Of its 212 municipalities, only Ankaran, Izola, Koper and Piran are on the (Adriatic) coast. These will be the subject of this dissertation. Having been amply involved in seaside tourism since World War II, they have now also opened up to cultural tourism. Tourism has recently also affected their immediate rural hinterland, in ways that are becoming ever more diverse. The various stakeholders – also in view of the considerable urbanisation that has involved all of the coastal belt – are dealing with the problem of sustainability, partly by adhering to the conceptions of destination governance and destination management (DM). Moreover, they are aware of the need to involve the local area in the light of the concept/instrument of a *Heritage Trail*. The European QNeST (Quality Network on Sustainable Tourism, <https://application.qnest.eu/>) project is an example and application thereof. The part regarding the Slovenian section of Istria to be found on the web has been coordinated by the University of Primorska (see Trono in this text figure 1 on page 19).

2. Objectives and methodology

For some time now, reflection has focused on the necessity to promote the minor towns and the rural territory (which is often rich in heritage) and on the importance of new and emerging types of tourism, to be developed by adopting a sustainable, slow and responsible approach. These goals are to be achieved by adhering to the concept of Europe's common heritage, whilst respecting and considering the Member States' national heritages.

Bearing this in mind, and in coherence with the objectives pursued by the QNeST project, we therefore sought to investigate the extent to which Slovenia is suited for this purpose. We consequently asked ourselves:

- do the natural and cultural assets make it possible to create interesting and varied proposals adopting a *route-based* and *resource-based* development model (which, as its strategic foundation, expresses attachment to its territory and the ability to incorporate distinctive identifying references in the value of its tourist product)?

- Do the territory’s actors allow for the creation of network products – which are modular and rely on synergy between filières and within themselves – that conform with the multi-faceted and experiential nature of the demand?

Replying to questions such as these called for the adoption of a desktop research methodology, examining the contents of academic publications and policy documents, as well as of websites.

The results of this study were then translated into the creation of a (multi-themed) cultural itinerary, which deliberately focused on the Istrian area (on the one hand, in order to make a logical selection of points of interest to offer the tourist; on the other, because of the possibility of dialogue with areas of Italy where the authors of this chapter are also working).

3. The geographical and tourism-related setting of Slovene Istria

3.1. *General aspects, Physical, settlement-related and agricultural characteristics, and related events*

3.1.1. General aspects

The territory under examination lies in the extreme southwest of Slovenia, in the Coastal-Karst Statistical Region (Obalno-kraška in Slovenian). It involves, in its most southern part, only the coastal communes of the “geographical region” of Istria – Ankaran, Koper, Izola and Piran – which look out over the Gulf of Trieste. This portion of land constitutes a de facto region and, at the same time, a statistical territorial unit: the *Koper Hills* (Perko, Ciglič 2020). It lies in the most northern sector of the Istrian peninsula and, over time, has developed its own identity: it is therefore referred to as *Slovene Istria*, as described by Juri:

Both from a functionalist and systemic point of view, the municipalities of Koper, Izola, Piran and Ankaran are able to constitute an individual region [...] It is a region that is now in a phase of deindustrialisation, in which the service sector,

based principally on the activities of the ports and on logistics, as well as on tourism, is highly developed, and where the relatively heavy industry of the Socialist period is giving way to production activities that have less of a marked effect on the environment. According to Frémont, it is therefore an exploded region, in which industrialisation and the tertiarization of the territory has created a robust organisation from an economic point of view, but which seeks its true identity in its regional iconography, which has sometimes been made to measure (Frémont 1984; Juri 2017, p. 26).

The four communes have very different surface areas: they go from a vast municipality like Koper, with over 300 km², to the very small one of Ankaran, which only broke away from Koper recently (table 1). Overall, in 2019, they had 89,814 residents.

3.1.2. Physical characteristics

The coast is mainly constituted of flysch and is about 47 km long. It is indented, rocky and stony, and has evolved continuously over the centuries due to natural phenomena and human intervention (Rossit 2015). Only in very rare stretches is it sandy. The Ankaran promontory lies to its north and that of Piran to the south, and it contains two bays: that of Koper and that of Piran, submerged estuaries formed by the flow into the sea of local waterways (Kolega 2015; Vahtar 2002).

Table 1. *The municipalities of Slovene Istria in the Statistical Region of Obalno-Kraška involved in 2019 in the QNeST project. Source: data processed by the Authors from <https://www.stat.si/obcine/en/Municip/Index/119>.*

Municipalities	Area in sq. km	Population	Density (inhabitants/sq. km)
Ankaran	8	3,215	399
Izola	29	16,367	573
Koper	303	52,540	173
Piran	43	17,692	407
<i>Tot.</i>	383	89,814	235
Others	660	25,799	-
<i>Obalno-Kraška</i>	1,043	115,613	110.8

Below the coast in the central part are the islands of the (old) city of Koper and the little town of (old) Izola: today, though, both are connected to the mainland (Suau *et al.* 2015: compare the historic maps in the article). From the coast, generally the land rises straightaway to altitudes of 100-300 m, up to the Karst Plateau. As a result, the zone as a whole is undulating – also with plateaus – or rugged (with crags on which settlements were built). Then, progressively, the terrain climbs again, reaching around 800 m above sea level in the eastern extreme of the commune of Koper (Pezzetta 2018). The zone is crossed – from north to south – by three short rivers: the Rižana, the Badaševica, and the Dragonja. Towards their estuaries, these originally widened out into flat, saline areas, subsequently given over in large part to agriculture. Here there were the salt pans of Sicciole/Sečovlje and Strugnano/Strunjan (Strunjan Landscape Park 2019; Finocchiaro *et al.* 2015; Rossit 2015; Lo Iacono 2008-2009; Selva 2007); today they are much reduced in size. Their history and present aspects are documented in the *Salt Pan Museum*. The route proposed by QNeST begins in fact in the area near Sečovlje. These sites have also been transformed into protected areas, along with the Nature Reserve of Val Stagnon/Škocjanski zatok, saved from being dried out and situated inland of the Port of Koper. (https://www.venetoagricoltura.org/upload/File/progetti_speciali/VS_ITA_Cartina.pdf). These constitute important tourist, hiking and educational attractions (Koderman, Tvrčko, Opačić 2020; Lipiej *et al.* 2020). The valleys running inland have allowed for the development of roads and the proliferation of settlements.

3.1.3. Settlement-related and infrastructural characteristics

The old towns of Koper, Izola and Piran developed historically in a compact manner, facing the sea, for hundreds of years. They were transformed in their urban layout and architecture by their various dominations, especially that of Venice, which lasted until 1797 (figure 1). As Di Paoli Paulovich notes (2016, p. 158), in the main town (i.e., Koper) «everything evokes Venice: its *palazzi*, its churches, the puteals of its wells and its houses squeezed in between the alleyways».

In the successive periods of dominion (Austrian, Napoleonic, Austro-Hungarian, Italian and Socialist), tourism also gradually began to hold sway, ini-



Figure 1. Tito Square in Koper. Source: photo by R.G. Rizzo, 2019.

tially in particular at Portorož, in the municipality of Piran, and then along the whole of the coast, dividing itself between traditional seaside pursuits, gambling, wellbeing and business meetings and events (Gosar 2014; Šuligoj 2020). For more details about tourism and for data regarding the accommodation situation (hotels and boarding houses) between the two wars in the last century, when Istria was Italian, we refer you to the comprehensive Guida del Touring Club Italiano (Bertarelli 1934, pp. 282-287 e 318-322) and to Kravečič (2020). With the independence of Slovenia in 1991, tourism increased substantially and became more diverse, and it has now also spread to the rural hinterland (Kumer *et al.* 2019; Bonjec 2006).

So, since the Second World War, the whole of the coastal area has been subjected to intense new construction for tourism and to renovation of various kinds of premises (hotels, multi-apartment villas, tower blocks, private apartments, rooms, etc.), with the aim of satisfying the needs for accommodation and eateries, including solutions designed by the architect/town planner Edo Mihevic (Kraj 1999).

Both in the “old” parts of the towns (usually refurbished apartments) and elsewhere, a lot of homes have been made suitable for tourist use, a fact that is also clearly made evident in the listings of Airbnb (and by Cvelbar and Dolnicar 2017). There has also been a considerable spread of residential and other construction in the suburbs, with completely new neighbourhoods being

built. Moreover, immediately behind the coastal belt, industrial and service areas and highways have been constructed, as well as premises and car parks for the supermarket sector (Umek 2019). The whole of the coast therefore – if considered from a local point of view – now appears as a conurbation, even if it is interrupted by areas of green. At a national level, this constitutes one of the three “centres of international importance” – Ljubljana, Maribor and Koper-Izola-Piran (Dimotrovska Andrews 2000 p. 117) – and one of the Functional Regions (FRs) of Slovenia (Drobne *et al.* 2010, p. 297). If one then widens one’s sphere of observation to the cross-border area, one notes that our conurbation is part of the “transborder metropolitan city of Trieste-Koper” (Čebren Lipovec 2019; Gasparini *et al.* 2010).

From the ’60s onwards another important territorial change has taken place: the town of Koper has spread northwards with the new infrastructure of its port (more than 1,600 ha), now shared with the commune of Ankaran (Twrđy *et al.* 2012; Trupac, Kolenc 2002).

Along the coast three tourist harbours have also been built, the most important of which is the Marina of Portorož (Uran Maravić *et al.* 2016). All of the many interventions in the area had, however, caused Stokin to remark at the 15th ICOMOS Symposium in 2005 that «the most important issue is how to manage the degraded cultural heritage and the monuments and sites between urbanisation, industrialisation and cultural tourism» (p. 3).

As regards the settlement of the suburbs and the hinterland, however, a characteristic should be underlined whose roots go well back in time: it is a common trait also throughout Croatian Istria that there are – apart from towns of varying size, such as Koper, Piran, Izola and Portorož – also a very large number of villages (*naselje*) (Kusar 2013): more than 100 just in the municipality of Koper, at between 5 and 30 km from the coast. These too have been the subject of modernisation and recent construction. The distribution of this settlement process has contributed to the creation of a dense and ramified network of minor roads, now taken advantage of also for bicycle tourism and trekking.

The various settlements are interspersed with plantations of vines and olive trees, as well as with the wild vegetation of Mediterranean scrubland. Also, the whole area has experienced another phenomenon, typical of many western countries following World War II: the spread of second homes (Koderman 2014).

3.1.4. Agriculture, its derivative products, and the events and initiatives connected with them

In the area under examination there are three principal crops: viticulture, olive growing, and fruit farming. The first of these is, indeed, a key sector for the whole of Slovenian agriculture. Wine contributed 11% to the nation's economy in the period 2018-2020 (EU Slovenia agri-statistical factsheet 2021, p. 9). Within Slovenia, various vine-growing areas are to be found. Slovene Istria is one of these (VTC₄ in the cartography in Kerma 2012 p. 239). Here wines have been produced from indigenous varieties (Malvasia Istarska, Teran and Refošk) and international cultivars (Cabernet, Chardonnay and Merlot) in 1,091 viticultural farms since at least 2010 (*ibidem* p. 241; Pičuljan *et al.* 2019; Jurinčič, Bojnec 2009). In 2020, official statistics registered 2,639 vineyards along the coast in the district of Primorje-Slovenska Istra (<https://pxweb.stat.si/SiStatData/pxweb/en/Data/-/1528327S.px/table/tableView-Layout2/>). Growing olives – the other classic Mediterranean crop *par excellence* – is also present here, and Slovene Istria constitutes the most northern zone in the Mediterranean where it is practised. This activity, with alternating results due to sometimes adverse weather conditions (years with frost) and the abandonment of agriculture in the hinterland in the past decades, is now widespread up to altitudes of around 250 m (Ogrin 2007). Olive growing, viticulture and substantial areas of xerophilous spontaneous vegetation are typical of the landscape of Slovene Istria, sometimes growing on terraces (Ažman Momirski, Gabrovec 2014). There are a number of important events which, during the course of the year, feature the products of the land: *Olive, Wine and Fish Festival* (Izola); *Artichoke Fest* (Strunjan); *Persimmon Fruit Feast* (Strunjan); *Orange Wine Festival* (Izola); *Sweet Istria* (Koper); *Refuscus Mundi* (Izola) and *Malvasia Festival* (Portorož). These are highlighted by QNeST (see the website for their individual descriptions). Apart from the sale of products and their consumption locally, these events include a wide variety of initiatives: entertainment involving music, dance and other artistic pursuits, workshops, masterclasses and either organised or individual excursions (<https://www.portoroz.si/en/all-news/news/7604-slovenian-istria-in-autumn-colours>). These also involve the restaurants (Sedmak 2021) and wine routes. Moreover – and not only on these occasions – many wineries, olive

oil mills and *agriturismi* are open for tastings and sales, sometimes linked to innovative types of international cooperation (Hribar *et al.* 2021; Kumer *et al.* 2019) and combined with specialised forms of tourism (cycling holidays, MTB, etc.).

4. Tourism in recent years

4.1. Tourist flows

Information on tourist flows – using the indicators of arrivals and overnight stays – can be obtained from three sources:

1. United Nations World Tourism Organisation (UNWTO);
2. Organisation for Economic Co-operation and Development (OECD);
3. Republic of Slovenia Statistical Office (SiStat).

The UNWTO website allows one to have access to data for inbound and outbound tourism from 2010 to 2021 at a countrywide level (cfr. <https://www.unwto.org/country-profile-inbound-tourism>). As regards the situation during 2020 and 2021, we recommend consulting the site offered by the Slovenian Tourist Board; the figures, however, refer only to Slovenia as a whole: «Of 4 million tourist arrivals and more than 11 million tourist overnight stays generated in Slovenia in 2021, foreign guests generated 1.8 million arrivals and 4.8 million overnight stays» (see <https://www.slovenia.info/en/press-centre/press-releases/18568-2021-in-a-review-slovenian-tourism-stats-numbers>).

For our area, on the other hand, our findings are based on data provided by the Republic of Slovenia Statistical Office (SiStat). Details are given here of the situation regarding the most recent years: 2019 and 2020 (i.e., the last year pre-pandemic and the first of Covid-19). The situation in 2019 is illustrated in tables 2 and 3. Around 1/6 of total arrivals and 1/5 of overnight stays of tourists in Slovenia are concentrated in the four municipalities, with a prevalence of visitors from abroad. In 2019, foreigners represented 75% of tourists in the whole of Slovenia, and 64% in our area. With 31,887 beds, its accommodation constituted 1/6 of that available throughout Slovenia.

Table 2. Arrivals of domestic and foreign tourists, municipalities, Slovenia, 2019. Source: processed by the Authors from <https://pxweb.stat.si/SiStatData/pxweb/en/Data/-/2164525S.px>.

Municipality	Arrivals (Tot.)	Domestic Arrivals	Foreign Arrivals
Ankaran	83,335	47,277	36,058
Koper	103,786	32,849	70,937
Izola	148,173	71,703	76,867
Piran – Portorož	720,495	191,960	426,535
<i>Total</i>	<i>1,055,789</i>	<i>343,789</i>	<i>610,397</i>
<i>Total Slovenia</i>	<i>6,229,573</i>	<i>1,527,695</i>	<i>4,701,478</i>

Table 3. Overnight stays of domestic and foreign tourists, municipalities, Slovenia, 2019. Source: processed by the Authors from <https://pxweb.stat.si/SiStatData/pxweb/en/Data/-/2164525S.px>.

Municipality	Overnights (Tot.)	Domestic Overnights	Foreign Overnights
Ankaran	318,914	190,785	128,129
Koper	293,662	83,837	209,785
Izola	529,069	293,843	225,226
Piran – Portorož	1,874,462	583,802	1,290,660
<i>Total</i>	<i>3,016,067</i>	<i>1,152,267</i>	<i>1,853,800</i>
<i>Total Slovenia</i>	<i>15,775,331</i>	<i>4,404,365</i>	<i>11,370,766</i>

The Slovenian official source provides the currently available data also for 2020 – the first period of Covid-19 – during which one can note a clear drop in arrivals. Those of Slovenia have been halved, with a notable reduction especially in the foreign component. The same pattern of behaviour is to be seen also in our area. There is only available disaggregated data, however, for the two municipalities of Izola and Piran (tables 4 and 5). In these, on the other hand, one can note a growth in domestic tourism, that based on proximity. This growth should be seen partly in relation to government incentivisation measures, such as vouchers (Republic of Slovenia 2020, p. 31).

4.2. Slovenia and its tourism resources

Characterised by 12 Statistical Regions – an administrative legacy of the 7 historical Provinces – Slovenia is a country that reveals itself in the eyes of the tourist as four macro-areas for tourism:

Table 4. Arrivals of domestic and foreign tourists, municipalities, Slovenia, 2020. Source: processed by the Authors from <https://pxweb.stat.si/SiStatData/pxweb/en/Data/-/2164525S.px>.

Municipality	Arrivals (Tot.)	Domestic Arrivals	Foreign Arrivals
Ankaran	n.a.	n.a.	n.a.
Koper	n.a.	n.a.	n.a.
Izola	103,248	78,723	24,525
Piran – Portorož	368,510	244,554	123,956
<i>Total</i>	n.a.	n.a.	n.a.
<i>Total Slovenia</i>	3,065,085	1,848,971	1,216,114

Table 5. Overnight stays of domestic and foreign tourists, municipalities, Slovenia, 2020. Source: processed by the Authors from <https://pxweb.stat.si/SiStatData/pxweb/en/Data/-/2164525S.px>.

Municipality	Overnights (Tot.)	Domestic Overnights	Foreign Overnights
Ankaran	n.a.	n.a.	n.a.
Koper	n.a.	n.a.	n.a.
Izola	412,118	336,728	75,390
Piran – Portorož	1,272,942	873,804	399,858
<i>Total</i>	n.a.	n.a.	n.a.
<i>Total Slovenia</i>	9,204,374	5,850,018	3,354,356

1. *Alpine Slovenia*;
2. *Mediterranean Slovenia and the Karst*;
3. *Pannonian Thermal Slovenia*;
4. *Lubiana and Central Slovenia* (www.slovenia.info; see also Renko 2020 p. 7).

In these areas, it can offer a varied range of – even specialised – types of tourism (table 6) (Timothy 2021; Wartyo *et al.* 2017), also with a view to co-creating a tourist experience (Richards 2021) associated with an *experience-driven* philosophy based on a “value in experience” approach (Pencarelli and Forlani in Richards 2021).

Containing natural and cultural destinations included in UNESCO’s World Heritage List, Slovenia has highlighted its image as a tourist destination – also thanks to the *I Feel Slovenia* brand (Binter *et al.* 2016) – in various ways:

- the cities of Maribor and Nova Gorica have been awarded the title of European Capital of Culture, in 2012 (<https://ec.europa.eu/culture/guima->

Table 6. *Types of tourism in Slovenia and related specialised tourisms. Source: drawn up by R.G. Rizzo.*

Macro-type of tourism	Specialised tourism
1. cultural	Religious; historical/artistic; architectural; walled towns; festivals (music, literature, cinema); museums; based on memory, folklore and local traditions
2. regarding agriculture and food resources	Food tourism; bee tourism; wine tourism; mushroom picking; olive oil tasting...
3. nature-based	Mountain areas; the Pannonian plain; coastal; parks and nature reserves; adventure parks and ziplines; geotourism
4. sports-based	Alpine skiing; cross country skiing; trekking; biking; climbing; water skiing; stand up paddling; rafting; kayaking; fishing; speleology; parachuting; hang gliding; hot-air ballooning; tourism on horseback; golf
5. gender-based	LGBT
6. sustainable	Ecotourism; rural tourism; <i>agriturismo</i>
7. professional	Conferences and business

raes-and-maribor#maribor) and for 2025 (<https://ec.europa.eu/culture/chemnitz-and-nova-gorica#nova-gorica>) respectively;

- various destinations have been selected, starting in 2008, within the EDEN project as *European Destinations of Excellence* (https://ec.europa.eu/growth/sectors/tourism/eden_en; see table 7).
- many locations have been attributed *Green Destination* certification for their sustainable development (<https://greendestinations.org/>; table 8): the tourist destination of Bled, with its homonymous Lake and Castle; the Bohinj Valley in the Upper Carniola region, in the Julian Alps; the city of Ljubljana, with its architectural designs by Jože Plečnik; the spa town of Rogaška Slatina; the town of Koper with its cultural tourism, or the municipality of Vipava, renowned for its wine production. These are just some that are worthy of mention;
- thanks to its typical wine and food products, Slovenia was honoured – within the World Region of Gastronomy programme – with the title of *European Region of Gastronomy of 2021* by the International Institute of Gastronomy, Culture, Arts and Tourism (Kukanja Peštek 2020; <https://www.europeanregionofgastronomy.org/>). This accolade is a consequence of the gradual growth of Slovenia as a gastronomic destination, begun in 2006 with the Strategy of Gastronomy and the subsequent brand *Taste Slovenia*. This Strategy was focused on the development and implementation of a

Table 7. EDEN destinations in Slovenia by year, Statistical Region and tourism category. Source: processed by R.G. Rizzo.

EDEN Destination	Statistical Region	Year	Category of tourism
Podčetrtek	Savinjska	2019	Health and wellbeing tourism
Koper	Obalno-Kraška	2017	Cultural tourism
Brda	Goriška	2015	Tourism and local gastronomy
Lasko	Savinjska	2013	Accessible tourism
Idrija	Goriška	2011	Tourism and regeneration of locations
River Kolpa	Jugovzhodna Slovenija	2010	Aquatic Tourism
Solčavsko	Savinjska	2009	Tourism and protected areas
Soca Valley	Goriška	2008	Tourism and intangible local heritage

Table 8. Slovenian Green Destinations in January 2022. Source: processed by R.G. Rizzo from <https://greendestinations.org>.

Green Destination	Green Category	N. per category
Bohinj	Platinum	1
Bled; Kamnik; Komen; Laško; Ljubljana; Logarska Dolina Solčavsko; Miren-Kostanjevica; Podčetrtek; Radolca; Rogaska Slatina; Rogla-Zreče; Soča Valley; Vipava	Gold	13
Bela Krajina; Brda; Brežice; Hrpelje-Kozina; Idrja; Koper; Kranjska Gora; Lenart; Postojna; Ptuj; Radlje ob Dravu; Šentjur; Sevnica; Škofja Loka; Slovenj Gradec; Šmarješke Toplice; Sveta Ana	Silver	17
Blagajeva Dežela; Celje; Cerklje; Divača; Kanal ob Soči; Kočevsko; Kostanjevica na Krki; Litija Šmartno pri Litiji; Maribor; Moravske Toplice; Nova Gorica; Novo Mesto; Razkrižje; Rečica ob Savinij; Sežana; Velenje; Žalec	Bronze	17

range of products of the destination based on the Slovenian culinary identity of local products in the sense of a gastronomic boutique. This in turn led, over the years, to the drafting of an *Action Plan for the Development and Marketing of Gastronomy Tourism 2019-2023* (Slovenian Tourist Board 2018). In 2020 the programme – which set out to create a relationship between the gastronomic destination and the concept of Slovenia as a “green” country with unspoilt countryside – was already in the heart of its final phase, which seeks to give emphasis to the country’s international gastronomic visibility by means of targeted marketing activity.

5. Policies regarding sustainability, tourism, cultural heritage and international collaboration

In the last twenty years, various pieces of legislation have been adopted in Slovenia with the aim of protecting the countryside, safeguarding cultural heritage (Pirkovič 2017), incentivising sustainability, increasing tourism and improving certain aspects regarding the sector (Rangus *et al.* 2018). We list below the principal documents:

1. Nature Conservation Act 1999;
2. Cultural Heritage Protection Act 1999;
3. Preservation of Cultural Heritage Act 2008;
4. Green Tourist policy: Strategic guidelines 2009;
5. Green Scheme of Slovenian Tourism 2014;
6. Law for the promotion of the development of tourism (ZSRT-1) 2018;
7. Strategy of Sustainable Growth of Slovenian Tourism 2017-2021.

These documents foresee the involvement of public and private actors, of local communities and – in the indicated cases – of obtaining certifications.

One should bear in mind that in 2014 the European Commission published its “Action Plan concerning the European Union Strategy for the Adriatic and Ionian Region”, to which Slovenia belongs. This document indicates 8 Actions to be implemented for a «diversified tourism offer (products and services)», which were then reiterated in the Strategy of Sustainable Growth of Slovenian Tourism 2017-2021. It also suggested – for 2020 – the creation of 5 new macro-regional routes. Moreover, it recommended 7 Actions for «sustainable and responsible tourism management (innovation and quality)» (COM 2014).

Of the various documents, we wish to concentrate here on the Strategy of Sustainable Growth of Slovenian Tourism 2017-2021, whose contents encapsulate all the others (Rangus *et al.* 2018, p. 231). This strategy is detailed and complex, and aims at achieving a principal target, as well as secondary objectives. In the former case, it seeks to achieve as its «key target: international tourist receipts [to] EUR 3.7-4 billion». In the latter, to arrive at the following secondary targets (*Ibidem* p. 12): «5-5.5 million tourist visits; 16-18 million overnight stays; average length of stay 3.1-3.4 days; 18,000 to 22,000 new tourist rooms, of

which 8,500 will be renovated and 6,500 will be new rooms in the hotel sector; to increase full-time employment in the tourism sector to 12,000 employees».

A strategy was therefore put in place that focused on the 6 Key Policies listed below:

1. A New Organisational Structure: Macro Destinations and Tourism Products;
2. Institutional and Legal Framework;
3. Accommodation, Tourism Infrastructure and Investments;
4. Human Resources in Tourism;
5. Space, Cultural and Natural Assets;
6. Small and Medium-Sized Enterprises.

The municipalities that are under examination in this paper are located in the Mediterranean Slovenia Macroarea: we are talking about four communes out of eight (*Ibidem* p. 19). All are considered leading destinations and to meet the aims of the policy 4 Key Products and 8 secondary products are targeted for the area (table 9).

The policies are put into practice by means of a wide variety of instruments. Here we focus on that of revalorisation of the territory and of tourism, constituted in particular by a *trail* (also referred to as a *route* or *itinerary*). It may be long-distance and transnational or national, regional or local in character. Moreover, it may be themed or mixed. Slovenian tourist development is supported

Table 9. *Tourist products to be implemented in the Mediterranean Slovenia Macroarea. Source: a summary from Republic of Slovenia-Ministry of Economic Development and Technology, 2017, p. 19.*

Key Products	Secondary products
Business Meeting & Events	Gambling
Sun & Sea	Outdoor
Health & Wellbeing	Experiences in Nature
Gastronomy	Culture
	Countryside Tourism
	Touring
	Special Interests
	Cruising and Yachting

by 12 Regional Destination Organisations – already advocated by Juvan, 2011, and put into effect by Ministerial Decree – that collaborate with the municipal authorities. One of the outputs of local tourism development is constituted by the provision of walking and cycling trails, facilitated by these same authorities (OECD 2020, p. 274). Then, on different scales – from transnational to local – we have seen operate stakeholders involved in European projects under the aegis of the Interreg ADRION 2014-2020 programme (Interreg ADRION programme 2021). Often, they have produced routes on various scales. In this publication QNeST is listed on p. 77 – among 62 projects – in Priority Axes 2 *Sustainable Region*. After careful screening, it seems clear that a means to highlight the cultural heritage and the tourism resources as a whole that destinations have to offer to tourists and excursionists is constituted by organising *routes/trails*, as affirmed also by Koščak (2015) (Koščak, O'Rourke 2018; Koščak *et al.* 2017). A *route* is made up of a combination of points of interest, actors in the local area (both private and public) who operate towards tourism-related ends, dedicated services, and an actual cartographic itinerary. Routes in this sense become instruments for touristic and territorial use, as well as for marketing. In the paragraph below – applying this concept to Slovene Istria in conformity with the intentions declared in the above-mentioned documents – we put forward a proposed itinerary, designed to highlight the cultural heritage of the area under examination.

6. Slovene Istria and the QNeST routes for cultural and sustainable tourism

6.1. *The “route” as an instrument for navigating the territory and highlighting points of interest*

The routes being proposed have continued to increase in the last few years. In the QNeST project for our area, four local routes have been devised:

- A) *Joyful Istria*;
- B) *The path of Istria stone sea and olive oil trees*;
- C) *The path of everyday man*;
- D) *Wandering through Istria*.

These are offered as one-day tours, each also with a specific itinerary as can be evinced from the project's cartographies (see <https://application.qnest.eu/routes>). The POIs under consideration are 19 in all:

1. Forma Viva Seča (Portorož);
2. Hotel Palace with a Park (Portorož);
3. the Giuseppe Tartini Theatre (Piran);
4. the Venetian House (Piran);
5. St. George's Church (Piran);
6. Tartini Square (Piran);
7. Town Tower of Koper;
8. Archaeological Park Simonov Zaliv (Izola);
9. the Praetorian Palace (Koper);
10. the Carpaccio House and Square (Koper);
11. Tito Square (Koper);
12. the Church of the Assumption of Mary (Koper);
13. the Podpeč Castle (Podpeč, Koper);
14. the Da Ponte Fountain (Koper);
15. Hotel Adria Convent (Ankaran);
16. the Socerb Castle (Socerb);
17. the Monument Nob and Pre-War of Fascism (Marezige);
18. the Kubed Castle (Kubed, Koper);
19. the Church of Sv. Trojica (Hrastovlje).

Each of these routes penetrate in a capillary manner within the coastal strip and then leave it to reach – in the hinterland – some locations that are particularly significant as points of interest or as places to enjoy rural, food and wine experiences.

As far as this paper is concerned, we take Route (A) as our example, but enriching it with POIs compared to the QNeST proposal by including some from the other routes. The trail as a whole run through the territory of the Istrian inter-district administration (ACC), which includes the already-mentioned municipalities of Piran, Izola, Koper and Ankaran (<https://www.koper.si/it/amministrazione-intercomunale-dellistria/>; see § 1). It is intended for cultural tourism *tout court*. One can in fact consider the nineteen POIs in their

entirety as indicated in the QNeST brochure. At the same time, the route allows for experiences of cultural sub-tourisms, such those related to history/remembrance (POIs nos. 11 & 17), art/architecture (POIs nos. 4, 6, 7, 9, 10, 13, 14 & 18), museums/cultural monuments (POIs nos. 1, 2, 8 & 15), religious tourism (POIs nos. 5, 12 & 19) and, lastly, music (POIs nos. 3 & 6).

Alongside these 19 POIs there are interesting resources that merit being pointed out: Sečovlje Salina Nature Park, Strunjan Landscape Park, Škocjanski zatok Nature Reserve, House of the Sea, and the Koper Regional Museum.

6.2. Details of the route

The itinerary begins at the Salt Pans of Sečovlje before continuing in the southern part of the small Seča peninsula near Portorož with a visit to the open-air museum of *Forma Viva* – a theme park entirely dedicated to contemporary stone sculptures (Božeglav Japelj 2009) – and ends in the hinterland of the village of Hrastovlje at the church of the Holy Trinity. It is a multi-themed route that includes walled towns, castles, UNESCO sites, historic hotels that are considered to be cultural monuments, European Destinations of Excellence (EDENs), nature reserves, etc. Within it are connected around twenty very varied points of natural, economic and cultural interest. The majority of these



Figure 2. Interior of the Cathedral of the Assumption and Saint Nazarius in Koper. Source: photo by R.G. Rizzo, 2019.

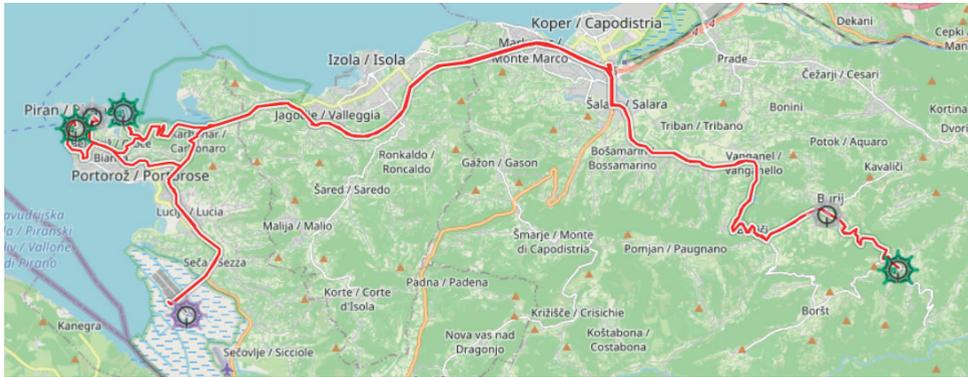


Figure 3. The QNeST route in Slovene Istria. Source: <https://application.qnest.eu/routes>.

are also described (on the website) as Landmarks, and have the characteristic of displaying in a diachronic manner significant elements of the history of this area: from the Roman period in the Simon's Bay Archaeological Park in Izola with its remains of a seaside villa (Lazar n.d.; <https://www.youtube.com/watch?app=desktop&v=9xBg6htVQAg>) and finds from the ancient port before gradually offering evidence of many subsequent periods, through to that of contemporary history. Sometimes the POIs are found as individual elements; others are grouped together, as in the case of the old town centres of Piran and Koper.

Otherwise, some cultural POIs could be combined, considering them according to their field of interest: one might focus on painting, for example, and then be drawn towards music. In the case of paintings, because the two towns of Koper and Piran contained a high concentration of churches, one finds in those that have remained or in the museum of Koper pictures of great worth. One name is enough to prove the point, and is one of the area's great attractions: "Carpaccio", from the 15th and 16th centuries, whether we are talking about the father (Vittore) – to whom a square in Koper is dedicated – or the son (Benedetto) (Maier 1943: we cite this work, because it too may be considered a piece of cultural heritage). Their paintings are to be found in Koper, in the Cathedral of the Assumption and Saint Nazarius, in the Rotunda, and in the Regional Museum. Koper – EDEN 2017 Town for Cultural Tourism and a Silver green destination (see § 4.2, tables 7 and 8) – was also, for centuries, an important centre for music. Notable are the many musical instruments being

played by delightfully executed angels in altarpieces, oil paintings and frescoes. These works of art can be found in POIs of cultural heritage already mentioned in Koper, but also in a little rural village like Hrastovlje, in a painting in the church of the Holy Trinity by Giovanni de Castua from around 1490 (Koter 2013). This church represents an unusual example of a fortified place of worship, and we propose it at the end of the route. Piran, on the other hand, was the birthplace of Giuseppe Tartini, an important composer and musical theorist who is today famous worldwide.

7. Beyond QNeST: some reflections in conclusion

Based on the above analysis of the tourist context of Slovene Istria – both in terms of tourism resources and tourist flows – one could give a positive reply to both questions posed in paragraph 2. Researching in internet, in the guise of a hypothetical tourist, allows one to maintain that the routes are well illustrated, both on the web and in the advertising material. These are accompanied by a rich selection of long-distance trails drawn up by organisations in Slovenia, partly as a result of European Community-backed projects. We draw your attention, for example, to the following websites and/or documents:

- <https://www.ita-slo.eu/it/INTER%20BIKE%20II>;
- https://issuu.com/visit-idrija-slovenija/docs/pohodni__tvo_2016_it; <https://issuu.com/slovenia/docs/ciclismo-slovenia-it>;
- <https://www.slovenia.info/uploads/publikacije/kolesarstvo-zemljevid/cicilismo-map-slovenia-it.pdf>.

Even the local trails are well-detailed. The municipality of Koper is, for example, advertised with routes for all kinds of excursions: on foot, on horseback, etc. (see <https://www.koper.si/wp-content/uploads/2019/02/Guida-15-sentieri-tematici-scelti-ITA.pdf>). These itineraries are also highlighted by communities, like those, for instance, proposed by the link <https://it.wikiloc.com/percorsi/escursionismo/slovenia>.

At an institutional level, one can infer that the Slovenian Tourist Board – whose work can be consulted in terms of a *double face* tourism proposal (i.e.,

“ordinary” turista and business tourist) on the www.slovenia.info/it website – does not operate as an isolated entity. It has put into effect (and is seeking new) collaborations and synergies with various bodies and/or subjects in order to implement its network in the most diverse tourist segments and also on various scales, including a transnational one (see, in this regard, the informative/promotional video interviews with Aljoša Ota, in charge of the Slovenian Tourist Board for Italy: <https://www.youtube.com/watch?v=eY-jmVP2R-I>, <https://www.youtube.com/watch?v=QvT1kwDNsKo>; <https://www.youtube.com/watch?v=gTvEudw19hU>).

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East Macedonia and Thrace

by Anthi Panagiotou, Valentina Castronuovo

1. Introduction

The objective of the QNeST Project – Quality Network for Sustainable Tourism – funded under the Adriatic-Ionian Programme Interreg V-B Transnational 2014-2020, Axis II SO 2.1 and co-funded by ERFD and IPA II – is to promote for tourism purposes the local cultural heritage (nature, art, handicraft, food, traditions, rites, practices and customs) of the Adriatic-Ionian Region and enhance their accessibility.

Among the results of this project is the construction of an Adriatic-Ionian network of operators active in the promotion of sustainable tourism and the creation of a “quality brand” which aims to fulfil the tourism development potential of the cultural, historical and natural heritage of underdeveloped geographical areas. Moreover, the project seeks to promote the traditional products of specific geographical areas, emphasising traditional food products, and to create production chains of small producers from specific areas.

The Xanthi Chamber of Commerce and Industry, a QNeST Project Partner, is a local organisation of businesses and companies in Xanthi whose aim is to develop and further the interests of local companies and businesses. It shares the overall objectives of the Project in terms of providing support for tourist sector SMEs in order to increase their interaction and performance. The region it represents offers travellers a unique opportunity to discover a part of Greece with a multitude of coexisting landscapes, from the Rhodopi mountain range with its endless forests to the Evros River. Thanks to its strategic geographical location, it connects the north-eastern part of Greece with Bulgaria and Turkey. Xanthi is where the saying “East meets West” comes to life.

After an initial examination of the geographical and tourism characteristics of the Greek region affected by the QNeST project, the chapter focuses on the proposed itineraries set out in the planning phase and on their sustainability.

2. Eastern Macedonia and Thrace Region (Greece)

2.1. Regional overview

The Eastern Macedonia and Thrace Region consists of the five districts: Drama, Evros, Kavala, Xanthi and Rhodopi. The census of 2020 reported a total population of 598,613.



Figure 1. Geographical map of the Regional District of Xanthi. Source: Xanthi Chamber of Commerce and Industry.

The Regional District of Xanthi belongs to the Region of Eastern Macedonia and Thrace, which is one of the thirteen regions of Greece. The Region lies in the northeast corner of the country, more specifically comprising the eastern part of Macedonia, the whole of Western Thrace and two large islands in the Thracian Sea, Thasos and Samothrace. The Regional District of Xanthi consists of four municipalities (Xanthi, Abdera, Topeiros, Myki) and it borders Bulgaria and the Thracian Sea (figure 1). According to the provisional results of the 2011 ELSTAT census, the permanent population of Xanthi Prefecture is 63,083 inhabitants.

South-western Thrace has been inhabited since Neolithic times. Settlements and artefacts have been found in the plains of Xanthi dating back to 4500 BC. The general development of the area during the Ottoman occupation was affected by the cultivation of tobacco after the 17th century. In the 18th century, Genisea and Xanthi became known worldwide thanks to this crop.

The prefecture of Xanthi covers 1,793 sq. km, of which 27% is arable land, 63% forests and 3% meadows in the plains. The economy of the region of Thrace and Eastern Macedonia, which saw a big drop in GDP in the years 2008-2018 (-24.2%) and has a high unemployment rate (16.2%, only one percentage point below the national figure of 17.3%), is still based on agriculture and the processing of raw materials. In addition to tobacco, the main crops are cotton, sugar beet and cereals, with processing and industrial production particularly active in the tobacco manufacturing, textile and agri-food sectors. More recently, particular attention has been paid to fishing, as can be seen from recent exchanges with some Italian regions (e.g. Calabria). This includes a commitment to applied research in the fields of fishing effort control, the development of marine reserves for cultural activities and tourism, and artificial barriers for fish repopulation.

2.2. *Heritage assets*

Thrace is a multicultural region that arose during long-standing cohabitation with other cultures and a space where the memories of the East and the Balkan hinterland are kept alive. The prefecture of Xanthi, which is characterised by diversity and variety, is of unique interest from the natural and historical points of view. The beauty of the area's natural environment remains relative-

ly unknown. The forests of the mountainous region, the “Nestos Gorge”, the Thracian Sea coast and Lake Vistonis will fascinate everyone who likes nature.

The villages of the mountainous region are characterised by particular natural beauty, rich folklore and cultural wealth. They became known thanks to the cultivation of an exceptional variety of tobacco, *basmas*. Their residents are Muslims and are characterised by industriousness and deep religious faith. Mosques, traditional bridges over the rivers Kosynthos and Kompastos and the traditional picturesque costumes are the things that attract visitors.

The prefecture of Xanthi conserves extensive architectural heritage, including industrial buildings (tobacco warehouses), residential complexes (the Old Town) and individual monuments dotted across the area. In recent years and especially after 1829 the town of Xanthi was rebuilt because of the two earthquakes that destroyed it. Remnants of those years can be seen in the Old Town of Xanthi with its traditional and neoclassical residences. Xanthi's old town is the best conserved example in the Hellenic space of the communal administration of New Hellenism, and thanks to its conservation, today it represents an outdoor museum of architectural styles. The old city of Xanthi is a prime example of local architecture that allows the visitor to discover its eclectic traditional mix of buildings strongly influenced by 19th-20th century European styles (Lianos *et al.* 2004).

The region is well known for its monasteries and churches. Right in the middle of the Rhodopi Mountains stands The Monastery of Panagia Archangelotissa (The Virgin Mary Archangel), built in 1848 and rebuilt in the 20th century after a fire. Many visitors make the pilgrimage to this sacred place to pay homage to the Virgin Mary. There are many museums to discover in this region too, such as the Folk Museum in the Old Town of Xanthi.

Well-known and highly appreciated both within as well as beyond the borders of Greece, the local cuisine is about straightforward flavours. Thanks to the fine quality of the raw materials, the local gastronomy offers a variety of delectable traditional dishes, complementing the region's special cultural identity. Excellent Mediterranean local products from the region include wine, table grapes, grape must, olives, extra-virgin olive oil and olive oil products, jams and traditional fruit sweets and cereal products.

Many traditional events are still held. Every year, during the Carnival period, Xanthi's Thracian Folklore Festival celebrates local history and culture,

the high point being the last Sunday of Carnival when a unique parade of floats takes place. Old and young get carried away in the colours, sounds and smells of an unbelievable satirical dance. The event finishes with the burning of Tzaros, inspired by local folklore. The other big cultural event in Xanthi is the Old Town Festival.

Interesting tourist routes have been planned by the Ministry of Tourism, and several measures have been enacted by the Region of East Macedonia & Thrace, municipalities and private companies. In addition to various religious routes, these include the European projects for a “Labours of Hercules” cultural route (which aims to create a historic and cultural tourist path based on the life, travels and labours of the most important hero of Greek mythology, Hercules) and a “Tobacco Road” (based on the tourist route associated with the “tobacco road” in Europe and the Mediterranean region).

In summary, the Nature – Culture – Place triad is the core of the tourist identity of Eastern Macedonia and Thrace (figure 2). What makes these three dimensions special is the way in which they are combined, creating the feeling of a place full of images, sounds, tastes, colours and activities that awakens the senses and does not go unnoticed even by the most demanding visitor.

Nature, rich and special, genuine and authentic, is undoubtedly the region’s most important and powerful advantage, with incomparable diversity and contrasts, exceptional beauty, high ecological value and biodiversity. Moreover, the coexistence of a variety of Place structures – urban, semi-urban and rural environments, islands, picturesque villages and tourist attractions – re-

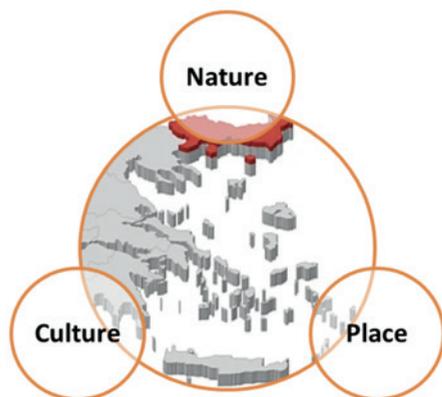


Figure 2. Triad forming the core identity of Eastern Macedonia and Thrace Tourism. Source: our presentation.

sults in a diversification of the available assets and the creation of potentially related service systems.

The culture factor is directly related to human activity at the destination, enriching the conceptual content and strengthening the identity of the region. The multicultural mosaic found in the region, unique in Greece but also in the wider Balkan and Mediterranean regions, is one of the strongest structural features of its identity. The area's special cultural and experiential physiognomy stems from the fact that the place was and continues to be a crossroads of peoples, ideas and cultures, harmoniously integrating and giving rise to a variety of different elements (customs, traditions, arts, tastes, languages, etc.).

2.3. Tourism development

In the area of Xanthi, tourism is now one of the most successful industries, based primarily on the potential of cultural heritage, which is seen as a strategic source of general socio-economic development for the region. Xanthi boasts a special range of tourist assets, influencing its attractiveness of as a destination thanks to its cultural and social characteristics, customs and traditions, along with archaeological sites, mythology, wetlands and biodiversity.

The past few years have seen increased interest among tourists in cultural tourism, a result of changing consumer culture and awareness of the importance of cultural heritage in tourist destinations. The tourism sector has also developed strongly on the large island of Thasos, which can be reached by ferry from the ports of Kavala (hydrofoils) and Keramoti in Greek Macedonia.

The region hosts an international conference on Fish Tourism in Abdera every year to promote eco-friendly methods of commercial fishing and support its local fishermen. This area of Greece combines many types of outdoor activities including hiking, caving, kayaking, bird-watching, horseback riding and agro-tourism. The Nestos river and delta are superb for outdoor activities from rafting to bird-watching. Lake Vistonida and Xanthi's lush forests are equally enchanting. Via an ongoing series of strategic policies in complex operating environments, the Ministry of Tourism, the Region of Eastern Macedonia & Thrace, various municipalities and private companies are seeking to adapt to an interdependent production process in a dynamic mix of competition and cooperation.

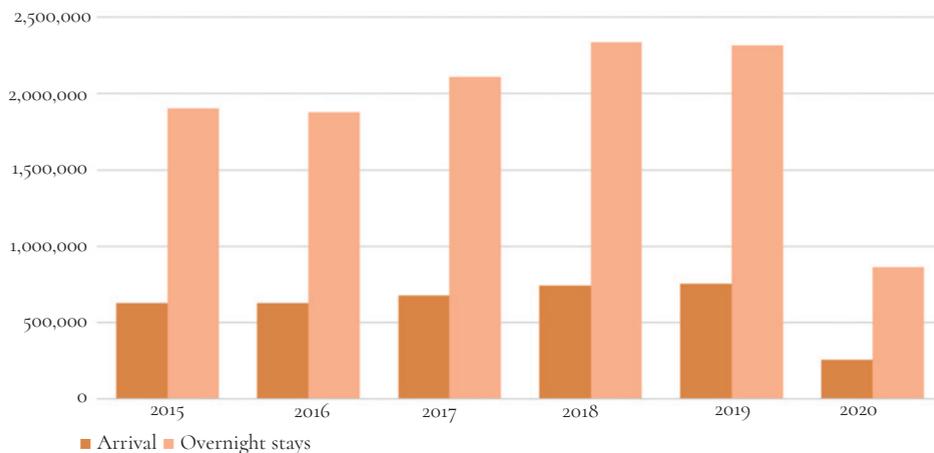


Figure 3. Arrivals and overnight stays, 2015-2020, in Eastern Macedonia and Thrace. Source: our presentation based on Hellenic Statistical Authority data.

According to data from the Hellenic Statistical Authority, from 2015 to 2019, arrivals grew by around 20% and overnight stays by 21.6%, demonstrating growing interest in the destination (figure 3).

Despite the growth of these flows, which in the pandemic year saw falls of 66.01% in arrivals and 62.84% in overnight stays compared to 2019, tourist visits to Xanthi and the surrounding area remain generally limited. Thrace is still seen as a distant land that is difficult to access.

The construction of the Egnatia Highway during the last decade brought Xanthi nearer to the rest of the Hellenic space. It is thought that the area of Xanthi has the potential to become a domestic and international tourist destination with proportionate economic, social and national benefits.

3. The Greek QNeST routes

In accordance with the project's objectives and with the aim of co-designing an open tourist system along the Adriatic and Ionian routes, the Eastern Macedonia and Thrace Region has identified local and trans-regional routes, paying particular attention to regional features, accessibility and well-being. With the aim of contributing to the creation of sustainable quality tourism and the

promotion of food and wine activities related to the Mediterranean Diet (in particular the olive oil and wine), 4 local and 4 international itineraries, described below, have been identified in the “Xanthi” pilot area. The routes are partly overlapping, the trans-regional itineraries showing elements of continuity with other project partner countries.

“Creativity” is a hallmark of the itinerary system, driving the improvement of all of its components, and enabling the achievement of higher operational standards, whose extension and application can also be envisaged in other regional contexts (Messineo 2011).

3.1. *QNeST Local Routes*

3.1.1. Routes of the Olive Tree

The presence of the olive tree has marked not only the landscape but also the everyday lives of the Mediterranean peoples. As a mythical and sacred tree, it is associated with their rites and customs and has influenced their lifestyles, creating a specific ancient culture that we may call the “olive tree civilisation”: The Routes of the Olive Tree follow in the footsteps of the Olive Tree Civilisation, linking Greece to other Euro-Mediterranean countries. Over the years, travel has formed a bridge between administrative and administrative applications in the Mediterranean area.

3.1.2. Myths & Culture

The “Labours of Hercules” itinerary aims to create a Mediterranean cultural tourist route with sub-routes in project countries which link areas where Hercules performed his labours. The ultimate goal is the establishment of a structure that will preserve the social, cultural and economic life of the whole Mediterranean region in terms of infrastructure, culture and economy, but also create added value by means of a sustainable cultural product.

This cultural tourist route has some more specific goals: promoting cultural products; restoring and enhancing local culture and traditions; developing educational programs that will lead to the promotion and greater knowledge of literature, arts and the route itself; promoting studies, research, conferenc-

es, publications, exhibitions, performances, competitions and other thematic initiatives and measures relating to the route; strengthening local tourism and cultural products via innovative measures; and creating conditions for the development and commercial promotion of products related to the route.

3.1.3 Wine Route

The wine map of Xanthi prefecture is dominated by the vineyards of Abdera. The area is part of the Dionysos Wine Route and focuses on wine and cultural tourism, which is combined with archaeological sites, the Byzantine Polystylos and the Archaeological Museum of Abdera, ensuring an unforgettable trip for all visitors.

3.1.4 Way to Jerusalem

The area of East Macedonia and Thrace is inextricably connected with the historical evolution of Christianity and Orthodoxy in Greece and Europe. The arrival of Apostle Paul in Philippi in the spring of 50 AD marks the introduction of Christianity to the western world.

During the Byzantine period, in the 9th and 10th centuries AD, the area flourished as a Christian and monastic centre. After the 10th century, the administration and development of the monastic state of Agion Oros (Mount Athos) had a significant impact on the area of Eastern Macedonia and Thrace. In that period, monasteries were not only centres of faith and devotion, but also institutions of Greek education and culture.

Unfortunately, the repeated invasions and conquest of the area by foreign armies over the centuries, including three periods of Bulgarian control in the first half of the 20th century, led to the plunder, abandonment and destruction of many sacred monuments. However, the large number of sacred monuments still conserved today represent a notable attraction for the area's visitors and many pilgrimage buildings still can be found in the Region of Eastern Macedonia and Thrace.

Xanthi is located in a prime geographical position. The natural highways and old commercial routes connect the town with the inland Balkan areas to the north. Together with its ancient port, Abdera was crucial to commu-

nication between the residents of the north and south for a long period. The town is world famous for its philosophers (including Democritus, Protagoras and Anaxarchos), the historian and philosopher Hecataeus of Abdera and the lyric poet Anacreon. The town's ruins can be still seen in Cape Balastra. They cover seven small hills, and extend from the east to the west side of the port. On the southwest slopes there are the ruins of the medieval settlement of Polystylos.

Abdera was the honorary capital of the Roman Catholic Church in the province of Rhodopi. It was thus common for pilgrims to Jerusalem from nearby areas of Balkans to pass through here on their way to visit and pray in the Holy Land, and much evidence of this traffic remains in Xanthi today. This includes the "holy brochures" from the Holy Land, given to the pilgrims of Jerusalem as souvenirs of their trip. Sanctuaries, monuments and stories from the Old and New Testament that are related to the holy story of Christianity are portrayed in various representations.

In modern times the region of Xanthi continues to keep close ties with Jerusalem. Xanthi residents make frequent visits to Jerusalem during major Christian holidays such as Easter and Christmas, as well as during summer.

3.2. *QNeST International Itineraries*

3.2.1. Wine and Olive Oil Itinerary

The theme of the Mediterranean Diet, with a particular focus on oil and wine, is common to all the countries of the EUSAIR area. The landscapes, characterised by olive groves and vineyards, bear witness to the common culture of the Euro-Mediterranean area, although each region has its own cultivars and production techniques. Oil and wine have always been used not just in food, but also in the rituals of the various belief systems practised on the shores of the Mediterranean. All the areas involved in the QNeST brand are crossed by routes linked to oil and wine.

Along these routes in Xanthi, the olive trees stand out in all their majesty, while the wine route bears witness to the region's historic identity.

3.2.2. Travellers, merchants and pilgrims

The Mediterranean is a sea enclosed by land, since time immemorial connecting the various cultures that have evolved along its shores. Since ancient times, this sea has been crossed by peoples, merchants, pilgrims and travellers of all kinds, carrying with them cultural baggage and experiences that have shaped its regions, traditions, languages and cultures. The QNeST Brand promotes cultural activities via specific itineraries. Closely connected to this theme is “The Way to Jerusalem” in the district of Xanthi.

3.2.3. Dry Stone

Traditional dry-stone building techniques, recognised by UNESCO as World Heritage, are another shared feature of the regions surrounding the Mediterranean Sea. The QNeST Brand promotes routes connected to this important theme: used to build boundary walls, small circular buildings of various kinds, retaining walls for agricultural terraces and underground places of worship, the stones tell the history of the locations where they are deployed. In the district of Xanthi, “Myths and Culture” is a historical and cultural tourist route linked to the myth of Hercules.

3.2.4. Water

Water is something that the countries of the Adriatic-Ionian area all share. In terms of nature, it includes wetlands, springs, rivers and lakes both near the coasts and inland. In terms of human activity, it plays a role in religious rites, gastronomic traditions and even health, as seen in the use of thermal spring waters since ancient times. This is reflected in the proximity of places of worship, cisterns, canals and spas, evidence of the day-to-day link between water and the human population. Then there is the sea, which hosts a vast ecosystem and constitutes a shared asset for the various populations. Over time it has enabled these populations to communicate with each other thanks to the art of navigation. The proposed itinerary includes daily routes from Xanthi to Thasopoula along the Nestos River, making the area’s cultural and natural heritage a unique immersive experience.

4. Conclusions

The creation of these routes relies heavily on the presence and cooperation of a diverse and dynamic partnership. The QNeST Brand Members (19 entities including tour operators, Ho.Re.Ca enterprises and farms), QNeST Stakeholders (5 at the start of the project) and numerous traditional points of interest and events (organised local systems) in Eastern Macedonia and Thrace represent the driving force behind the development of QNeST routes (figure 4).

Multi-stakeholder partnerships between private, public and non-profit sector representatives are fundamental for tourism destinations (Lane, Bramwell 2000). Tourism partnerships emerge in a variety of settings and have been extensively researched (e.g. Beritelli 2011; Czernek 2013; Jesus, Franco 2016; Vogt *et al.* 2016; Peroff *et al.* 2017; Pilving *et al.* 2019), highlighting tourism partner-



Figure 4. *The QNeST Vision (Brand Members – Stakeholders – Points of interest – Traditional events) in Eastern Macedonia and Thrace (Greece). Source: our presentation.*

ship life cycles and aspects that influence the evolution of networks in the context of sustainable tourism. The design of the routes requires the involvement of the community and local stakeholders (including entrepreneurial associations), in addition to that of the public authorities (at whatever level of administration and government of the territory), in establishing the strategies to support and promote cultural routes (Torres Bernier 2006; Trono 2019).

The Greek QNeST routes provide a concrete opportunity to build and promote a quality tourist and cultural product, which will also help to boost development in hitherto marginal areas, often excluded from traditional competitive strategies and large tourism circuits, supporting integration of the regional goods and services on offer.

The good geographical position and accessibility of the region, its great potential for the development of various products based on natural and cultural heritage and a rich cuisine all make the strategy adopted by the Eastern Macedonia and Thrace Region (Greece) strong and implementable. This requires the informed participation of all relevant stakeholders, as well as strong political leadership, in order to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary.

In this sense, cultural routes translate into an opportunity for integrated enhancement of the many economies involved, as well as an element helping to activate virtuous processes capable of giving new impetus to the proper transformation of the territory.

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Conclusions

by Anna Trono

The social and economic impact of the Covid-19 pandemic has clearly been devastating for all sectors of the economy, above all tourism, both globally and in the areas of interest to the QNeST project. Here, as elsewhere, the lockdowns and the consequent travel restrictions imposed by individual national and local governments led to a serious drop in tourist arrivals and presences, with strong repercussions in terms of employment and GDP in the countries of arrival.

This serious situation requires a renewal of the range of products and services on offer, in line with new market expectations, and the formulation of new strategies to promote a kind of tourism that respects local culture and the environment, i.e. sustainable tourism. This is called for by the Lanzarote Charter (1995), as well as Agenda 2030, approved by the United Nations in September 2015. This invitation to uphold sustainability has been reinforced by the pandemic, prompting calls for a review of models and behaviour. In place of the aggressive tourism and overtourism seen in some of the most popular destinations, which is responsible for a gradual loss of their identity, their *genius loci* and thus, in part, their attractiveness, there is now a need for environmentally friendly tourism.

Coronavirus has certainly provided an opportunity to reflect on and question established tourism models, which may not have been ideal, and which in summer 2021 began to reappear in some very popular tourist locations including beach resorts on the Adriatic and Ionian coasts of Croatia, Puglia and Slovenia. There is no doubt that many of the traditional tourist attractions (sun, sea and sand) will continue to be successful, but it is also likely that new tourist models will be developed, specifically on a small scale, focusing on cre-

ative tourism, experiential tourism and distance tourism (using virtual tools), all of which offer the consumer a feeling of well-being.

Among these new (and not so new) models are cultural routes and itineraries, facilitated by new public policies aimed at developing peripheral and marginal areas with low population density, which have already become popular as a result of the proximity tourism driven by the pandemic.

The QNeST project has focused on this model, taking up existing cultural routes and proposing new ones, recognising their competitive advantages. These routes, which leverage the regions' considerable natural and cultural heritage, both tangible and intangible (crafts, Mediterranean diet), reinforced by the presence of numerous UNESCO sites, can form the cornerstone of a holistic tourist satisfaction process. However, in order for the route to be successful and "strategic" in terms of the range of goods and services on offer, its construction, promotion and management need to respect certain distinctive elements that can ensure efficiency and "durability", which the World Tourism and Travel Council associates with sustainability in tourism. Indeed, the route will need to meet the current needs of tourists and host communities, safeguarding and promoting the places while improving the prospects for the future (MiBACT p. 45).

Among others which need to be considered, the feasibility of cultural itineraries and routes is ensured by the following elements: the central motivation and attraction is a theme on which to build activities and proposals; the focus is on its historical contextualisation of thematic content and on the structuring of the individual segments of the route; the route ensures a diversified range of tourism goods and services, engaging with the market partly via promotional and sales tools offered by new means of communication and technology.

In the construction of a route and its associated tourism goods and services, the resources required for it to operate properly must be taken into account. These include, first and foremost, regional facilities (accommodation and catering, transport infrastructure, services, communications, intermediary services for the sale of tourism products, public and private tourism support services), but also knowledge and assessment of the resources (cultural, natural, economic and structural) involved in the construction of the route/itinerary. Last but not least, there is the involvement of the local community and stakeholders (e.g. trade associations).

These were the main concerns of the QNeST project, considered right from its inception in the years before the pandemic and reiterated with QNeST PLUS.

The creation of the QNeST sustainable tourism brand drew attention to the principles of organisation and unity in a system of stakeholders characterised by the interaction of subjects with divergent interests and aims, which are expressed via a complex governance process. In addition to regional expertise, the latter requires the abandonment of the logic of competition in favour of a shared vision of the project involving agreements between public and private players (entrepreneurs and other subjects, including those from outside the area of interest). The aim is to encourage the participation of all in an integrated plan, while maintaining social cohesion through new communication strategies among the interested parties.

It is hoped that the presence in the pilot project areas (among others) of stakeholders with a quality brand which emphasises the value of quality goods and services for lasting tourism will improve strategic communication. Enhanced by the presence of an efficient innovative ICT project platform and the use of new digital technologies, this will enable the strengthening of the network and the construction of a tourism system in the Adriatic-Ionian Region.

Participation and construction of the stakeholder network are important because they are based on a perspective that puts their decision-making power at the heart of tourism development and encourages social dialogue based on the principles of participation, solidarity and *responsibility*. Worthy of special attention is the principle of responsible tourism, with reference to the need for empowerment of local populations, in accordance with a concept that is complex yet at the same time vague and non-specific. It entails self-determination and the acquisition of authority, understood as a learning process that requires tourism decisions to be taken in consultation with the inhabitants of the destinations. This is a form of conscious tourism, characterised by two-way awareness, involving supply and demand, hosts and guests, and it has an exquisitely cultural dimension. The result is a circuit which, on the supply side, overcomes the limitations of some of the sector's economic characteristics and incorporates content of a social nature, starting with the cultural identity of the host regions and communities. Awareness is strengthened by a tourist demand that is itself aware, creating a virtuous circle of awareness, satisfaction

and well-being on both sides of the hospitality equation. On the “tourist” side, it affirms the value of research into the context and personal self knowledge. The circuit is a necessary and sufficient condition for the creation of a positive feed-back relationship between supply and demand, a condition and a sign of a resilient and self-reinforcing regional tourism system: one that is, precisely, sustainable, i.e. able to last and evolve positively over time (Tinacci Mossello 2014).

It will also be necessary to set up an institutional structure with representation and decision-making power with respect to the main players involved in the creation and operation of the network, starting from the routes and itineraries proposed by the project.

Indeed, the creation of tourist products must take account of the public authorities – at all levels of administration and government of the regions in question – which are responsible for infrastructure, safety, business support, training and innovation. Last but not least, for the promotion and marketing of the route, a plan for the itinerary/route and the entire area must be drawn up (Torres Bernier 2006; Trono 2015).

It will thus be necessary to devise a strategy for the cultural routes that is suited to the new demands of users who require accessibility and a focus on the quality of life. Indeed, increased sensitivity towards eco-compatible production is leading to the rediscovery of the natural dimension, the identification and emergence of new tourist destinations and the demand for a series of recreational and aesthetic activities. There is a growing demand for products linked to the local culture and economy, prompting measures to promote eco-sustainable local activities and greater integration with traditional tourist attractions. Wellness centres, cyclo-tourism and tasting of local products (especially those linked to the Mediterranean diet, such as extra-virgin olive oil and wine), have all been cited as activities of interest and factors of attraction for sustainable tourism in the context of the QNeST project.

As well as being products with many dietary health benefits, extra-virgin olive oil and wine contain other substances of interest, which the cosmetics industry in particular has brought to market with strong growth. Within the project, food represents an opportunity to promote the values of the past and to functionally integrate them with the present as a “resource” not only in cultural terms but also as a purely economic benefit (Croce, Perry 2010). In the oil

and wine itinerary, the gastronomic aspect accentuates the sense of rurality, with particular emphasis on sites of local agricultural production, in a sort of journey of sensory knowledge. From the places of production to distinctive local products, fulfilling the potential of these regions means engaging with their flavours and interpreting their cultural values, rediscovering ancient processes linked to peasant traditions. The progress made by the agri-food sector has not altered the ancient character of the product. On the contrary, quality has grown over time, together with the range of products available, and today the sector is able to satisfy a wide variety of consumer needs. We are seeing the spread of a model of tourism which, in accordance with the new “soft economy” approach, safeguards and promotes the region, the quality of life and local cultural heritage. The range of goods and services on offer lies within the framework of cultural tourism, in which an area’s customs and *modus vivendi* are reflected. Indeed, it is frequently associated with traditional music and dance, feasts in honour of patron saints, food festivals and cultural and religious events. We are thus dealing with a combination of experiences in which the local population, rural environment, history, religiosity, fragrances and flavours are rediscovered via poly-sensory tourism.

A key element of these new dynamics of production and experiential tourism is traditional craftsmanship, which is a key component of the culture and economy of the QNeST project regions. Signs of the rebirth of these areas can also be seen in the ability to invest in technological knowledge and to develop examples of entrepreneurial culture. This has led to the recovery of a fascinating world that shows how manufacturing know-how and excellence – be it an ancient Venetian gondola, the art of sculpture and papier-mâché in the Salento, or traditional Croatian lace – is both cultural heritage and a community resource. The “Open Factories” and “Open Wineries” initiatives, which encourage visits to places of production and boost tourist flows, promote the image and culture of manufacturing and local craftsmanship, becoming a tool of growth and innovation. It is clear from the above that competitive advantages are increasingly attributable to regional connections, interdependence and the combination of identity and visibility. All of these are associated with the presence of a large number of activities and goods in the same area, producing “system-areas” where the economy and culture are closely linked, and are also attentive to innovation and research.

The QNeST brand, which selects and rewards operators who are attentive to quality tourism in the Adriatic-Ionian regions of the eastern Mediterranean, is without a doubt one of the most interesting innovations in the ADRI-ON programme, which may also herald new political and economic strategies within the EUSAIR macro-region.

It is hoped that the integrated offer of high-quality cultural, environmental and food and wine assets, provided by individual or associated tourism enterprises with a quality label, will encourage the abandonment of futile local rivalries within the Adriatic-Ionian Region, giving rise to so-called *sponge territories* that produce tourism in which quality is an expectation. This means quality of both demand and supply, in terms of tourism services (hospitality, information and safety), but also in terms of upgrading the local transport network; making the most of architectural, historical and artistic heritage; refurbishment and renewal of urban, suburban and rural settings; environmental recovery; enhancement of local activities (agriculture, commerce, handicrafts); and the promotion of distinctive local characteristics and traditions and leisure activities.

However, achievement by the Adriatic-Ionian Region of the desired results requires both the active involvement of local communities *downstream* and a valid planning strategy *upstream*. The latter must ensure the involvement of institutions, enterprises and local associations, which together form a network able to contribute to an economy that respects the cultural value of the regions concerned and to the development of sustainable tourism. This assumes the reskilling of local management and the creation of new and specific professional figures that help the local authorities to engage with the new concept of “self-sustainability” and the adoption by the regional government of a system – and policy-based approach.

The Faro Convention, which emphasises the value of cultural heritage for society, stresses the need for the participation of regional authorities and local communities in the protection and safeguard of cultural heritage, encouraging the creation of a system with effective *participatory governance* (i.e. on multiple levels among a range of stakeholders) and *strong cross-sector cooperation*.

The creation of “community enterprises”, as suggested by Federculture, could contribute to the creation of an economy respectful of the cultural value of the regions and to the promotion of sustainable tourism. Not only would they ensure the innovative and sustainable management of cultural resources, but they

would also help to identify and understand the motives of tourists, a key element in the enhancement of destinations. Also useful would be the creation of tourist observatories and the launch of experiential marketing initiatives aimed at gaining in-depth knowledge of the value of cultural heritage and the profile of the demand. This would yield information useful for monitoring and planning measures, helping to reduce tourism seasonality and the costs arising from congestion, which impact both private property and the community at large.

Following innovative methods inspired by an open and participatory approach, the QNeST project has created a network of interest in regional assets and the values of accessibility and well-being that envisages systematic communication between all the institutions involved and between these and the operators in the sector, in line with the recommendations of Agenda 2030. It is hoped that this network can contribute to the creation of quality sustainable tourism throughout the Adriatic-Ionian Region, creating, in an intermingling of cultures and traditions, an open tourist system that can truly connect the two shores and its people. This will restore to the Mediterranean its ancient cultural role and dignity as a “thinking subject”, putting an end to the multiple and conflicting interests to which *Mare Nostrum* has long been subordinated.

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**UNIVERSITÀ
DEL SALENTO**

*Sustainable Tourism and Cultural Routes
in the Ionian and Adriatic Regions*
a cura di Anna Trono

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redazione: Giuliano Ferrara
progetto grafico: Sara Pilloni

This book has been produced with the financial assistance of the European Union. The content of the book is the sole responsibility of the Department of Cultural Heritage – University of Salento and can under no circumstances be regarded as reflecting the position of the European Union and/or ADRION programme authorities.