

Placemaking and Networking of Heritage for Sustainable Tourism

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Abstract

Heritage as an emotional investment of the citizens is an essential resource for the communities affirming their local identity and establishing the great potential for tourism development. This chapter focuses on how towns in Europe can enhance their heritage by increasing competitive, sustainable tourism by using different tools (digital, collaborative, design) in the networking of heritage sites and placemaking. In this chapter the overall tangible and intangible cultural heritage in small- and medium-sized towns is considered under the term “heritage”. The networking of heritage is represented as a goal for connecting towns through heritage. Digitalization is a useful tool for better networking and placemaking. Networking and overall connection among cities and countries are rather important from different perspectives of tourism development. Small- and medium-sized towns are the focus of the research because they have been shrinking during the last few decades as a result of depopulation and socio-economic factors. Developing small- and medium-sized cities through their heritage promotions enhances tourism as a milestone for urban development and advancement. Sustainable development of tourism can be achieved by strengthening the ties between different actors in the process of placemaking and by enhancing the relations and interactions between tourism, cultural heritage, and local inhabitants using digital tools. One of the goals is to try to depict the connection between physical heritage networks and linked digital tools. Cultural assets are of great importance for revitalizing small cities and endangered towns, but these are not enough if investments are missing. It is necessary to attract investments in order for them to live again, rebuilding the lost commercial activities and public services. Heritage and tourism are closely connected; on the one hand, heritage is one of the significant stimuli for cultural tourism and, on the other hand, heritage sites can improve their preservation by tourism. But the relationship between the two can be conflictual due to a possible overuse and consequent deterioration of heritage sites due to different needs and strategies between the two fields. A new placemaking strategy must be developed that considers how tourism can influence (positively or negatively) the sustainability of cultural heritage as well as the role of heritage in the local identity. One of the specific aims of this chapter is to analyse the relationship between digitalization and the networking of cultural heritage and placemaking and tourism development in small- and medium-sized towns. This chapter highlights the findings and lessons learned from examples around the world, taken from the literature as well as from selected case studies from Romania, Italy, Croatia, Greece and Serbia. By engaging in a critical analysis of the literature and the selected case studies, we hope to present proposals for strengthening heritage potentials for sustainable tourism in small- and medium-sized towns, focusing on the junction of scientific theories and practical experiences. The final intentions of the chapter are to present the variety of possible ways to use networking of heritage sites as a medium

for placemaking but also for the socio-economic redevelopment of towns, in favour of both the local population and prospective tourists.

Keywords

cultural heritage – networking – small- and medium-sized towns – tourism – placemaking – digitalization – sustainability

1 Introduction

The significance of heritage represents an essential resource in the modern age of city redevelopment. The values of cultural heritage and historical assets represent one of the most important resources of European cities. The intelligent, efficient and innovative usage of heritage can, directly and indirectly, lead to tourism development and the overall prosperity of the city or a town. For the purpose of this chapter, the analysed heritage is going to be focused on the cultural heritage as a tangible and intangible type of heritage connected with local context, history, art, science and architecture (McCain & Ray, 2003). Heritage has a strong connection with the local identity of the place, as well as the identity of people, representing an important *genius locus*, especially for small- and medium-sized cities. Therefore, it is rather important, not only for tourism but for the local community, to strengthen the network of heritage and to identify all of the intangible heritage and search for the potential of the forgotten heritage. An additional problem that these cities are facing is the decline in the population, and they need to work on their attractiveness in order to prevent more people from emigrating. Due to a problem of shrinking in the last few decades, these cities are in need of new and innovative solutions that could enhance tourism development.

Heritage itself plays an important role in the city's identity and value, but without smart approaches and funding, the cities are facing serious stagnation in this field. This can be addressed through the innovative heritage presentation and promotion via information and communications technology (ICT) and various methods of digitalization. The existing heritage represents the first step, while the digitization of heritage could enhance heritage networking and placemaking for boosting tourism in the cities. Additionally, the issue of negative effects of tourism should be addressed. Therefore, sustainable tourism is the optimal choice for small- and medium-sized cities. Sustainable tourism is closely connected to the local community and their ability to collaborate in the

process of placemaking. One goal is to depict the possible connection between physical heritage networks and linked digital tools. This chapter reflects on theoretical research, including a focused literature review in the domain of tourism development, heritage, digitalization and placemaking. The main part of the chapter is focused on presenting case studies from small- and medium-sized cities and towns in Romania, Italy, Croatia, Greece and Serbia. One of the main goals of the chapter is to analyse different approaches and present proposals for sustainable tourism strategies and methods.

Theoretical background research relies on the previously mentioned topics of heritage and the development of sustainable tourism in small- and medium-sized European cities. Also, concepts such as heritage networking and placemaking are considered in the context of tourism improvement. Considering one of the main underlined topics of this chapter, the innovative and contemporary methods of heritage utilization and presentation using ICT and digitalization are discussed.

1.1 *Heritage and Its Importance for Tourism of Small- and Medium-Sized Cities*

Living in an urban environment, whether it is a small town in Europe or a big one in China, being part of a society implies recognizing the importance of its past and valuing its heritage as one of the main foundations of national identity (Ott & Pozzi, 2011). Heritage is a collection of tangibles, but also intangible resources inherited from the past as an expression of knowledge, skills, unique natural and cultural values, and traditions. In modern times of destabilization and pandemics, it is crucial to increase understanding and promote the value of heritage among citizens as a part of their legacy (Ezz El-Din, 2019). Heritage may include connections to history, art, science, lifestyles, architecture and scenery (McCain & Ray, 2003), and especially small- and medium-sized European cities are full of different and significant heritage that is often rather neglected or even forgotten by the majority of the population, and the enormous potential is not used.

Cultural tourism, based on the promotion of heritage, plays an important role in what Europe has to offer to tourists. It covers all kinds of visits to cultural attractions (built monuments, places, manifestations). During the last decade and according to UN World Tourism Organization (UNWTO) reports, cultural tourism has been seen as a prospective factor to boost the overall socio-economic development of cities and regions in Europe. Furthermore, it is a crucial element to the attractiveness of European space, equally contributing to all spatial levels: cities, towns, rural areas and regions (Europa Nostra, 2015). Cultural tourism goes hand in hand with intangible heritage, which has been recognized as a key element of market utilization by UNWTO (Qiu

& Zhang, 2021). According to the UNWTO report from 2019 (before the Covid pandemic), Europe had 710 million tourist arrivals in 2019, as many as all the other continents together. The most popular places were cities and towns that possess a unique heritage and cultural values. Small- and medium-sized cities, which have valuable cultural resources and heritage sites, have often lacked the economic and technical resources for their promotion, maintenance and support. Therefore, the role of tourism is even more important for these cities because it has the power to reverse the state of population decline that they are going through and to make them attractive not only for tourists but also for the local citizens and potential investments.

However, another problem regarding tourism is that its growth could be incompatible with sustainability goals. The authorities continue to promote tourism growth despite the arguments that such a trend eventually leads to unsustainable tourism. The development and planning of cultural tourism in small- and medium-sized cities should be planned carefully and, according to the UN Sustainable Development Goals 2030, seek to achieve efficient and eco-friendly goals. Small-scale approaches and bottom-up projects and initiatives could be the solution for a more sustainable tourism redevelopment. Connecting residents to their local heritage and providing their active participation through the placemaking of open public spaces is one of the main methods for tourism redevelopment on the local levels. "Placemaking can be understood as an intentional process of situating, revealing, and creating meaningful environments" (Freeman, 2020). Local communities and their identity depend deeply on the unique ecological features and built structures as well as open public space, and placemaking can be recognized as an important tool in the area of discovering the potential of the local heritage and its promotion.

1.2 *The Role of Digitalization in Heritage Representation*

In the modern era, the usage of ICT has become present in almost every part of city development areas. This refers to heritage and tourism. Digitization of heritage can have multiple benefits regarding the development of tourism: (1) to make a unique and interesting presentation of local heritage and attract more users and tourists, (2) to make local heritage more visible to a wider audience, (3) to help identify forgotten or marginalized heritage in small- and medium-sized towns and, finally, (4) to help towns connect on the basis of similar heritage. Countries and towns that share the same history, historical characters, culture, tradition, art or architecture also share the same heritage. The digitalization of this heritage enables networking among cities. Today, more than ever, we are witnessing the innovative approach in tourism development and branding using digitalization and ICT tools. The modern era of technology

has influenced almost every aspect of our life; ICT enables people to share personal experiences and to draw up new forms of learning, gathering and communication across multiple contexts (Pérez-Sanagustín et al. 2013; Smaniotto Costa et al., 2018). Technologies have enabled and facilitated the creation and consumption of digitized materials that contain information about tangible and intangible heritage. The overall growth of ICT usage led to the development of the term “digital placemaking”. Digital placemaking is an evolving research topic, as well as a practice that focuses on the integration of digitization methods within placemaking (Toland et al., 2020). It can increase and boost social and environmental values, spatial values and heritage assets while deepening and strengthening the connection (Morrison, 2018).

Furthermore, the digitization of heritage is proving to be a useful tool for heritage democratization and the promotion of tourism. When it comes to heritage and tourism, ICT and digitization can have an important role in the process of heritage branding and presentation, as well as social media. Digitalization can enhance the capacity and competitiveness of cultural and historical sites with different forms of presentation (virtual, AR, mixed reality, Bluetooth, wireless beacons, surround sound), as well as communication with different users (tourists, visitors) and shared activities. This can be achieved through creative technological solutions which are capable of facilitating, teaching and accelerating different groups of users (Smaniotto Costa et al., 2018). The future of sustainable tourism in small- and medium-sized cities depends on digitalization and digital placemaking in the context of heritage presentation and mutual collaboration of local stakeholders.

2 Cases

This chapter is focused on analysing the small- and medium-sized cities in Europe that are undergoing the process of population decline (i.e. shrinking cities). The examples are cities in selected case studies from Italy, Croatia, Romania, Greece and Serbia. By critically analysing the literature and selected case studies, we hope to present innovative, unique and digitalized proposals for strengthening heritage potentials for sustainable tourism in small- and medium-sized towns in favour of both the local population and prospective tourists.

2.1 *Golubac, Serbia*

Golubac is a small town located within the bounds of the national park and on the entrance of the Iron Gate (Djerdap), the longest gorge, with probably

the most attractive scenery, along the Danube. It is a shrinking town, established along the Danube waterfront on the border with Romania, with a lack of economic resources and limited accessibility and infrastructure. For Golubac, the heritage network and connection with not only Romanian but also other Danubian cities is of great importance in the process of tourism development. The medieval Golubac Fortress, a structure of national importance, is certainly the most important heritage asset in the vicinity of the town. Since it has been recently renovated by a EU-Serbian joint fund, it became one of the most visited sites in the Serbian part of the Danube riverfront. The town of Golubac is an associated town partner in the Interreg Danube projects: DANURB and DANURB+ (Danube Urban Brand), intending to build regional and local resilience through the valorization of the heritage of the Danube. The main goal of the project is the reactivation of underused heritage and resources in shrinking settlements of the Danube river's peripheral and border regions while creating new possibilities to make the town and its regions attractive again. One of the results of both projects is the development of the digital DANURB Platform for the local stakeholders as well as for the tourists and citizens.¹ The platform has open access enabled through the internet and provides contextual information about the tangible and intangible heritage (site, including photos, maps, locators [GPS], descriptions), stakeholders, action plans, projects, good practice, municipalities, partners, etc. (fig. 2.1).

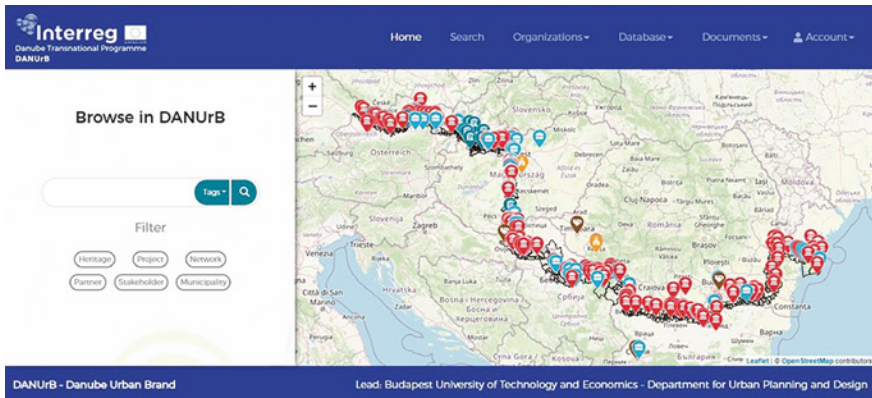


FIGURE 2.1 The DANURB platform with tags and filters. Developed by Istvan Shandor (PocketGuide) and BME

SOURCE: [HTTPS://WWW.DANURB.EU/#/](https://www.danurb.eu/#/)

1 <https://www.danurb.eu/#/>.

Objectives of the DANUrB platform are: (1) to reactivate underused heritage and resources; (2) to create new possibilities for town development (investments, infrastructure, better social conditions); and (3) to increase local prosperity and international tourist attractiveness.

The platform is primarily designed for networking of small- and medium-sized towns along the Danube; for networking of heritage sites (tangible and intangible) between different cities, regions, and countries; and networking of stakeholders and good practices that enhance the potential of heritage. This platform connects towns with similar origins and that share heritage related to history, tradition, arts and crafts. The digital platform is based on QGIS (an open-source cross-platform desktop geographic information system application) and has information and exact location of heritage, stakeholders, good practice, action plans, towns and municipalities (fig. 2.2).

Two kinds of problems were recognized during the design and use of the platform. The first one was regarding different technical issues, and the second was the limitation of working with the local community and stakeholders. The first problem was about unstable servers and coding and the second one was about missing data (information about the ones which were not project partners) and regarding stakeholders who are not motivated to learn how to use the platform. The series of changes and improvements of the platform eliminated operational uncertainties, and the results are reliable operation and continuous availability of the data on the platform. Regarding the second problem, academic partners collected missing information for municipalities and towns and tried to organize several workshops with stakeholders together

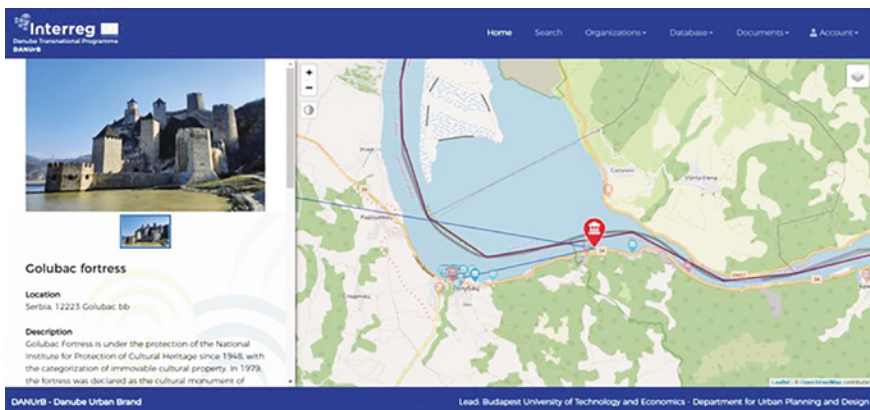


FIGURE 2.2 The DANUrB platform with information about heritage – a medieval fortress in Golubac

SOURCE: [HTTPS://WWW.DANURB.EU/#/](https://www.danurb.eu/#/)

with NGOs to inform and educate them about the opportunities and benefits they could have if they actively participated in the platform.

Improvements in placemaking and the innovative approach mentioned above are providing the exchange of information and good practice between stakeholders not only in one city but from different towns and cities along the Danube. Additionally, learning about well-known (as well as forgotten) examples of tangible and intangible heritage and improving their visibility is valuable for the promotion of tourism and could interest future investors. As a part of the DANUrB platform, Golubac has joined a heritage-based network of the cities and towns on the Danube River. Henceforth, this digital platform will represent a network and a good base for collaboration between the towns through the mutual cooperation of stakeholders and local municipalities, and the development of joint strategies and action plans. It is a good way of exchange of knowledge and good practice.

2.2 *Osijek, Croatia*

The city of Osijek, the regional centre of eastern Croatia, located along the Drava River, is the fourth-largest city in Croatia. It has gone through a dynamic cycle of historical formation, upgrading, diminishing and rebuilding. At the beginning of the nineteenth century, Osijek was Croatia's largest city and had a robust manufacturing and industrial character, qualities that marked its culture and identity. During the nineteenth and twentieth centuries, industrial architecture represented a progressive component in the physical development of the city, but the contemporary loss of the productive capacity of the old factory buildings initiated a period of restructuring. The industrial architecture of Osijek belongs to European modern architecture, which covers the period from the beginning of the twentieth century until 1945. Today, Osijek can be defined as a shrinking city due to its declining demography and structural changes, with scattered brownfield locations in the urban tissue and the undervalued industrial period of the city as part of its identity. Osijek has a rich history and therefore has a variety of heritage and potential for tourism development. The digitalization of its heritage has been presented through the VIRAL project.

The VIRAL project promoted the idea that “the factories may have closed, the machines may have gone, maybe the buildings have been demolished, but the stories can still be collected and retold”. The project has gathered five archives from five cities – Dornbirn (AT), Wuppertal (DE), Osijek (HR), Torres Novas (PT) and Coventry (UK) – to develop social learning materials and methodologies in order to create new competencies for adults in the field of virtual reality (VR) and augmented reality (AR) for the promotion of local

industrial heritage. The aims and objectives of the project is to promote local industrial heritage, increase access to archived heritage, use digital tools for the promotion of the heritage and, in the end, raise capacities and competencies of low-skilled adults in non-formal learning.

Results from activities on digitizing heritage sources are structured in several fields: 360° interactive views and augmented reality sources of industrial products with linked commercial posters, story texts and other graphical presentations (Osijek, HR), eTutorials, 360° videos (Wuppertal, DE) and a case study on post-industrial heritage (Torres Novas, PT). Experiences gathered during the design of the digitized materials were used to produce educational materials. All educational materials address the thematic area of industrial heritage within eight fields: STEM, languages, digital competencies, literacy, cultural awareness and expression, entrepreneurship, civic and personal, social, and learning. Materials are equipped with textual support, including an introduction, a set task, a description of a process, a conclusion and elaborated learning outcomes identifying the knowledge, skills and competencies to be acquired. For every task, the EQF level is assigned (fig. 2.3).

All these materials have a double purpose: to be educational materials and to promote industrial heritage in local communities. The Museum of Slavonia in Osijek, a partner in the project, focused research activities on the Osijek iron and steel factory, museum archive materials and the production of virtual

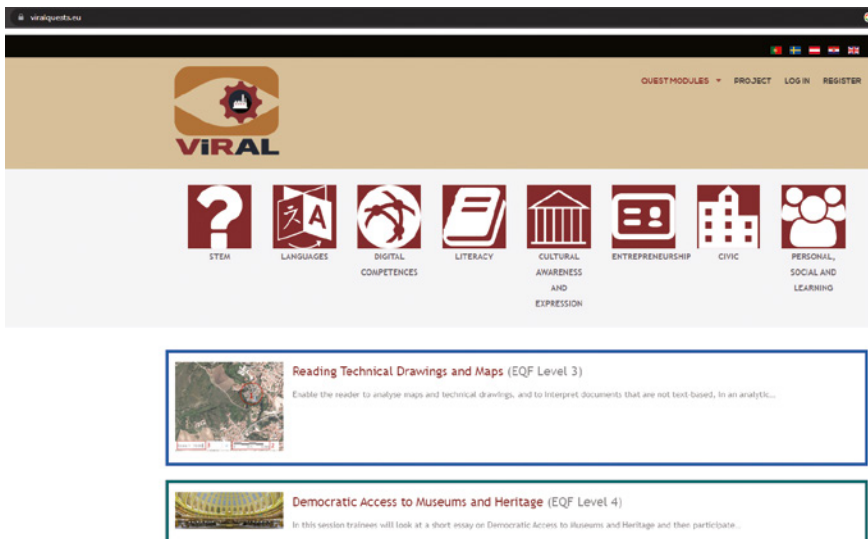


FIGURE 2.3 Educational materials for acquiring new competencies in the field of industrial heritage promotion

SOURCE: [HTTPS://VIRALQUESTS.EU](https://viralquests.eu)

museum tours. They gathered a project team and established a network, including employees of a company that produces 3D and virtual materials, researchers from a university and members of NGOs that promote local heritage values. They hold activities that gather together community members. The local network produced materials for 360°/AR that introduced a virtual exhibition tour and a virtual inspection of products made at the iron and steel factory (fig. 2.4).

The VIRAL project enabled archived industrial heritage to become visible and to be connected to its place of origin while recreating past stories based on scientific methodologies and existing documents. New technologies and innovative methods of surveying and presenting heritage were introduced and all educational materials are available in all project languages, thus making them more visible for all the users and more suitable for creating heritage-based networks with towns sharing a similar heritage type.

2.3 *Sovana, Tuscany, Italy*

Sovana is a small town in the Tuscany region of Italy. The first traces of settlement in Sovana, according to archaeological excavations, date back to the Neolithic period and the Late Bronze Age. The site was then abandoned, to be repopulated between the eleventh century and the eighth century BC, when the Etruscan population appeared there. The current plan of Sovana dates to medieval times and was constituted by three longitudinal streets: Via del Pretorio in the middle, and Via dell'Oratorio and Via del Siviero on either side



FIGURE 2.4 Interactive 3D model of the Triumph kitchen cooker produced in the Osijek iron and steel factory

SOURCE: MUSEUM OF SLAVONIA

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of it. These streets are connected to the surrounding area by the Sovana-Sorano provincial road.

The village of Sovana (fig. 2.5) is characterized by a low level of tourism despite its proximity to an Etruscan necropolis. The original PlaceMaker method and software were used both to gather identifying resources and to construct the project guidelines to (1) enhance place identity in an underused small city with heritage and resources; (2) identify new possibilities of sustainable regeneration; and (3) involve locals in the regeneration of the place to appeal to visitors. In this example, PlaceMaker was used to enhance heritage-based networking. The PlaceMaker method comprises eight phases – five of analysis and three of design. Different types of databases are created to contain the different types of data collected. These include data from anticipatory analysis; denominative and perceptive information, the graphical, the photographic, video surveys; elements deduced from the study of traditional planimetry; and questionnaires administered to visitors to the places. The result consists of two complex maps, one of analysis and one of design, which represent the identity of the place and the project interventions for its enhancement, respectively. The software, as required by the TECON@BC project, was created in order to connect and communicate the information contained in the complex map and strengthen the use of the method.

With the PlaceMaker software (fig. 2.5) it is possible to represent and interpret the places in an area by creating interactive, dynamic and multimedia



FIGURE 2.5 PlaceMaker software: a window displaying analysis of surveys

SOURCE: ARCHIVE OF MARICHEL A SEPE

maps. The platform is Adobe Flex/Air, which was used to implement the software, while the programming language is ActionScript 3.

The creation of the software, which represents both intangible and tangible characteristics of territory, was the main obstacle of the case study, which was resolved thanks to many scientific and graphic tests of the tool. Places are represented by inserting symbols and elements into maps, connected to multimedia schedules that can be continuously updated. The prime users of this tool are urban planners, administrators and citizens. The main objective, as aforementioned, was to use the identity resources of Sovana to increase local tourism, enhancing the medieval town and activating the roots of the new idea of territory in its inhabitants. The data collected in the previous phases were used to create symbols suitable to represent the peculiarity of the place and drew up a complex analytical map (Phase 5) (fig. 2.6). The symbols created specifically for this study designate places of archaeological interest, local craft shops, places for meditation, flower gardens, planned green spaces and uncultivated green spaces. The complex map of analysis shows that the identity of places in Sovana is based on a combination of factors, including the town's very ancient history, in which the Etruscans and, later, the Aldobrandeschi family are especially prominent; its medieval layout and tuff architecture; nature in its various forms; and the peaceful atmosphere of the town.

The nearness of the Etruscan necropolis does not seem to contribute directly to the identity of Sovana, although Palazzo del Pretorio does serve as an information point for visitors of the necropolis. In general, the place seems to be scarcely frequented, visitors spend little time here and tend to concentrate only on the main streets with the monuments of historical interest. The place is predominantly calm, while the open spaces are not used as places for socializing.

In the final phase of the PlaceMaker project, the complex design map with the project interventions was constructed. The main improvement in placemaking consists of the identification of actions, aimed at enhancing and promoting Sovana's identity-related resources in an integrated and sustainable way, following a logic of network among local people, administrators and visitors. Out of the seven actions, the first three consist of the creation of thematic itineraries, namely: the Landscape Itinerary on Via dell'Oratorio; the Art and Craft Itinerary along Via Pretorio and Via del Duomo; and the Itinerary of the Senses on Via del Siviero and Piazza della Cattedrale. The other four actions are related to the construction of the network of cultural resources for both locals and visitors: Enhancing Public Spaces and Monuments; Differentiating Activities; Organizing a Network of Artisan Shops and Creating Information Points. PlaceMaker software was useful to show both the project interventions

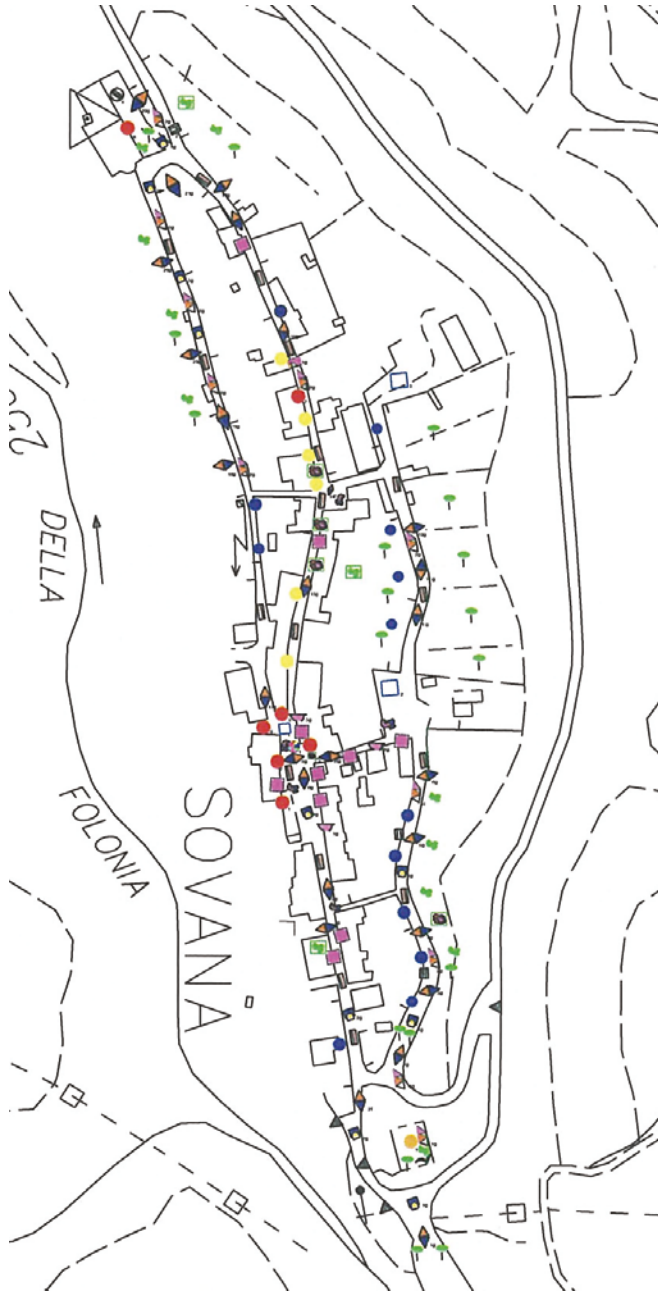
































FIGURE 2.6 Map of Sovana (place identity). Within the legend (see facing page): a place of historical interest, commercial places, empty places, a place with multiple values, places of archaeological interest, local craft shops, places for meditation, flower gardens, planned green spaces and uncultivated green spaces, visual-tactile-smell-sound perceptions, and peace

SOURCE: ARCHIVE OF MARICHELIA SEPE
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LEGENDA

-  **luogo di interesse archeologico**
1- rovine etrusche 2-Rocca Aldobrandesca
-  **luogo di interesse storico-artistico**
1-Palazzo Bourbon Del Monte, 2-Chiesa di S. Maria, 3-4- loggia del Capitano e Palazzo del Pretorio, 5- Palazzetto dell'Archivio, 6-Fontana, 7-Casa di Ildibrando, 8-Cattedrale
-  **luogo ad uso commerciale**
-  **luogo ad uso residenziale rurale**
-  **luogo ad uso commerciale per vendita souvenir locali**
-  **luogo ad uso commerciale per vendita souvenir locali e non locali**
-  **luogo a valore multiplo**
1- Piazza del Pretorio
-  **luogo di socializzazione casuale**
-  **luogo vuoto**
1,2- slargo, 3-Piazza del Pretorio
-  **luogo di limite**
1-muro in pietra basso, 2-ringhiera-limite
-  **luogo di commercio artigianato locale**
-  **luogo di meditazione**
-  **percezione visiva permanente**
1- viale alberato, 2. macchine, 3-prato, 4 paesaggio con prato fiorito e colline, 5- paesaggio collinare, 6- vista alberi, 7- esposizione ceramiche, 8-scala fiorite, 9- arco con panorama, 10-vista alberi, 11-prospettiva vigneti sui due lati, 12- prospettiva uliveti, 13- prospettiva case con vasi fioriti e botteghe artigianato, 14-prospettiva case in pietra, 15- panorama, 16-facciata decorata con fiori, 17-uliveto, 18-prospettiva con muro basso di pietra e verde incolto, 19- verde incolto, 20- Cattedrale
-  **percezione tattile permanente**
1-pavimentazione in pietra, 2- pavimento storico, 3 pavimento in pietra con verde incolto, 4- solita
-  **percezione olfattiva transitoria**
1- odori pizzeria a taglio
-  **percezione gustativa permanente**
1- specialità gastronomiche locali, gelateria artigianale
-  **percezione sonora transitoria**
1- versi uccelli, 2- passaggio trattore, 3- passaggio macchina
-  **ritmo tranquillo**
-  **ritmo moderato**
-  **ritmo sostenuto**
-  **alberi e verde**
-  **verde disegnato**
-  **piante fiorite**
-  **verde incolto**
-  **passaggio colombi**
-  **dimensione del simbolo piccola = presenza del dato in percentuale lieve**
-  **dimensione del simbolo media = presenza del dato in percentuale media**
-  **dimensione del simbolo grande = presenza del dato in percentuale notevole**
-  **percezione ininfluyente**
-  **percezione gradevole**
-  **percezione fastidiosa**

and the itineraries, supporting both participation between people and improving the sustainable use of underused heritage.

2.4 *Celei-Sucidava, Romania*

Located on the left bank of the lower Danube, Corabia is a small city in the southern part of Romania. In the western part of Corabia, there is a Roman and early Byzantine settlement and fortress. This was a small prosperous Roman settlement in the second and third centuries AD.

In the early Byzantine period, there was a small fort (around 30,000 m²) at the head of bridge to the north of the Danube River. Also, a bridge was built there between Sucidava and Oescus in the reign of Constantine the Great in 328 AD. This is the longest bridge in Roman and Byzantine Europe. A structure with a hypocaustum (heat installation) from this period has been preserved.

Also, there is a foundation of a Christian basilica dating to the sixth century AD, and the strong walls of a Byzantine fort, built in stone and brick (fig. 2.7). Additionally, the Secret Fountain, reaching 18 metres underground and built during the Justinian period in the middle of the sixth century AD, is a unique monument in the Danube region (fig. 2.8).

The Rehabilitation of the Historical Monuments of Sucidava project established a tourist route through Corabia city in Olt County between 2013 and 2015. It was financed by European regional development funds and national funding. A modern museum was built at the site, and some tourist routes were laid inside the site (fig. 2.7, fig. 2.9).

The Sucidava Research programme was developed by the University of Craiova. It takes place at an excavation site used by the students of the university who carry out archaeological excavations each summer in partnership with the site museum and the local city council. The major results from these excavations have been published in books and scientific journals (Gherghe et al., 2018; Toropu & Tătulea, 1987; Tudor, 1974). One of the primary aims was to improve the long-term tourist potential of the archaeological site and to include it in national tour routes. The main objectives were to increase the visibility of the site and its notable features, while increasing the number of visitors and establishing connections with other similar sites on the Danube in the network based on mutual heritage. Also, this archaeological site is an exceptional case study for the insertion of archaeological and architectural heritage in the Danube landscape.

The archaeological heritage of Sucidava involves the University of Craiova, as an academic research institution, the site museum, as a depository and exhibition institution, and the city council of Corabia, as site owner and administrator. All these actors are open to cooperation and networking with similar institutions all over the EU.



FIGURE 2.7 Sucidava. Western Gate, fourth – sixth centuries AD (2020)
SOURCE: MIRCEA NEGRU



FIGURE 2.8 Sucidava. Secret Fountain, sixth century AD (2021)
SOURCE: MIRCEA NEGRU

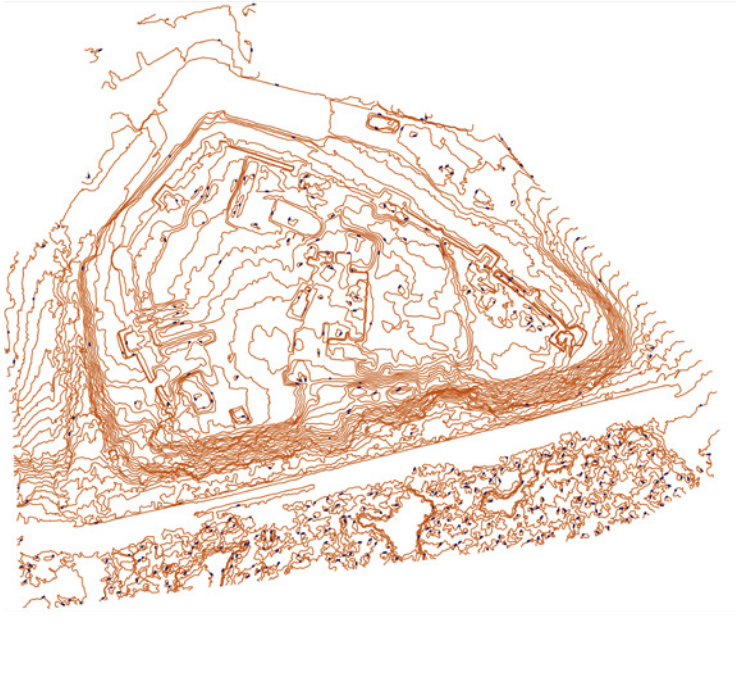


FIGURE 2.9 Sucidava. Topographic plan and tourist route (2021)

SOURCE: FLORIN NACHE, MIRCEA NEGRU

The information about this archaeological site is available on the web pages of the city council and mayor of Corabia and also on the European project for restoring the site. Additionally, a Facebook page, Arheo Sucidava,² provides unique information about the archaeological site and the artefacts that were discovered there. Also, the digitalization of the discovered heritage started a few years ago and it is being constantly upgraded and developed. In recent years new forms of gathering information about the site have been employed, such as aerial viewing with a drone. The digitalization features over 100 million topographic points, topographic maps and a 3D image of the fortress.

2.5 *Nafplio, Greece*

Nafplio is one of the most picturesque cities in Greece (fig. 2.10). In Greek mythology, Nafplio was the son of Poseidon and was known for his naval skills. A prehistoric settlement has been located in the acropolis of Nafplio and parts of ancient polygonal walls of the Hellenistic and Byzantine periods have been preserved. The heritage of Nafplio also includes important buildings dating

² <https://www.facebook.com/arheo.sucidava>.



FIGURE 2.10 Cultural routes in Nafplio
 SOURCE: MN, 2011

role in the place identity of a city. It is connected to the past, the history, the traditions, the habits, the material and abstract elements of the city. The importance of heritage is especially visible for small- and medium-sized towns. These towns are threatened by population decline and shrinkage, while they are often full of the variety of heritage that can enhance the development of tourism and thus help these towns deal with the problem of decline.

The presented case studies represent five small- or medium-sized cities with different types of heritage, different types of heritage digitization and different levels of networking and placemaking. Digitalization helps us better understand, visualize and imagine the heritage. Additionally, the variety of ICT, with its endless possibilities and opportunities to be creative in terms of presentation, enables heritage digitization development to follow unique paths. In the

from the period of Venetian rule (1359–1540) and Ottoman rule (1540–1686 and 1715–1822). The old city was built on the north side of Akronafplia, and then it expanded north on Palamidi's Hill. It was the capital of the modern Greek state during the period 1829–1834 and the seat of the first governor, Ioannis Kapodistrias (MN, 2001). The historic city centre has been characterized as a traditional settlement and is an important tourist centre with tourists visiting continuously throughout the year (UPD, 1989). Nafplio is classified as a small town (it has 14,203 inhabitants) with an area of 33.6 km² (HSA, 2011). The history of the area is reflected today in the points within the residential area and in the architecture of the buildings that have been saved.

Cultural routes were proposed to disseminate and promote the heritage of Nafplio, from the Middle Ages until 1828, when it was chosen as the capital of the newly formed Greek state. These routes involve the visitors and the school students in the discovery of the cultural values of the area. The cultural routes were designed through the digital means of GIS (geographic information systems). The four cultural routes that were proposed connect the cultural elements of the area and include the special features that compose the city's physiognomy (fig. 2.10). Digital cultural routes can be disseminated on different websites (internet), including social media (Facebook, Instagram).

The routes are thematic, and they connect the different spaces in the town, places of historical interest, historical monuments, buildings of architectural significance, churches and museums. Cultural and natural features that attract the visitor's interest are the main elements used to form the cultural networks. In these routes, the visitor has the opportunity to experience the authenticity of the locale and to discover the special features of the area through experience (walking). Therefore, such routes represent the example of heritage digitalization and are the basis for creating placemaking and the adequate platform for initiating heritage-based networking.

3 Discussion and Lessons Learned

The social, economic and urban implications of industrial decline and de-industrialization offer some of the biggest challenges facing post-industrial societies. The physical effect of underused industrial territories for the urban tissue is most often negative, but brownfield strategies are today so very well elaborated and implemented that territorial issues can be resolved by knowledge. Less well appreciated problems are the fading of the identity of the place, the losing of stories connected to industrial and other aspects of local culture and the disappearance of memories formed by past generations related to earlier stages in the life of that society. Heritage plays a rather important

five cases discussed in this chapter we can see five different approaches regarding the digitization of heritage, and therefore five different outcomes regarding placemaking and networking. They show how heritage digitalization and heritage networking can be strongly interconnected.

The example of Golubac showed us how the visibility and presentation of local heritage can be done through digitalization and how a simple workshop can educate locals to use ICT to their advantage, and to improve what the city has to offer to tourists while branding its otherwise forgotten tangible and intangible heritage. ICT plays a very important role in introducing heritage to tourists, educating visitors and connecting stakeholders from different communities along the Danube to Golubac. By being part of the DANURB platform, Golubac joined a heritage-based network linking cities and towns on the Danube River. Henceforth, this platform will be a good base for collaboration between the towns through the mutual cooperation of different local stakeholders. Strategic cooperation between countries and towns is a way for them to share knowledge and good practice.

The case study of Osijek's industrial heritage was focused on the Osijek iron and steel factory and within the project, interactive virtual reality for the products of the factory was designed and included in the museum's virtual exhibition. Furthermore, the project developed forms of social learning and networking for the development of competencies of adults in the field of virtual reality (VR) and augmented reality (AR) for the promotion of local industrial heritage. New technologies and innovative methods were introduced through the VIRAL project, thus making them more visible for all the users and more suitable for creating a heritage-based network with neighbouring towns and countries.

The case study of Sovana is very interesting and full of heritage potential. Interesting usage of ICT and digitalization were represented in this case study. Furthermore, it shows that PlaceMaker can support the idea of heritage networking by creating networks of small cities with cultural resources, networks of good practices for experiential paths in heritage towns, and networks of stakeholders involved in the enhancement of local products and cultural resources. With the PlaceMaker software, it is possible to represent heritage in a new, modern and interesting way, through interactive multimedia maps.

In the Celei-Sucidava case it is clear that the local ancient structures (such as Sucidava Fortress) have a huge tourist potential that will increase over the next few years. The ancient Roman and Byzantines structures – the Secret Fountain (unique in the Danube region at least), the strong surrounding walls and tours, the early Byzantine church (basilica), the building with the hypocaustum, and many other ancient buildings – are important assets in relation to archaeological placemaking and increasing the attractiveness of this Danubian settlement.

The existing partnerships between the research programme at the university, the site museum and the city council of Corabia guarantees the development and valorizing of this archaeological site over the long-term. The digitization of the archaeological heritage of Sucidava combines academic, private, and public stakeholders, connecting them in the specific network and via collaboration. This model of internal cooperation is open to collaborating with similar international institutions all over the EU, especially with those that research and administer archaeological sites on the Danube riverfront.

In Nafplio, Greece, digital cultural routes were developed with natural and architectural elements together with its intangible heritage and were made visible for different categories of users via digitalization tools and social media. In this way, such routes represent an informative and creative platform for initiating heritage-based networking and for creating the sense of place and placemaking.

In this study, the starting hypothesis focused on the possibility of obtaining, preserving and presenting the heritage assets in multiple cases and in a sustainable manner, using innovative approaches. After analysing the integrated results, it can be stated that there is a lot of potential in European cities to introduce modern methods of digitalization in order to brand the identity of local heritage and enhance the placemaking in these cities. In the research presented, considering both theoretical and practical inputs, we can connect the heritage potentials with concepts of placemaking and heritage-based networking (fig. 2.11). With the creative application of digitization to heritage, the same heritage is becoming more visible and more recognizable – not only for local audiences but also for visitors from other cities and countries. Furthermore, digitization makes it more convenient to connect with cities that perhaps share the same or similar heritage or share geographical and natural characteristics.

However, it is also clear that to achieve this aim it is not necessary to follow a single methodology. The subjects of each case study, whether it is a small town in Serbia, or one in Romania, all have specific, unique characteristics that require custom-made research and methods to identify the most appropriate solution, depending on the predefined objectives. One of the first aspects to assess is the location and the specific spatial features of heritage. Another important aspect is the type of heritage and the current condition it is in. Of course, methods for digitalization and possibilities for collaboration with other towns and countries on the basis of heritage can be numerous and are very important in this process.

Finally, the technical difficulty of each method must be assessed, corresponding to the environmental, social and cultural context and the protection measures in each country. **As for the innovative means of heritage presentation,**

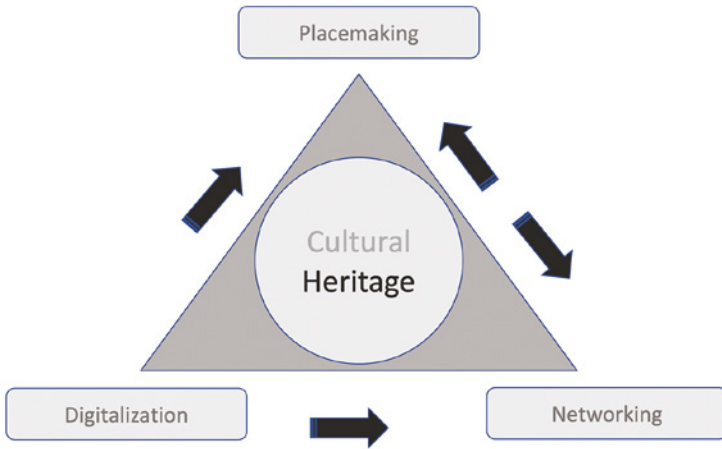


FIGURE 2.11 Diagram showing the relationship between cultural heritage, digitalization, networking and placemaking
SOURCE: THE AUTHORS

and the use of ICT and digitalization, considering the characteristics of the case studies, it has been verified that the best option always involves a method combining modern techniques. If, in addition, the limited economic capacity of those responsible for protecting the property is introduced as a condition, although the options are reduced, there may be alternatives that allow such a capture in a sustainable manner with reduced resources and in a short time. The starting hypothesis focused on the possibility of obtaining fast and accurate digitization of heritage in multiple cases and in the context of tourism redevelopment. Another precondition is the sustainability of the applied methodology. After analysing the results, it can be stated that there are several examples of rather simple and efficient techniques for heritage promotion that are in line with concepts such as placemaking and at the same time are not financially demanding and time-consuming.

4 Conclusion

The importance of heritage in every way, shape or form is unquestionable. Heritage represents one of the biggest assets of cities in Europe, because of their long and important history. The richness found in their heritage and in their historic layers is one of the main characteristics especially of small- and medium-sized cities and towns.

Heritage and tourism are in close relation. Many European towns depend on culturally based tourism as the main income source. There are several issues

regarding tourism development in these cities. The first one is connected with the possible misuse or overuse and weakening of certain heritage sites. In these cases, specific elements of sustainable tourism should be implemented. Sustainable tourism is closely connected to the local community and their ability to collaborate in the process of placemaking. With community-based participation as its focus, the concept of placemaking inspires people to reimagine and reinvent public spaces, in order to maximize the added value that heritage poses. Placemaking can be a useful approach for improving a neighbourhood, city or region. The second issue is the traditional presentation of heritage that can be customary, predictable or ordinary, and therefore it has to be re-invented. It should be original, advanced, fashionable and even futuristic. Several concepts can be implemented in this process, like the digitization of heritage presentation. Regarding heritage presentation and innovation in the field of tourism, the direct usage of ICT proved to be an important method with desirable results in gathering tourists and making heritage more accessible, visible and, overall, better preserved. Additionally, heritage digitization enables better and more efficient interconnection among different stakeholders and different towns, and even countries. It can be observed as a base for networking, thus improving placemaking and local tourism, and overall city regeneration.

Therefore, one of the main aims of this study was to present the possible solutions, strategies and connections between heritage networks and the process of digitalization. In this chapter, we presented several examples, both from literature and from selected case studies from Romania, Italy, Croatia, Greece and Serbia. These case studies presented innovative forms of heritage networking as well as tools and digitalization used in the process of culture-based tourism redevelopment. Often, these processes are implemented as a part of EU-funded projects. The Golubac case presented an online platform developed as a part of the DANUrB project, which identified all the intangible and not well-known heritage in the area, as well as created an international network of heritage while connecting real people as stakeholders from local communities. Osijek used to be an industrial town, but today it could be classified as a university town. With its dynamic and rich history, Osijek could build its identity on its multi-layered history and especially its industrial heritage story to develop sustainable tourism. When it comes to Sovana, the development of software to identify place-identity and project interventions helped to point out the underused heritage and potentials and different possibilities of sustainable regeneration and to involve locals, and increase the overall attractiveness of the place. Using new tridimensional technologies, and social media platforms as a preview of the archaeological heritage, the Celei-Sucidava example showed us the importance of archaeological heritage for creating its network of the

museums, universities, and local authorities and stakeholders in promoting the Roman Danubian heritage. These networks are also present in the example of Nafplio, Greece, where digitization was used to form a unique cultural route that represents all the important heritage sites in the town. Being part of a heritage network and mutual collaboration with different sectors, connecting the local stakeholders with the public and private sectors, under the authority of Europe-funded projects proved to be a sustainable and efficient way of tourism development. The aforementioned studies showed in several new approaches how the usage of ICT and digitalization tools and social media can improve the process of presenting, branding and preserving local heritage, making the platform for heritage-based networking and improving placemaking and tourism in small- and medium-sized towns.

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