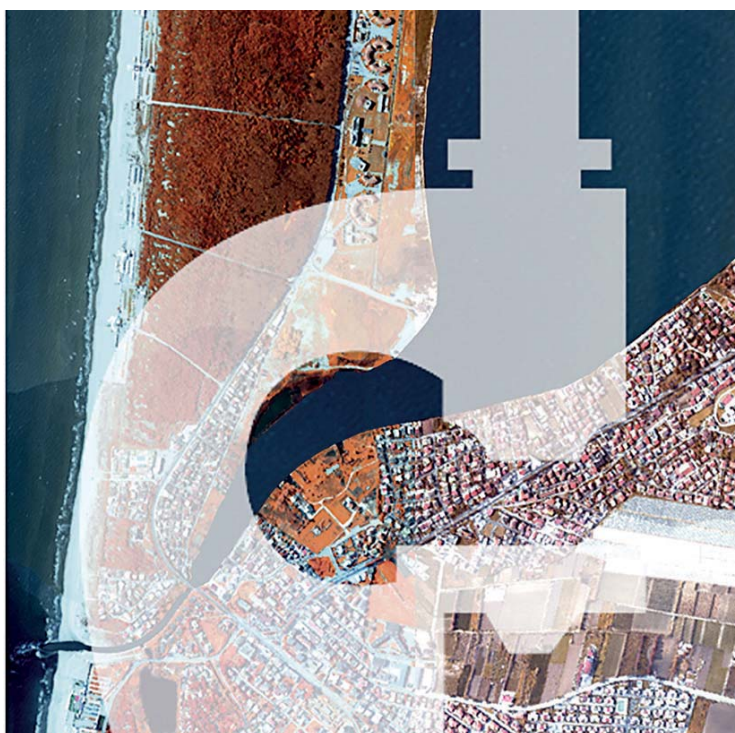


ARCHITECTURE HERITAGE and DESIGN

Carmine Gambardella

XIX INTERNATIONAL FORUM

Le Vie dei
Mercanti



World Heritage and Design for Health

ARCHITECTURE | CULTURE | HEALTH | LANDSCAPE | DESIGN |
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Le Vie dei Mercanti
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Peer review

Scholars has been invited to submit researches on theoretical and methodological aspects related to Smart Design, Planning and Technologies, and show real applications and experiences carried out on this themes. Based on blind peer review, abstracts has been accepted, conditionally accepted, or rejected. Authors of accepted and conditionally accepted papers has been invited to submit full papers. These has been again peer-reviewed and selected for the oral session and publication, or only for the publication in the conference proceedings.

Conference report

300 abstracts and 550 authors from 40 countries:

Albania, Arizona, Australia, Belgium, Bosnia and Herzegovina, Brasil, Bulgaria, California, Chile, China, Cipro, Cuba, Egypt, France, Germany, Greece, India, Italy, Japan, Jordan, Lebanon, Malta, Massachusetts, Michigan, Montenegro, Montserrat, New Jersey, New York, New Zealand, Poland, Portugal, Russian Federation, Serbia, Slovakia, Spain, Switzerland, Texas, Tunisia, Turkey, United Kingdom.

WORLD HERITAGE and DESIGN for HEALTH

The innocent eye sees nothing (Ernst Gombrich)

In this particular time characterized by a pandemic due to the expansion of the Covid-19 virus throughout a globalized world, the destinies of everybody have suddenly changed behavior, lifestyles, interpersonal relationships, production methods as well as the governing of the territory; the priority of investing in the healthcare sector has become increasingly urgent and indifferent with reference to a political management of the communities that prevents and does not suffer, as unprepared, the emergencies that increasingly afflict the community. Furthermore, in these months of “quarantine”, the Planet has shown a Resilience that makes us hope for the future. A response to the Culture of Emergency, which finds its generative ground not only in the healthcare sector but also in the governance of the territory, relates to the hydrogeological aspects, pollution of soils, air, water, illegal construction, the exploitation of energy resources faced with the use of the integral of scientific and managerial skills based on meritocracy. The XIX International Forum of Study ‘World Heritage and Design for Health’ addresses the issues related to the global pandemic in a multidisciplinary and systemic logic, as indicated by the UNESCO and the United Nations 2030 Agenda for the definition of projects and concrete actions that include the Welfare and Health of the Community. Therefore, the Forum aims to create a transversal critical dialogue, open to cultural contamination and ‘without limits’, in a logic of integration between skills that extends, and is not limited to, the following disciplines: Architecture, Culture, Environment, Agriculture, Health, Landscape, Design, Territorial Governance, Archeology, Economy, History, Sociology, Security, e-Learning. The Scientific Community of the Forum is composed of about seven thousand Professors and Researchers from one hundred Universities and Research Centers in the world, from institutional representatives, from the business sector and from the representatives of the 830 UNESCO Chairs (UNITWIN Program) thanks to the WebGIS created and managed by the UNESCO Chair at the Benecon University Consortium. The location of the Forum is of excellence. Campania Region with six World Heritage Properties, two Unesco Man and Biospheres, three assets registered on the Intangible Heritage List is one of the richest Regions in the world for cultural and landscape heritage, particularly ‘contaminated’ by Mediterranean cultures. No coincidence that the Forum takes place in Naples and Capri, with site visits and presentations of scientific research and operational projects by the Benecon University

Consortium, consisting of five Italian Universities, head office of my UNESCO Chair on Landscape, Cultural Heritage and Territorial Governance. The papers, selected by the Forum's Scientific Committee, will be published in the Proceedings of international relevance (candidate to be indexed Isi Web of Science). Furthermore, the most innovative research and projects will be published in the 'Quaderni' of the A Class international magazine 'Abitare la Terra / Dwelling on Earth'.

Prof. Carmine Gambardella
General Chair XIX Forum 'World Heritage and Design for Health'
President and CEO of the Benecon University Consortium
UNESCO Chair on Landscape, Cultural Heritage
and Territorial Governance

WORLD HERITAGE and DESIGN for HEALTH

The innocent eye sees nothing (Ernst Gombrich)

In questo particolare tempo connotato da una pandemia dovuta dall'espansione del virus Covid-19 in un mondo globalizzato, i destini delle Persone improvvisamente sono stati modificati nei comportamenti, negli stili di vita, nei rapporti interpersonali, nei modi di produzione, nel governo del territorio; le priorità degli investimenti nel comparto Salute, diventa sempre più urgente e indifferibile con riferimento a una gestione politica delle Comunità che prevenga e non subisca, in quanto impreparata, le emergenze che sempre più affliggono la Collettività. Inoltre, in questi mesi di "quarantena", il Pianeta ha dimostrato una capacità di Resilienza che ci fa bene sperare per il futuro. Una risposta alla Cultura dell'Emergenza che trova il suo terreno generativo non solo nel campo della Salute ma nel governo del territorio per quanto riguarda gli aspetti idrogeologici, l'inquinamento dei suoli, dell'aria, dell'acqua, l'abusivismo edilizio, lo sfruttamento delle risorse energetiche affrontato con l'utilizzo dell'integrale delle competenze scientifiche e gestionali fondate sulla meritocrazia.

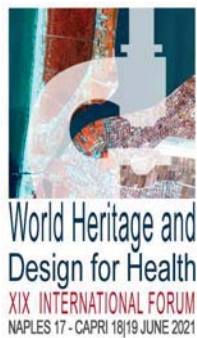
Il XIX Forum Internazionale di Studi World Heritage and Design for Health affronta le problematiche legate alla pandemia globale in una logica pluridisciplinare e di sistema, così come indicato dall'UNESCO e dall'Agenda 2030 delle Nazioni Unite per la definizione di progetti e azioni concrete che includano il Benessere e la Salute della Collettività. Il Forum si propone quindi di creare un dialogo critico trasversale, aperto alle contaminazioni culturali e 'senza limiti', in una logica di integrazione fra le competenze che si estende, e non si limita, alle seguenti discipline: Architecture, Culture, Environment, Agriculture, Health, Landscape, Design, Territorial Governance, Archeology, Economy, History, Sociology, Security, e-Learning.

La Comunità Scientifica del Forum è costituita da circa settemila Docenti e Ricercatori di cento Università e Centri di Ricerca nel mondo, da rappresentanti istituzionali, del settore dell'impresa e dai referenti delle 830 Cattedre UNESCO (UNITWIN Programme) grazie al WebGIS realizzato e gestito dalla Cattedra UNESCO incardinata al Consorzio Universitario Benecon.

La location del Forum è d'eccezione. La Campania con sei siti iscritti nella lista del Patrimonio Mondiale, due Man and Biospheres UNESCO, tre beni iscritti nella Lista del Patrimonio immateriale è una delle regioni più ricche al mondo per beni culturali e paesaggistici, particolarmente 'contaminata' delle culture del Mediterraneo. Non a caso il Forum si svolge a Napoli e Capri, con sopralluoghi e presentazioni di ricerche scientifiche

e progetti operativi a cura della Consorzio Universitario Benecon, costituito da cinque Atenei italiani, sede della Cattedra Unesco su Paesaggio, Beni Culturali e Governo del Territorio. I paper, selezionati dal Comitato Scientifico del Forum, saranno pubblicati negli Atti di rilevanza internazionale (candidati all'indicizzazione Isi Web of Science). Inoltre, le ricerche e i progetti più innovativi saranno pubblicati nei 'Quaderni' della Rivista internazionale di Classe A 'Abitare la Terra/Dwelling on Earth'.

Prof. Carmine Gambardella
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President and CEO of the Benecon University Consortium
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WORLD HERITAGE and DESIGN for HEALTH

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Le Vie dei
Mercanti

XIX INTERNATIONAL FORUM

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Cultural and Landscapes Heritages: Mobility, Fruition and Accessibility for all

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Abstract

At such a delicate historical moment, in which the pandemic health emergency has reduced the mobility of citizens, a new resilient culture is affirming its capacity to encourage and guarantee the use of cultural and landscape assets for all. This study analyzes some international and national experiences that have already been implemented, or are at an advanced planning stage, which point to a new way of understanding the accessibility of places by users with specific needs and permits their visitation which was previously impossible. Our discussion will deal with Agrigento in particular: the city itself, the Valley of the Temples, its historical center and all the naturalistic treasures of its hinterland. Though the area has been struggling almost permanently with a serious socio-economic crisis for decades, it is an increasingly interesting destination for travelers, even in the new mode of experiential tourism. In this context, despite efforts being made to create routes and systems to ensure the cultural heritage is utilized, in particular between the Valley of the Temples and the urban center, issues of accessibility and inclusiveness remain unresolved. Unfortunately, at these latitudes, the gap between Italian legislation on the subject and its practical impact is still enormous and in some ways insurmountable. Only a reversal of trend, primarily at the cultural level, will allow us to transform long-standing weaknesses into new and interesting strengths, while ensuring both accessibility, and a resultant increase in tourism, as well as the improvement of urban mobility for all.

Keywords: accessibility, fruition, urban mobility

1. Introduction

The cultural heritage of a country is the result of the historical-cultural-architectural production of the peoples who have dominated it and includes the great tangible and intangible assets commonly called "*cultural goods*" (1). This heritage, which passes on the individual and community memory of a specific territory and a specific historical period to future generations, represents an important tool for aggregation, social cohesion, cultural exchange, values and emotions, as well as the sharing of knowledge and skills, and must be guaranteed to all. This includes those who, temporarily or permanently, suffer from reduced motor or sensory capacities. Yet guaranteeing access to this heritage is not always possible as, in our cities, accessibility and use of certain spaces and artifacts are both marked by significant inequality. Due to architectural barriers – which, unfortunately, are still present in some sites today – it is not possible for different categories of people to access, learn about, and enjoy their own cultural heritage, effectively preventing its use by a significant part of the public. Then, "*if the difficulty of finding practical information about the places that preserve our culture is added to this inhibitory feeling, this public, already scarred by its own insecurities, will feel totally excluded and unable to shake off the sense of total frustration*" (2). In this scenario, institutions and civil society – attentive to the needs of every individual – must make every effort to ensure that cities and public goods in general, are accessible to everyone in an easy, autonomous, comfortable and safe way. The correct and responsible development of a civilized country, in fact, cannot ignore the implementation of *governance* that aims at the "*sustainable mobility*" of everyone. One of the key requirements for an inclusive society is that everyone must be able to participate and enjoy the social, economic and cultural assets of that

society. Historical heritage is a significant asset, a great resource for the community that reflects the society of the past and forms an integral part of a Country's cultural identity. To make the built heritage more accessible, it is essential to be aware of the different needs of people and how these needs can be met in various ways. It is important to remember that often the best and most appropriate way to make places more accessible is through management solutions that may sometimes require very few physical interventions or alterations of the urban fabric, such as well-planned access strategies, as well as careful, sensitive and elegantly designed solutions. In this regard, a tangible and significant signal comes to us from some urban realities that have aimed at a new way of understanding the accessibility of places by users with specific needs, which has permitted previously unvisitable sites to be frequented. These are resilient experiences – international and national – of great cultural and cognitive enrichment, and of high formative and educational value. They are cities that stand out from others for having undertaken various initiatives aimed at promoting actions – that are effective and efficient – in favor of disabled people with different physiological or pathological conditions (Table 1) – towards which one often feels guilty or inadequate – as well as the application of *best practices*, the use of innovative technologies, the adaptation of structures with suitable tools and means, and that are capable of overcoming obstacles and architectural barriers (3). The focus of this study are the activities promoted within the Archaeological Park of the Valley of the Temples in Agrigento, a UNESCO site since 1997.

Table 1 **SIZE OF DISABILITY**

TYPES OF DISABILITIES	DESCRIPTION	DIFFICULTY
MOTOR DISABILITIES	Reduced mobility due to problems in the legs, feet, neck, back, arms and hands	Difficulty moving independently Difficulty in carrying out the main daily functions (walking, sitting)
SENSORY DISABILITIES	Limited or absent vision Ability to hear limited or absent	Reduced ability to see clearly Difficulty of written communication Difficulty of oral communication Difficulty hearing audio presentations
INTELLECTUAL DISABILITIES	Long-lasting diseases that present pathologies that result in behavioral disturbances	Slow learning Difficulty of behavior Difficulty in understanding concepts Sensory and motor difficulties Restricted ability to perform basic life functions
OTHER DISABILITIES	Variety of diseases	Food problems Heart problems Pressure problems Respiratory difficulties Stomach, kidney and liver problems Diabetes Epilepsy

2. Cultural Heritage: Accessibility Actions and Projects in Europe and Italy

When it comes to accessibility, the number of initiatives and projects for the sustainability, protection and innovation of cultural heritage carried out in cities is still limited, despite the fact that the European Union – for several years – has financed projects in support of cultural heritage in the context of a series of programs (Horizon 2020, Erasmus+ and others) and is collaborating with the Council of Europe, Europa Nostra (4), UNESCO and other partners (fig. 1). Additionally, the Access City Award (5) was established in 2010 which allows cities with more than 50,000 inhabitants to highlight their accessibility projects and publicize the initiatives that have been carried out in the tourism sector in order to accommodate visitors with special needs. Over the years, the prizes have been awarded to the cities of Avila (Spain, 2011), Salzburg (Austria, 2012), Berlin (Germany, 2013), Gothenburg (Sweden, 2014), Borås (Sweden, 2015), Milan (Italy, 2016), Chester (United Kingdom, 2017), Lyon (France, 2018), Breda (Netherlands, 2019), Warsaw (Poland, 2020), Jönköping (Sweden, 2021). This is a due recognition of cities that have made it easier to access public areas, play areas for children, public transport for the disabled and the elderly, thanks also to new communication technologies.

2.1 European Projects

Among the first projects launched in 2010 by the European Union we should mention the *LHAC* (League of Historical and Accessible Cities) project, which aims to improve the accessibility of historic cities and, at the same time, promotes the development of sustainable tourism and the protection of cultural heritage. Its multiple objectives include: the implementation of innovative accessibility solutions aimed

at allowing people with disabilities and their families to fully enjoy recreational and cultural activities; the promotion of tourism and the social development of involved cities; the development of pilot projects that can serve as inspiration for local authorities and stakeholders; the exchange of best practices and know-how; awareness raising, idea exchanges and actions undertaken that afford greater accessibility. These objectives have an impact on the long-term cultural and social development of the European cities involved, also promoting tourism among people with disabilities. To date, six accessible tourist itineraries have been created in six European cities: Avila (Spain), Lucca (Italy), Mulhouse (France), Turin (Italy), Viborg (Denmark), Sozopol (Bulgaria). Tourist itineraries include buildings of historical interest, museums, restaurants and shops, parks and tourist information centers which are designed with the needs of people with both physical and sensory disabilities in mind, though residents and tourists can also certainly benefit from them. The presence of accessible information signs such as tactile signs, sign language, audio guides and other interactive tools along the routes allows everyone to explore the urban landscape independently.

As part of the European Disability Strategy, 2010-2020, the *Disability Card* project should also be mentioned. The project aimed at introducing a card that allows people with disabilities to access a series of free – or reduced cost – services in different areas like transport, culture and leisure throughout the national territory and in reciprocity with other EU countries. The aim is to help people with disabilities travel more easily between EU countries. Among the first eight countries to kick off the project were Belgium, Cyprus, Estonia, Finland, Italy, Malta, Slovenia, and Romania along with various Italian stakeholders such as - the Ministry for Cultural Heritage and Activities, the Ministry of Transport, the Presidency of the Council, the Department of Regional Affairs, Autonomy and Sport, ANCI, the Conference of the Regions, INPS, AGIS, ANEC and Assomusica. In Italy, the project was implemented and managed by FISH (the Italian Federation for Overcoming Disabilities), in collaboration with FAND (the Federation of National Associations of Persons with Disabilities) – following the EU guidelines for the construction of requested structures and the operational sharing of common protocols.

Another project is *Greenways 4ALL* (Accessible Tourism on European Greenways 4All), co-financed by the COSME program of the Executive Agency for Small and Medium-sized Enterprises (EASME) of the European Union, which aims to improve accessibility for people with disabilities to greenways, trails, and pedestrian paths. The project is coordinated by the Spanish Railways Foundation in collaboration with the European Greenways Association (EGWA), together with the Plataforma Representativa Estatal de Discapacitados Físicos, the Comunidade Intercomunale da Região Dão Lafões and the Fundación Vía Verde de la Sierra. It is also supported by Movilidad Ampliada - Accessible Madrid, AstroAndalus and Turismo Vivencial.

In 2016, within the EU Horizon 2020 research framework program, the *ARCHES* (Accessible Resources for Cultural Heritage EcoSystems) project pays particular attention to museums, so that they are more inclusive cultural environments for those with differences and difficulties associated with perception, memory, cognition and communication. ARCHES develops an online software platform and applications for portable devices, promotes multisensory activities (touch tours), exploiting innovative technologies such as augmented reality: Avatars, embossed printers and models, context-sensitive tactiles, audio guides, metadata and advanced image processing techniques. One of its most innovative aspects is the creation of inclusive work groups in which people, with and without disabilities, interact in an environment, deciding and testing together which are the most effective solutions to their needs in the museum area.

In 2017, to foster inclusiveness in education and the ability to creatively deal with different groups of students with and without disabilities, a project called *TANDEM* was launched. The goals of the project include developing inclusive programs of educational activities; training museum staff to improve their skills and develop innovative and inclusive educational programs; a better understanding of the issues related to inclusion and a deeper understanding of the specific needs of each group; the exchange of expertise on methods, tools and approaches between staff members; the inclusion of more people with disabilities in project activities, giving them the opportunity to experiment and improve their skills. Project partners are the Museo de Arte Contemporáneo de Castilla y León (MUSAC), the MU-ZEE-UM, an art educational organization, the South Trøndelag Museums (MiST), the Institute for Artistic, Cultural and Natural Heritage IBACN) of the Emilia Romagna Region, the Estonian Maritime Museum, the Calouste Gulbenkian Foundation and the Berlin Wall Foundation.

With the *AMBAVis* project (Access to museums for the blind and visually impaired through 3D technology, 2019), the use of 3D technologies and multisensory methods were introduced, to allow blind and visually impaired people to participate in the educational services and exhibitions of the museums. The project partners are the Vienna Economic Institute, the Manchester Museum, the Austrian Federation of the Blind and Visually Impaired (BSVÖ), the German Association for the Blind and Visually Impaired (DBSV eV), Trnka n.o., an non-profit organization based in Bratislava dedicated to the research and production of audio descriptions of audiovisual works, the Österreichische Galerie Belvedere and the Center for Virtual Reality and Visualization (VRVis).

There are other projects that deserve mention, but we conclude this brief excursus with the *Google Art Project* of 2019. The idea behind it was to “democratize” accessibility to culture and promote its conservation for future generations. It is a network composed of 345 museums and institutions worldwide whose main objective is to make art accessible to everyone through the implementation of a digital platform where over 63 thousand works of art can be virtually explored, customized and shared by individual users. One of the museums in the network is the “MAXXI” National Museum of XXI Century Arts in Rome. Project partners include the Archaeological Center of Scladina cave (Belgium), the Museum of the Royal Tombs of Aigai (Greece), Vulcan UAV Ltd, Pix4D, the French National Center for Scientific Research (CNRS, France), Liverpool John Moores University (UK), and the Center for Research and Technology-Hellas (CERTH, Greece).

2.2 Italian Projects

Italy is one of the European countries with the highest quantity and variety of cultural heritage sites and, for these reasons, has launched several projects aimed at guaranteeing both physical and sensory accessibility. One such project from 2010 was *A.D. Arte*: an information system linking the cultural heritage of thirteen different Italian regions: Abruzzo, Basilicata, Calabria, Campania, Emilia Romagna, Lazio, Lombardy, Marche, Piedmont, Puglia, Tuscany, Umbria, and Veneto. The project, created by a team of Italian experts with the collaboration of representative associations of the disabled as well as the participation of various European organizations, includes architectural modifications aimed at improving the accessibility of some of the most visited sites throughout the country. Among these, “*An elevator for Michelangelo*” in the Medici Chapels of Florence; the *Tarquinius accessibility path*, in the Etruscan necropolis of Tarquinia; the elimination of barriers in the archaeological area of the Palatine hill and Roman Forum; the *Hendrik Andersen and Olivia Cushing*: between utopia and reality project; “*The memory of beauty*” project which includes a series of guided tours specifically aimed at people with Alzheimer’s and their companions; the *Historical Ostia Ageless City project*, which created an accessible and environmentally friendly route through the archaeological site of historical Ostia for people with disabilities.

The most interesting Italian project is certainly “*Culture without Barriers*”, launched in 2012 on the occasion of the International Day of Persons with Disabilities, which promotes the enhancement of cultural heritage through the organization of events and activities specifically dedicated to people with sensory and physical disabilities like the activities organized in museums, where during the visit it is possible to download or consult audio-video guides, images and insights into the collections using Quick Response Codes (QR) and Near Field Communication (NFC) systems, as well as sensory and tactile tours.

Another project is *C.A.R.E.* (Accessible Cities of the European Regions). By sharing urban development strategies that involve the participation of citizens with different needs from the life of the city, the project seeks to create a network of accessible services and facilities between European cities by promoting a common standard of accessibility, involving both citizens and tourists. The project is promoted and implemented by the Region of Lombardy, A.I.A.S. Milan onlus, the Region of Emilia-Romagna, the Municipality of Bologna, the Municipality of Ferrara, the Municipality of Forlì, the Region of Umbria, the Province of Ancona, the Province of Pesaro-Urbino, the “*Yes You Can*” association, and Venice Cards – the City of Venice. Four pilot projects have been carried out. The first, in Lombardy, concerns accessibility for the disabled to the urban public transport system. The second, in Emilia-Romagna, deals with the creation of a list of 450 accommodation facilities that offer services with specific needs (for example, temporary or permanent mobility problems, allergies, food intolerances, etc.). The third, in Venice, is the “*Venice Card*,” designed to help elderly or disabled people, that offers access to public transport, both on land and over water, public toilets, museums and discounts on other recreational and cultural activities, as well as a map of barrier-free routes around the city. Finally, the fourth project “*I’m coming too*” proposes the creation of a public garden accessible to all in the Municipality of Rimini, with particular attention to the needs of blind and visually impaired people.

Another noteworthy initiative is the *Videoguide LIS* project, which is a platform accessible via various tablet devices, smartphones, and web apps, that allows any museum to include a video guide in sign language among its informational materials. To date, the museums that provide this platform in Italy are the Royal Palace of Caserta, the National Archaeological Museum of Reggio Calabria, the Mondragone Civic Museum, the Nieddu del Rio Palace and the ArcheoDeri Archaeological Park. The videoguide was developed and created by *digi.Art Digital Services for Art and Cultural Heritage*, in collaboration with the National Italian Agency for the Deaf.

In 2013, the Region of Piedmont launched a one-of-a-kind initiative called *Turismabile*, together with the Onlus Council for People in Difficulty. The goal is to encourage tourism in Piedmont through the creation of accessible routes not only for people with motor difficulties or perceptual disabilities, but also for anyone with special needs. It is an innovative project that – through ad hoc itineraries easily accessible to people with motor difficulties or sensory disabilities – works in two directions: the creation of a regional help desk for free advice as well as the creation of a promotional circuit throughout the Piedmont area.

For deaf visitors there is the possibility of guides/LIS translators or of being equipped with free tablets, specially designed to guide them on their visit. The Region is also very attentive to sport. In fact, a specific itinerary has been created to allow ski lovers to access all the facilities present.

One city that has done a lot in terms of accessibility is Venice. The city boasts one of the most important historical and artistic heritages of the world, with churches and other places of historical importance, palaces, and museums that can only be reached by bridges, calle (streets in Venetian toponymy) or gondolas. This certainly suggests a lack of accessibility. Yet, due to the fact that it does not have car traffic, it is a pedestrian city that can be lived without the stress of traffic. Thanks to the “*Gondolas without Barriers*” project, a gondola space (located in Piazzale Roma) is provided that is easy to access even for people with mobility difficulties, in particular for those using wheelchairs. In addition, new bridges have been built without steps as well as walkways for crossing the minor canals, which allow easy crossing from one island to another even for those with walking difficulties. On the tallest and most difficult bridges, removable ramps or adequate elevators have been installed for crossing. On the bridges that permit it, “facilitated steps” have been built, which are ramps with low steps that allow disabled people to go up and down without much difficulty. For those with sensory disabilities, raised signs have been created at the end of dangerous calle without parapets to signal the end of the calle and the beginning of the upcoming canal. For blind or visually impaired people, tactile maps and multimedia and sensory paths have also been created, which stimulate the sense of smell and sight, the creation of spaces and environments that can be used by anyone also through the creation of special software that allow blind, deaf or elderly people to enjoy the artistic heritage more easily.

This brief analysis collects some examples of how the issue of accessibility and usability of the built heritage has been addressed in the urban environment.

But what are the difficulties encountered while visiting archaeological areas, parks and historic gardens? Generally, these are types of heritage that extend over vast areas where it is necessary to walk distances of several hundred meters – often over uneven and uncomfortable paths for everyone – and to overcome differences in height due to differences in altitude between various areas or within any of the properties present.

Among the most important archaeological sites, sensitive to the issue of accessibility, are the Imperial Forums, where the project “*Without Barriers*” was carried out. This is the first loop, at the heart of the Palatine hill, 1.5 km long that allows you to cross the ancient public area of the capital and learn about the most important monuments of the Forum. It is an interesting intervention, especially in light of the ability to apply facilitation tools for users, integrating them with the architectural peculiarities of the environment.

Another site that deserves attention is the Pompeii Archaeological Park which, together with the Municipality of Pompeii and the collaboration of the Ministry for Cultural Heritage, Activities and Tourism, launched the *Pompeii for All* project in 2018. The project aims to address the issue of accessibility for people with motor, sensory and cognitive disabilities, as well as the issue of inclusion, in order to give everyone the opportunity and the right to be citizens in every respect, without distinction whatsoever. An accessible path was identified across the whole park together with an experimental system of “*WithMe*” electronic bracelets – for use by blind and visually impaired people – capable of sending signals aimed at guaranteeing the safety and security of the visitor. Deaf people can also take advantage of a dedicated accompaniment, to make the most of the Pompeii site and fully grasp the suggestions and atmosphere of the places. Specialized deaf operators and native LIS speakers, allow you to organize a visit tailored to the specific needs of the deaf, thus overcoming a further barrier to the accessibility of cultural heritage.



Fig. 1 – Accessibility Projects: Examples in European and Italy.

3. Case Study: The Valley of the Temples in Agrigento

Though Agrigento, its Valley of the Temples, its medieval historic center and all the naturalistic treasures of its hinterland have been struggling for decades with a serious socio-economic crisis, they represent an increasingly interesting destination for travelers, even under the new flag of experiential tourism (Cilona T. 2019). In this context, however, issues of accessibility and inclusiveness in the symbolic places of the city, its Valley, and the enchanting naturalistic sites remain substantially unresolved. Some interesting projects, that have already been carried out or are in an advanced design phase, foresee the Archaeological and Landscape Park of the Valley of the Temples as the leader of a new way of understanding accessibility for users with specific needs, which would allow the majority of them to visit sites that were hitherto inaccessible. It is interesting, both from a priority technical profile and from a broader cultural point of view, the effort made to create paths and systems that guarantee the use of the entire Valley.

3.1 Heritage Accessible to All

The Archaeological and Landscape Park of the Valley of the Temples in Agrigento, a UNESCO World heritage site since 1997, is characterized by a series of important Doric temples from the Hellenic period in an exceptional state of conservation. A very popular tourist destination, at 1300 hectares in size, it is one of the largest archaeological sites in the Mediterranean. In recent years, issues of “expanded” accessibility as well as the full use of cultural sites have become a primary need together with the enhancement, conservation and active protection of cultural heritage. The goal is to ensure the right of “access to everything for everyone” – abled and disabled – and to break down any barrier (physical, sensory, or cognitive) that limits access to places of culture, as required by national and international legislation. The Park, in collaboration with the Cooperative Culture Society, not only ensures a facilitated cultural experience for visitors with different abilities – with special needs or with sensory difficulties – but allows everyone to be able to enjoy the archaeological site through the adoption of functional solutions accessible to the greatest number of users. All this is made possible thanks to the specific training of the entire staff that takes care of visits as well as a facilitated reading guide, written in accessible languages, which contains various educational materials dedicated to the spaces of the site as well as their contents. Over the years, in fact, the Park Authority has equipped itself with qualified and competent personnel as well as structural, didactic and informative supports in order to eliminate the physical, sensory and communicative barriers and to guarantee a full understanding and enrichment of all users during their visit. To resolve the various critical issues and ensure that everyone can freely and independently access this unique place, a virtuous and participatory path has been identified that allows guests to visit 85% of the archaeological area (fig. 2), orographically characterized by steep and sloping grounds, including the Kolymbethra Garden, an enchanting site located within the archaeological area and managed by the FAI since 1999 (6). The new park accessibility project was launched with local associations that work with people with disabilities as well as organizations involved in accessibility and mobility, such as the Rinascita Social Cooperative Society, the Disadvantaged Elderly Assistance Project, the Saieva Associations, the National Deaf Organization, the Italian Association of Amyotrophic Lateral Sclerosis, New Wings, and the Agrigento Tourist Consortium. Since the project aims at breaking down barriers, stairs, and differences in height that can hinder a visit to the Valley, many specific interventions have been carried out in favor of the disabled. Among others are the identification of facilitated paths, the placement – along the entire route – of restrooms and panels in Braille, the possibility to use video guides in LIS (Italian Sign Language), the creation of access walkways for prams at the Temple of the Dioscuri and at the Temple of Juno, adequate parking at the Griffo Museum, Porta V and Temple of Juno, as well as the opportunity to visit the great exhibition “*Building for the Gods*” by MondoMostre (imposing construction machines of the ancient Greeks, rebuilt on a 1:1 scale, which are easily accessible and equipped with dedicated signs usable by all subjects). In addition, there is also the possibility to utilize latest generation electric wheelchairs (7) – specially purchased and made available to those with special needs – to allow everyone to move freely in the archaeological area and discover different routes without anyone's help.

3.2 Inclusive and Usable Paths

The Park offers specific routes for every type of disability.

These include a path for deaf or hard of hearing visitors: at the main entrance of the Temple of Juno or Porta V, monitors provide information on the places of greatest interest shown on two general site maps. Along the way, panels equipped with QR codes allow the activation of videos in sign language.

There is a path for blind or visually impaired visitors: at the entrance to the Temple of Juno, there is a large general map of the site in Braille with the indication of the location of other panels installed at points of interest.

There is a route for visitors with motor disabilities or reduced mobility: at the main entrances of the Temple of Juno and Porta V, two general site maps provide explanations about the facilitated routes and indications of the degree of difficulty, percentages and slopes of the site. These visitors and their

companions also have the opportunity to use the shuttle service within the area free of charge. There is also a route for visitors with specific dietary needs: the cafeteria-restaurant, located at the center of the Via Sacra a few steps from the Temple of Concordia, offers gluten-free products.

The educational path is aimed at visually impaired or blind people who are accompanied by a companion. This itinerary consists of using tactile maps, to learn about the temple architecture, and touch a three-dimensional scale reconstruction of the Temple of Concordia.

The *Environmental Path* and “*Green Ways*” is a very pleasant experience to do inside the Kolymbethra Garden. The visit allows guests, and their companions (parents, teachers, friends), to familiarize themselves with places and learn their history, characteristics and curiosities in an engaging way thanks to “easy to read” texts, enriched with photographs, illustrations and maps (8). Visitors with intellectual, sensory or motor disabilities can discover this corner of paradise – which contains the colors, flavors and aromas of the Sicilian landscape, with its scenery and its hypogea, excavated 2,500 years ago – and learn more about the history of the ancient swimming pool of Akragas subsequently transformed into a splendid Mediterranean garden (fig. 3).

The inclusive educational action, therefore, allows the public to learn about the value of nature as well the millennial history of the Kolymbethra Garden. For people with physical disabilities it is possible to arrive comfortably by car to the garden from contrada San Marco.



Fig. 2 - General Map Valley of the Temples: Inclusive and Usable Paths, by <https://www.parcovalledeitempli.it>.

3.3 A Model to Imitate in the City Center

The new accessibility model, which inspired the Park Authority and is offered to all its potential users, is certainly an excellent example to imitate and replicate in the urban environment as well.

Unfortunately, the city center, not far from the Valley of the Temples, does not have paths and systems that guarantee the use of its cultural heritage, its shores or its hinterland.

All of these sites are concerned with the urban disaster of the last sixty years with which we are confronted every day.

The gap between Italian legislation on the subject and its practical effects at these latitudes is still enormous, and in some ways unbridgeable. A trend reversal that is primarily cultural is capable of transforming some longstanding weaknesses into new and interesting strengths in order to guarantee both the accessibility and usability of tourist sites as well as the improvement of urban mobility for all. For these reasons, it is extremely important to keep the discussion alive about accessibility and inclusion and on the perception of disability.

A city becomes truly accessible when the culture of the city itself is made accessible. Museums, noble palaces, churches, cinemas and theaters – which in this case are the emblems of culture – must necessarily be equipped and adapted with systems that guarantee accessibility; unfortunately in Agrigento this is not always guaranteed.

The integration of accessible facilities with a quality infrastructure network certainly increases the attractiveness of the city itself. The fact of creating something accessible for those with a particular disability makes the structure or service even more comfortable and usable by the whole population. In Agrigento some efforts have been made, but much more still needs to be done. We hope that the city will follow the model of the Archaeological Park and will undertake new accessibility paths thanks to a more enlightened, sensitive and attentive *governance* to the issue of accessibility.



Fig. 3 – The Kolymbethra Garden: a moment of the visit with a group of disabled people.
Photo by M. Ala, Responsible for the educational services Kolymbethra Garden.

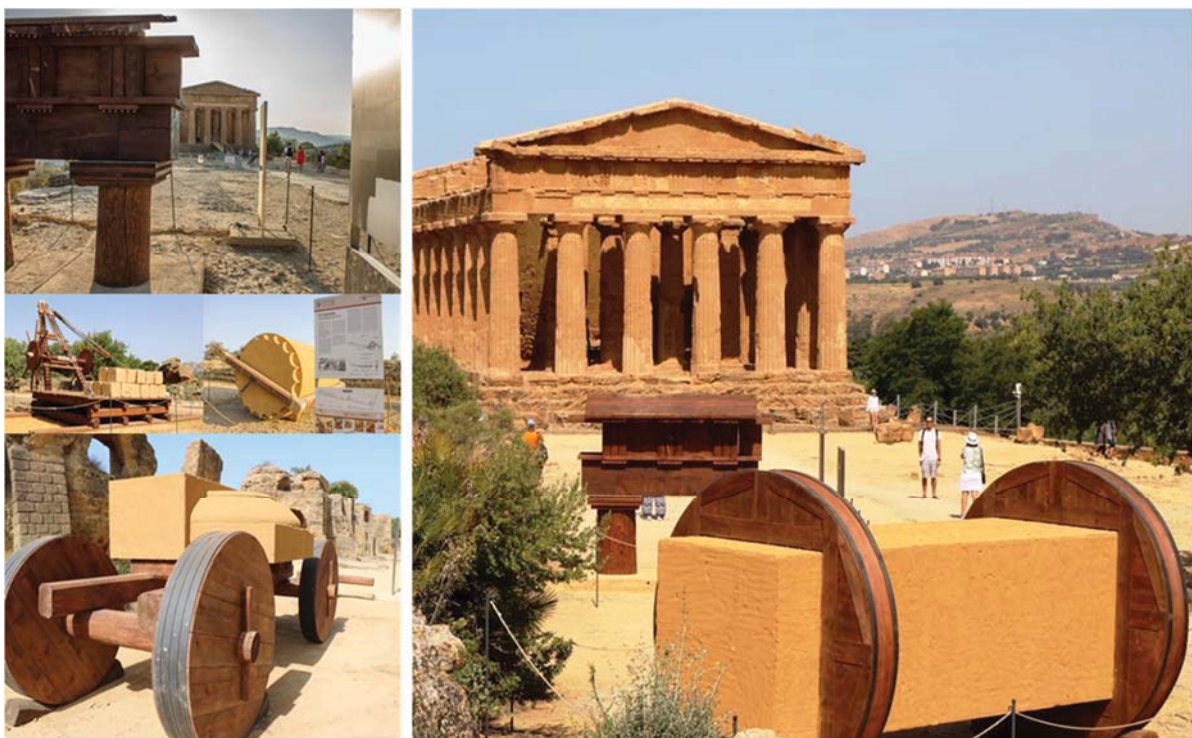


Fig. 4 – Example of the Project: *Building for the Gods*.

CONCLUSION

This study presents an overview of some projects and initiatives implemented in Europe and Italy on the accessibility of cultural heritage in all its forms: sensory, physical and cognitive. A keen interest has emerged in finding solutions that allow all citizens to freely access cultural heritage, thanks to positive examples of good practices at multiple levels. At the same time, this study highlights a bitter truth, that the removal of physical barriers in a structure is not enough to permit accessibility to the property itself. Physical accessibility is undoubtedly a fundamental prerogative but it is not the only condition that permits the structure to be truly usable by everyone. Think of people with sensory disabilities, for example, who require special systems in order to effectively make use of cultural sites. Fortunately, at the design level, the trend of trivially reducing the concept of accessibility to physical access alone is slowly making room for a more complete and inclusive practice that takes into account the needs of all individuals. The sooner we change our mental approach towards these sectors of the population the sooner they will be able to freely enjoy their cultural heritage without obstacles for anyone.

Notes

- (1) The expression cultural heritage was introduced into Italian legal language around the sixties by the "Franceschini Commission" and shortly after by the "Papalardo Commission". Since then, legal regulations have increasingly clarified this concept. Its evolution can be reconstructed precisely through the analysis of the numerous laws and legislative decrees governing the matter, testifying the difficulty of integrating legislation with the rapid evolution of sensitivity towards conservation, protection, enhancement as well as the use of the historical-artistic heritage. According to the Legislative Decree n. 112 of March 31, 1998, are understood as cultural assets, *"those that make up the historical, artistic, monumental, demo-ethno-anthropological, archaeological, archival and book heritage and the others that constitute evidence having the value of civilization thus identified on the basis of law"*.
- (2) M.G. Gargiulo, 2009.
- (3) In the Ministerial Decree no. 236 of 1989, art. 2, we read: *"by architectural barriers we mean: physical obstacles that are a source of discomfort for the mobility of anyone and in particular of those who, for whatever reason, have a reduced or permanently or temporarily impaired motor capacity; obstacles that limit or prevent anyone from the comfortable and safe use of parts, equipment or components; the lack of precautions and reports that allow the orientation and recognition of places and sources of danger for anyone and in particular for the blind, the visually impaired and the deaf"*. The term and the very concept of architectural barriers not only include physical obstacles (steps, stairs, doors, narrow passages, etc.), but they have considerably expanded to include elements of various kinds, which can also cause limitations. perceptive in nature or can, due to their particular conformation, cause disorientation, fatigue, discomfort or danger. Pathways with slippery, irregular or bumpy pavement, stairs without handrails, steeply sloping ramps, waiting areas without seating, lack of indications to facilitate orientation or the identification of sources are therefore architectural barriers. danger, too high a bar counter, etc. Compliance with the legislation for the removal of architectural barriers responds to the expectations of people with disabilities and at the same time offers the possibility of using cultural sites to a wider public, not identified as a disabled person, who will equally take advantage of these provisions. In fact, it is important to underline the principle recalled several times by the legislation, that is, that architectural barriers are an obstacle for anyone. In fact, we must not forget that there are people who can be defined as people with invisible handicaps, who constitute the most important and numerous group. There are many invisible handicaps, of all kinds and of different degrees, and can be of a transitory nature. In most cases they escape an unskilled observer and are therefore often ignored by everyone. They mostly concern elderly people, pregnant women, convalescents or people affected by disabling diseases (obesity, heart disease, diabetes, nephrology, back pain, etc.), which involve a decrease in the use of one or more bodily functions such as locomotion, sight, hearing, speech and also general behavior, so the equipment adopted to make places of culture accessible to disabled people become extremely useful for them too and guarantee their usability at all levels. The interventions to overcome architectural barriers must also include furnishings and any other component or equipment essential for the usability of the environments.
- (4) Organization founded in 1993 with the aim of protecting and celebrating cultural and natural heritage, it is now recognized as the most representative heritage organization in Europe. The main objective of Europa Nostra is to put heritage and its benefits at the center in the public consciousness and to make heritage a higher priority for public policies both at European and national level. Its specific objectives are to promote, at European level, high quality standards in the fields of conservation of cultural heritage, architecture, urban and rural planning, and to promote a balanced and sustainable development of the urban, rural, built and natural environment. Europa Nostra tries to focus on the importance of shared cultural heritage as a backbone of European identity, which contributes to the strengthening of citizenship itself.
- (5) The award was launched in May 2010 on the occasion of the approval of the European Disability Strategy (2010-2020).
- (6) A place of peace and serenity (atarassico), that recapitulates the agrarian and natural landscape of the Valley of the Temples, where immersed and inebriated by the perfumes of nature, it is possible to admire, together with the archaeological artifacts, the Mediterranean scrub, the extraordinary biodiversity of citrus and other fruit-bearing trees. A landscape of great potential for the socio-cultural, tourism and economic development of the city, which together with illustrious landscape of the Valley of the Temples, linked to the cultivation of the almond and the olive, represents a unique and exceptionally rare landscape of irrigated arboriculture. Accessibility to

the site is guaranteed by an easy-to-use network of dirt paths, that can be traveled on foot or by bicycle - rebuilt thanks to the historical memory of older farmers and the discovery of the original traces in the ground (M. Ala, T. Cilona, 2018).

(7) Electric wheelchairs strongly desired by the director of the Park archeological, Sciarratta Roberto architect.

(8) Specialist visits are supervised by the Garden's educational services manager, Dr. Maria Ala.

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