



Best Practice Handbook on Contemporary Use of Cultural Heritage - - case studies

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Best Practice Handbook on Contemporary Use of Cultural Heritage

CASE STUDIES – – EXAMPLES OF BEST PRACTICE

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**CASE STUDIES –
– EXAMPLES OF BEST PRACTICE**

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Innovative uses for the revitalisation of heritage places for sustainable development.

Case studies in the historic city centre of Florence, Italy

Introduction

The city of Florence—a World Heritage Site since 1982—has in recent decades oriented its activity almost exclusively towards tourism and is currently implementing alternative urban development practices to manage the post-COVID-19 crisis. Following the first wave of the pandemic, a document entitled *Rinascere Firenze* (Reborn Florence)¹ was drawn up, and by 2021, the city had redefined its strategic vision with a Structural Plan, with specific regulatory elements in the Operational, sided by a Green Plan and an action plan for the management of the UNESCO site. The current paper offers an overview of the city, its characteristics, its development vision and its heritage; it will also focus on two selected case studies of the architectural and urban heritage of the historic centre, offering a reflection on the possibilities for revitalising the historic centre of the city by bringing back residents and creating places where the flows of residents and travellers can meet. Such places should be the subject of specific planning, both to encourage the return of citizens, with strategies for improving environmental quality and services (such as by equipping green spaces in the historic centre), and to create opportunities for intercultural dialogue by redeveloping the travel system and hospitality. The two case studies are the Auditorium al Duomo—a place for culture and international scientific meetings—and a system of underused minor squares that includes the redevelopment project of the Piazzetta dei Tre Re.

¹ https://www.comune.fi.it/system/files/2020-05/rinascefirenze_DOC_6.pdf, last visited on May 27th, 2021.

Florence: metropolitan area, municipality and historic centre

The Florentine Metropolitan City comprises 42 municipalities in an area of approximately 3,500 km² with over 1,007,000 inhabitants. Geographically, it is characterised by a largely hilly area with significant mountain coverage (26.8%) and a small area of plains (4.5%)².

Since the time of the Roman settlements, the area has developed in a polycentric way and the dominance of rural over urban areas has been maintained. The limited anthropisation can be seen in the large quantity of wooded areas (52%), which is clearly larger than the area for agricultural use (39%). The countryside and nature are therefore strong elements of the metropolitan area as a whole. The main river is the Arno, which rises on Mount Falterona and then flows into the Ligurian Sea at the height of the city of Pisa, after crossing the Municipality of Florence from east to west. In the Florentine area, the two banks of the river are connected by bridges of great architectural and historical value, including the Ponte Vecchio and Ponte Santa Trinita.

The municipality is home to more than 378,000 inhabitants in an area of just over 102 km² and is divided into five districts: Historic Centre (Q1), Campo di Marte (Q2), Gavinana–Galluzzo (Q3), Isolotto–Legnaia (Q4) and Rifredi (Q5). Part of Q1 is the historic centre of the city that has been on the World Heritage List since 1982 (*core zone*)³, and a large portion of the Florentine territory is protected by UNESCO as a *buffer zone* to the central area. The core zone is inhabited by 67,500 residents on 505 Ha and is delimited by the remains of the fourteenth century city walls, which feature gates, towers and two Medici fortresses (to the north, the Fortress of San Giovanni Battista, called ‘da Basso’, and to the south, the Fort of San Giorgio in Belvedere).

Since 2005, management of the Florence World Heritage City Centre has been carried out through the Florence World Heritage and Relations with UNESCO Office of the Municipality of Florence, which deals with the drafting and monitoring of the site management plan of the Steering Committee of the Historic Centre of Florence. This committee is composed of the Municipality of Florence, the Region of Tuscany and the Ministry of Cultural Heritage and Activities and Tourism (MiBACT), together with the Superintendence of Archaeology, Fine Arts and Landscape and the Regional Directorate for Museums of Tuscany. The current management plan (PdG) drawn up in 2021 is the third and replaces the previous one, which was approved in 2016.

² Dati *Rinascimento Metropolitano – Piano Strutturale Metropolitano 2030* della Città Metropolitana di Firenze.

³ <https://www.firenzepatrimoniomondiale.it/wp-content/uploads/2015/12/Documento-Preparatorio-Piano-di-Gestione-2021.pdf>, last visited on May 27th, 2021.



Image 1: The Arno River and the Ponte Vecchio. Photograph by Corinna Del Bianco, 2019.

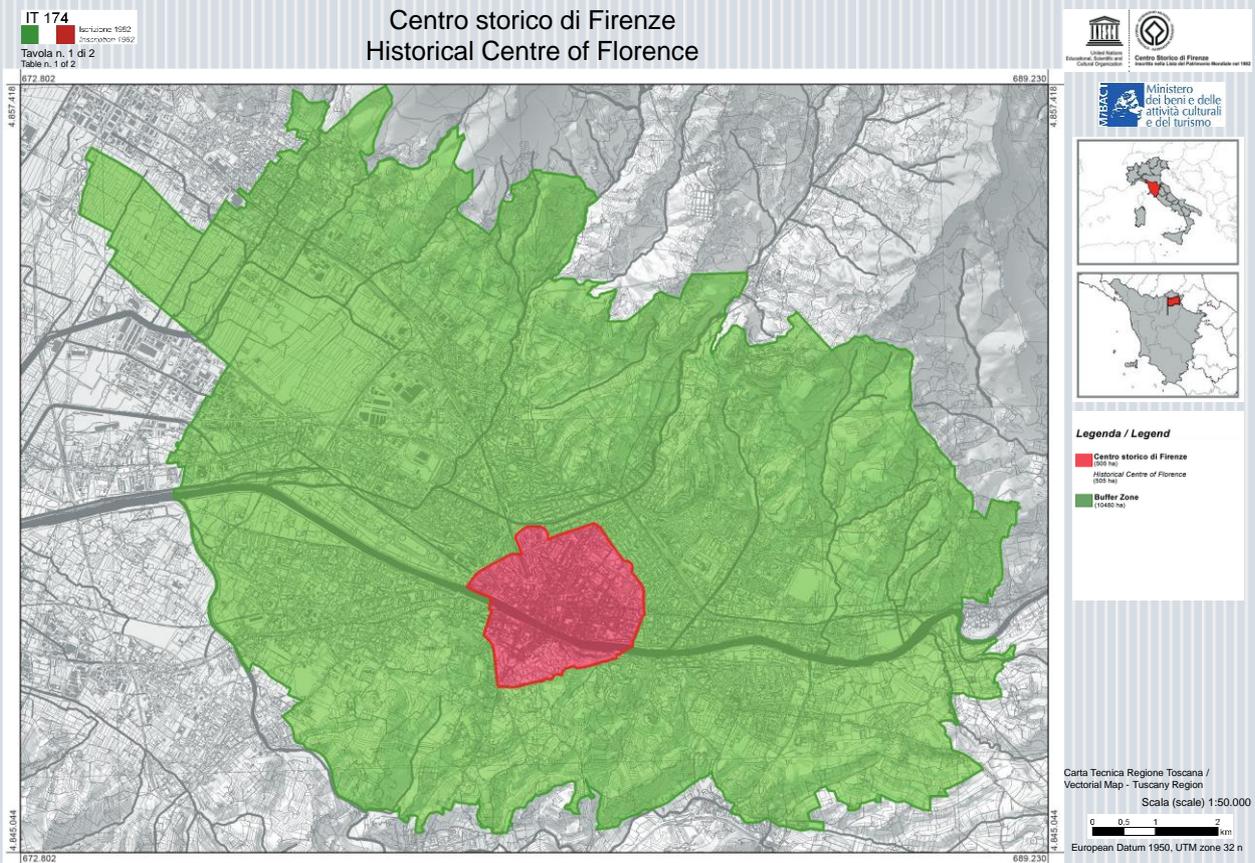


Image 2: The historic centre of Florence registered on the UNESCO World Heritage List and its buffer zone. Map by the UNESCO Office, based on the Tuscany Region Vectorial Map.

The heritage of the historic centre of Florence

The historic centre of Florence comprises an urban and social fabric that for centuries has been the scene of an extraordinary cultural and artistic flowering that has manifested itself in monuments like the Cathedral of Santa Maria del Fiore, the Church of Santa Croce, Palazzo Vecchio and the Uffizi o Palazzo Pitti. The artistic works in the area are many and are signed by great masters such as Michelangelo, Brunelleschi and Giotto. The Florentine Renaissance strongly influenced the development of arts and architecture in Italy and across Europe, and the character of Florence is therefore unique from both historical and aesthetic points of view. Florence qualifies for inclusion in the World Heritage List under Criteria (i), (ii), (iii), (iv) and (vi), and its uniqueness is also seen in its integrity and authenticity. In detail, with regard to UNESCO Criterion (i), the Florentine urban complex in its entirety is explicitly considered a masterpiece and a result of continuous creation that has lasted for more than six centuries. For Criterion (ii), since the fifteenth century, Florence has had a dominant influence on the development of architecture and monumental arts in both Italy and in Europe, and—for Criterion (iii)—the historic centre is also representative of the commercial power that the city had during the Middle Ages and Renaissance, as the ancient places and types (markets, lodges etc.) of trade have been preserved. The palaces represent the magnificence and wealth of the bankers and princes who ruled the city between the fourteenth and seventeenth centuries—Criterion (iv)—and finally, the city is materially associated with events of universal importance, such as the birth of the ideas of the Renaissance and of modern humanism—Criterion (vi)⁴.

Florence and travel

For centuries, Florence has been a cultural travel destination, and for a long time was a fixed stop on the Grand Tour of Europe for the children of the wealthiest families of the continent. On such trips, the travellers would stop in Florence and remain for a significant time, forging a real connection with the urban, suburban and rural area, enriching it with their culture and sometimes even their work. In the second half of the twentieth century, mass tourism developed, with its service chains and industrial model, and thus began the democratisation of travel, both internal and international. Most workers in wealthy areas of the world can now travel, and, in recent decades, tourists have become—spurred by the advent of cheap flights and access to online services—hasty, distracted and essentially ‘consumers’ of the city, its spaces and its culture. However, a change in this trend started to appear only a few years before COVID-19, with a new generation of travellers more attentive to discovering the authenticity of places and to creating, through travel, true cultural experiences.

⁴ <http://whc.unesco.org/en/list/174>, last visited on May 31st, 2021.

With the arrival of masses of tourists, citizens in Florence began to abandon the historic centre, which was no longer suitable for families but was instead responding increasingly to the need for a ‘touristification’ of public spaces, services and even residences. Currently, the majority of the residents of the UNESCO historic centre are people who live alone or in couples—mainly the elderly or young people who have owned a house for less than twenty years (Zoppi, 2020). The residents perceive tourists as a precious economic source, but also as a bearer of inconvenience because they see and use the city as a place of entertainment, regardless of those living and working there (Blagojevic, 2020). At the same time, travellers bring to a place not only economic enrichment, but also—and above all—cultural enrichment created by the encounter with the multiculturalism present at that place (Del Bianco, 2018).

It is a spiral process already experienced by many other historic international cities, such as Venice or Barcelona, but which the COVID-19 pandemic abruptly interrupted, offering the possibility for a rethinking of the entire city system. The goal must be to bring residents back to live in the historic centre, and to do this, it is necessary to rethink the system of public spaces, social residences and citizen services. Only by bringing the residents back to live in the city is it possible to return to a state of balance and quality in terms of both living in and using the fruits of the city’s heritage.

Prevailing tourist flows, issues to be solved

In a city like Florence, tourism represents a problem rather than an economic, social and cultural opportunity that would be intrinsic to a system of travel and hospitality. Over the years, the tourists who have visited the city have become increasingly numerous and hasty⁵. The response to this growing market demand has itself been increasingly impulsive and less and less oriented to public administration, resulting in a situation that is difficult to control or reverse. Before the COVID-19 pandemic, the city saw masses of tourists arriving on day trips from cruise ships that stopped at the nearby Port of Livorno, from the airports of Florence and Pisa and from the city’s stations, both by public and private buses. Many of these people did not even stay overnight in the city, but only visited the main streets and museum attractions while remaining in the Duomo–Uffizi–Ponte Vecchio–Galleria dell’Accademia quadrilateral. Few tourists, therefore, had the opportunity to experience the city’s heritage and territory in depth, dedicating a few days to exploring not only the museums and monuments, but also the city and the metropolitan system, with the cultural expressions of the historic centre and other districts and the cultural, natural and food and wine offerings of the rural and suburban areas.

⁵ In 2018, the tourist market of the city and its metropolitan area recorded almost 15.5 million visits, with an average stay of 2.9 nights, up from 2.7 in 2013 (Centro Studi Turistici, 2019). The average stay trend continued to rise in 2019.

Meanwhile, the historic centre, emptied of residents, has given way to short-term rentals, bringing heavy repercussions for the residential building stock, with prices and sizes not accessible to local people. The network of production activities has been oriented mainly towards temporary customers, and environmental pollution has increased along with the difficulty of managing both resources and waste. Finally, without its own citizens, the city's local cultural identity has begun to deteriorate in an irreversible process of *Disneyfication*⁶.

In summary, tourism impacts at least ten main aspects of the city: 1) transport, 2) quality of life of residents and tourists, 3) quality of work, 4) growth of demand/offering with respect to seasonal adjustments, 5) protection of cultural heritage, 6) protection of environmental heritage, 7) protection of the identity of the local destinations, 8) depletion of natural resources, 9) increase in energy consumption and 10) management and production of waste.

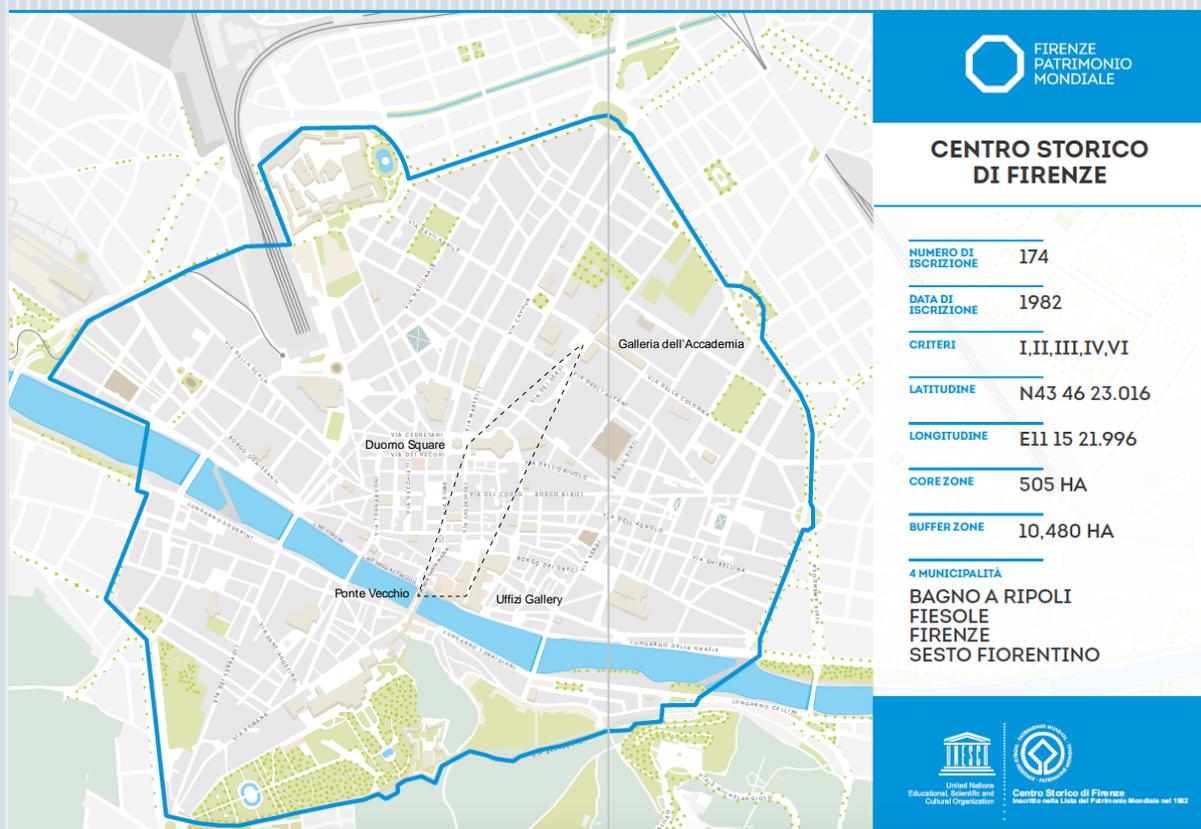


Image 3: The Duomo Square–Uffizi Gallery–Ponte Vecchio–Galleria dell'Accademia quadrilateral. Base map UNESCO Office (UNESCO, 2018, pp. 14–15), elaboration by Corinna Del Bianco.

Tourism development trajectories and innovative ideas for the Metropolitan City, Municipality and UNESCO-listed centre

⁶ *Disneyfication* is defined by the Merriam-Webster dictionary as 'the transformation (as of something real or unsettling) into carefully controlled and safe entertainment or an environment with similar qualities'. <https://www.merriam-webster.com/dictionary/Disneyfication>, last visited May 27th, 2021.

In the vision of the Metropolitan City of Florence, expressed in the *Rinascimento Metropolitano–Metropolitan Structural Plan 2030*, tourism is framed as an integrated system throughout the territory, involving urban and rural areas and enhancing the widespread environmental assets and the culture of relationship and balance between man and the environment that has been maintained over the years for both the production and conservation of resources. The 2030 vision therefore sees tourism as an opportunity for the entire metropolitan area—one that should exploit the brand of the historic centre of Florence to create synergy with the neighbouring areas, encouraging different forms of tourism and exploiting the network of small centres that exist throughout the city’s territory. One can thus envisage not only occasional foreign travellers, but also metropolitan citizens interested in understanding their region more in depth. Such a system would allow 1) the decongestion of historic centres and the recovery of their identities, in synergy with other planned actions, 2) reduced consumption and 3) experimentation with new forms of living in smaller rural centres.

By narrowing the scale and focusing on the city of Florence, nine themes for the development and regeneration of the city—and particularly its historic centre, one of the most affected areas because of its predominantly tourist orientation—are identified in *Rinascere Firenze*. Briefly, the city is conceived as

1. polycentric, with the need to reactivate the neighbourhood-scale system with enhanced pedestrian and cycle mobility, reinforced green areas and shops and new neighbourhood services;
2. having a new historic centre in which medium- and long-term rentals are encouraged and investments are made in accessibility, innovation, research and training;
3. containing more liveable urban spaces that have a focus on energy transformation and urban forestry, with the planting of 20,000 new trees⁷;
4. possessing greener mobility through the encouragement of cycle highways and an increase in the sharing offers of bicycles, scooters and cars;
5. developing the city’s economy and working on a diversification of tourism in addition to the Duomo–Uffizi–Ponte Vecchio–Accademia Gallery quadrilateral;
6. expanding the systemic and cultural offerings;
7. putting children and families at the centre with dedicated offers;
8. encouraging work care, with welfare, home and work policies; and

⁷ <https://ambiente.comune.fi.it/dalle-redazioni/transizione-verde-e-forestazione-urbana>. last visited May 27th, 2021.

9. working on an increasingly intelligent city and expanding digital accessibility with fibre mapping and the drafting of a Digital Urban Plan.

The UNESCO Office has also worked on the redevelopment of minor or little-used squares in order to distribute the offerings, offer new value to the entire urban fabric, give visibility to the productive sector and enhance services and commercial, artisanal and cultural activities.

Innovative uses of heritage to develop alternative and sustainable tourism dynamics

The importance of decentralisation of the cultural offerings infuses all the documents for the direction and management of the area; it aims to enhance the secondary and peripheral areas and to improve the management of tourist flows by decongesting the Florentine historic centre and enhancing the surroundings. Thus, travellers would be better able to understand the local cultural identity and would stay longer by investing in a journey that is much more aware and respectful of both the heritage and the place and its residents.

The environment would also benefit, with a reduction in the impact on its resources. As already mentioned by Paolo Del Bianco in numerous publications, the management plans of heritage sites should target a reduction in the number of tourists, favouring a longer average stay with policies and commercial offers. The increase in the average stay would allow travel redevelopment and an expansion to meet travellers' needs, not just for frugal meals and access to places of culture, but also for theatres, cinemas, food shops and other retailers. Such development represents a use of heritage that favours dialogue between cultures as an exercise in tolerance and respect for cultural diversity (Del Bianco, 2018). Through these actions, the entire market—both supply and demand—can be redeveloped, solving problems related to overtourism dynamics and rediscovering the values of travel and hospitality through a new use of architectural and urban heritage.

Two case studies: the Auditorium al Duomo and the Piazzetta dei Tre Re

Among the many places normally visited by large flows of travellers, some can be identified as creating exceptional moments of encounter between travellers and residents and between travellers of different origins. As discussed in the didactic material, it is possible to analyse spaces of various types that activate this type of meeting activity and to work both on urban and architectural regeneration and on the redevelopment of tourism. Two interventions have been identified that involve both public and private spaces and which potentiate meetings and exchanges between residents and travellers, opposing the phenomenon of

'touristification' of historic centres and encouraging meeting and dialogue through cultural and recreational activities between different flows.

The first case study is a space dedicated to culture that is located a few metres from the Cathedral of Santa Maria del Fiore: the Auditorium al Duomo, a former historic cinema and place of culture and socialisation, which was intended as a place for meetings among international visitors and the city. The second example is the Piazzetta dei Tre Re, a small square close to Piazza della Repubblica, which had fallen into decay and was regenerated through a conservation and maintenance intervention and then with an architectural project that included an open-air bar enriched by a programme of recreational and cultural activities. Both the Auditorium and the Piazzetta are located in the heart of the World Heritage Centre.

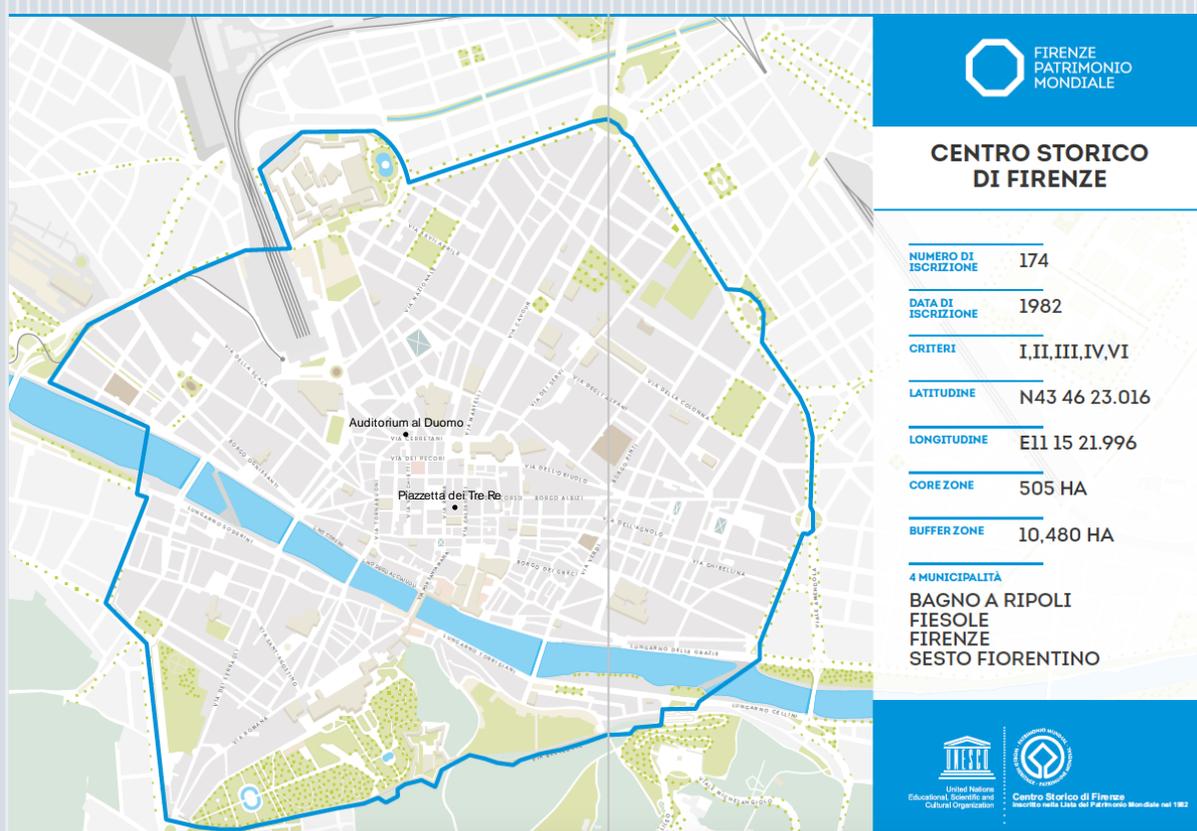


Image 4: Location of the two selected best practices. Base map UNESCO Office (UNESCO, 2018, pp. 14–15), elaboration by Corinna Del Bianco.

The Auditorium al Duomo: notes on the history of the private architecture

The Auditorium al Duomo is located on the block between Via de' Cerretani and Via dell'Alloro and has an entrance on each of the two fronts. The building has a prominent

position in the geography of the city as it is located on the main road leading to the square of the Cathedral of Santa Maria Del Fiore in front of the church of Santa Maria Maggiore, which is located in front of the building. The road is also the most frequented by flows of travellers arriving in Florence by train at the Santa Maria Novella station, which is located at the end of Via Panzani, the continuation of Via de' Cerretani.

The building was born as the headquarters of the Compagnia degli Oliandoli and Pizzicagnoli, who created an oratory there. The building has since undergone numerous internal and façade transformations; the elevation on Via dell'Alloro No. 3 is from the fourteenth century while the façade on Via de' Cerretani is of nineteenth-century origin. In 1931, it was completely redesigned for a radical change of use, becoming a cinema managed by the church of Santa Maria Maggiore. The place was first called the Educational Moral Cinema and then Cinema Dante. After the war, it changed its name twice more, first to Cinema Mignon then to Cinema Astra I, and, from 1962, various projects aimed at expanding and renovating the hall were carried out. In 1988, the location was renovated by the engineer Lisindo Baldassini, and between 2003 and 2006, the architect Paolo Del Bianco conducted other works to reconfirm its public entertainment purpose, while incorporating functionality for conferences and international cultural meetings. On 5 May 2006, the new spaces were inaugurated under the name Auditorium al Duomo.

Eventually, management of the cinema hall was separated, as was distribution of foot traffic to the left and right sides of the building's structure, but with Del Bianco's project, the building's function, even though diversified, was again integrated and the central entrance was placed in front the Auditorium, with the Hotel Laurus al Duomo on the right and the Caffè Astra al Duomo on the left. Today, the Auditorium has its main entrance on Via de' Cerretani and the emergency exit on Via dell'Alloro; it is divided into two spaces—the upper an amphitheatre and the lower a modular room with three sub-sectors. In the basement, there are dressing rooms and rehearsal rooms for artists, and the structure can accommodate up to 500 people. The Auditorium is where the meetings of the Romualdo Del Bianco Foundation take place, and it works closely with the nearby Palazzo Coppini, which is also a space for international meetings and is located at Via del Giglio 10. In September 2011, the amphitheatre hall was dedicated to Andrzej Tomaszewki with a formal ceremony in the presence of the authorities, and the lower room was dedicated to Giuliano Borselli.



Image 5: Façade of the main entrance of the Auditorium on Via de' Cerretani. On the right side is the façade of the Santa Maria Maggiore Church. Photograph by Corinna Del Bianco, 2021.



Image 6: Detail of the entrance on Via de' Cerretani. Photograph by Corinna Del Bianco, 2021.



Image 7: Façade on Via dell'Alloro. Photograph by Corinna Del Bianco, 2021.

A place dedicated to culture, where residential and tourist flows overlap

The Romualdo Del Bianco Foundation and the COMI hotel company have worked together on creating encounters for peace-building purposes by returning a private space to citizens. The company, in meeting its corporate social responsibilities, sought to regenerate space and architecture for the city and its citizens, which is certainly a less profitable endeavour than other possible uses. The effort created a central meeting place between international cultures while also stimulating a high-level international scientific debate on issues related to heritage and travel for intercultural dialogue. The Auditorium hosts up to five International Council on Monuments and Sites (ICOMOS) International Scientific Committees per year as well as meetings of major international cultural institutions representing heritage, including UNESCO, ICCROM and UNWTO⁸.

⁸ Guests have included members of the network of the Romualdo Del Bianco Foundation, which includes over 500 institutions in 111 countries on five continents.



Image 8: A symposium of the Fondazione Romualdo Del Bianco. Photograph by Corinna Del Bianco, 2018.

The system of minor squares: an opportunity to improve liveability and the environment in the historic centre

In the complex hierarchies of the historic centre's urban fabric, it is important to observe the system of minor or lesser-known squares that are often forgotten and are in a state of decay. These squares represent an opportunity that was also noted in the *2016 Management Plan Monitoring Report*, published in 2018⁹. The historic centre has a series of critical issues, such as mobility; the environmental situation of the Arno River, with its risk of flooding; the decline in residents; the conservation of monuments; and, significantly, mass tourism (Francini, 2019). A further element to consider in increasing the liveability of the historic centre is that of greenery¹⁰.

⁹ <https://www.firenzepatrimoniomondiale.it/wp-content/uploads/2015/12/Monitoraggio-2018-low.pdf>, last visited on May 31st, 2021.

¹⁰ Specific studies for the creation of a new plan and for the identification of the city's heat islands in order to mitigate their effects are currently underway and being conducted by the Faculty of Agriculture of the University of Florence and the CNR.

In this regard, the system of minor squares could be an opportunity to create new green spaces with demineralisation of the soil and the planting of tree species. Greenery has always coexisted with the architectural and building heritage and so does not represent an incompatibility with the historic centre. If they became green, these smaller squares would be places where a new, more comfortable environment could be offered to residents and children, with services for families, such as games, seats and shaded spaces. They would also favour the reenergisation of small commercial, artisanal and cultural activities, which are also relevant services for travellers who might find rest and comfort in these small squares. The system of minor squares could thus bring a new vitality to the Florentine historic centre by offering an alternative to the paths most beaten by tourists; they could also bring a diversification of connections, and, if properly conceived, they could be places where travellers and residents meet and communicate, encouraged by the pleasantness of the architectural surroundings and the greenery that would allow a new use of the Florentine heritage.

The recovery of the Piazzetta dei Tre Re

This space is located between Piazza della Repubblica and Via de' Calzaiuoli. It is accessed via three gates: the first in Via Calimala, the second in Via de' Calzaiuoli and the third from Piazza della Repubblica. The space was in a state of great decay and neglect and was recovered through a project by the architect Chiara Fanigliulo¹¹, who interpreted the space as a small Garden of Eden to be made available to the city through private action by Serre Torrigiani, which took care of the space in agreement with the municipality, bringing a traditional street food programme, art installations and musical performances. The project was awarded First Prize at the 2017 Tuscan Architecture Awards¹².

The recovery of the square required cleaning of all the surfaces—which had previously been covered with graffiti and used as a public bathroom—that was carried out by the Angeli del Bello of the Municipality of Florence, followed by the installation in the square of a specially designed kiosk, a service warehouse, seating, a performance platform with a green wall on scaffolding and a selection of potted trees. The signs placed at the entrance to the three access alleys were equally important in informing residents and travellers of this regenerated corner of the city. In addition to these, trees, flower boxes and suspended lanterns have been emplaced that signal a detachment from the normal minerality of the historic centre.

Although the project was limited in scope and dimensions and does not represent a permanent solution, it prompted reflection on the role of smaller squares, which could

¹¹ <https://studiofanigliulo.net/PIAZZA-DEI-TRE-RE-FIRENZE-EF2019>, last visited May 27th, 2021.

¹² <https://www.premio-architettura-toscana.it/nominee/riqualificazione-urbana-piazza-dei-tre-re-2/>, last visited May 27th, 2021.

become real public spaces for culture, art and greenery and provide an alternative to traditional flows and above all a meeting place for residents to rediscover and reanimate parts of the city and for tourists to find a new form of urbanity. In this way, the flows, crossing in these small and characteristic spaces, would lay the foundations for encounters between different cultures and for the experimentation of new forms of dialogue that could be monitored and stimulated through existing certification systems (Board Members of the Romualdo Del Bianco Foundation, 2018).

Conclusions

In conclusion, the architectural project is a fundamental tool to encourage innovative uses of heritage at both the architectural and urban scales. An architectural project has the power to direct people's behaviour and can therefore, with a view to achieving the objectives of the 2030 agenda, contribute to the creation of opportunities for dialogue between the cultures found at a site, be a key resource for reducing distress and violence in cities and contribute to intercultural dialogue by facilitating mutual understanding and allowing for different interpretations of heritage. In particular, cultural infrastructure can include locations where dialogue and sharing are practised, contributing to social cohesion and mutual understanding (UNESCO, 2016 pp. 242). A project can characterise the use of architectural heritage by giving the space a new function, such as that of a creator of peace processes, favouring interaction between people of different cultures and being designed to contribute to increasing the environmental standards of historic sites.

In Florence, the problem of tourism—and therefore of the use of the architectural heritage that characterises the area—has been central in recent decades as it has transformed the city into a playground, depriving it of many of its residents. From 2020, however, the city has, with the pause enforced by the pandemic, had the opportunity to rethink its vision and to give a new meaning to the flow of visitors interested in its cultural heritage.

This text offers two examples: a closed private space intended for public entertainment and a public space whose recovery required synergy with a private actor. Both the Auditorium al Duomo and the Piazzetta dei Tre Re can be seen as best practices as, with their architectural and functional designs, they give residents and travellers the opportunity to meet in the heart of the city and to engage in dialogue. Finally, this text emphasises the importance of working on green interventions in historic centres in order to redevelop them as spaces in which to live and in which the quality of life is high. This type of redevelopment, which is not incompatible with the conservation and management of the architectural heritage, is of great importance and can lead to radical changes in the use of the heritage of historic centres, enriching the diversity of functions and guaranteeing an increase in environmental comfort and sustainability.

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<https://studiofanigliulo.net/PIAZZA-DEI-TRE-RE-FIRENZE-EF2019>

<https://www.premio-architettura-toscana.it/nominee/riqualificazione-urbana-piazza-dei-tre-re-2/>

<https://www.lanazione.it/firenze/cronaca/restyling-piazzetta-dei-tre-re-1.1599228>

<https://firenzeurbanlifestyle.com/la-nuova-vita-della-piazza-dei-tre-re/>

South Devon AONB¹³

Devon (UK)



Figure 1 – The Outstanding Area of Natural Beauty in South Devon. Photo courtesy of South Devon AONB Unit.

Brief description:

The South Devon AONB is located in Southwest England, UK. The area is known for its significant landscape features including rugged cliffs, sandy coves, peaceful countryside, picturesque villages, rolling hills, wooded valleys, colorful hedge banks and secretive estuaries. As a result of its distinct landscape character and well-known beauty, it has become a popular place to visit. However, the landscape character of the South Devon AONB is under increasing threat due to social, economic, and environmental pressures. Activities such as land use, planning and the changing climate, all have an influence on the character and condition of the landscape. The cumulative impact of small-scale changes is being felt at a landscape scale and the need to respect distinctive local character is

¹³ The best practice description has been authored by Hanna Elisabet Åberg, Angela Santangelo and Simona Tondelli as part of the UNINET Cultural Heritage research group of the Alma Mater Studiorum - University of Bologna.

increasingly needed to avoid further damaging cumulative damage. As an AONB the landscape is protected by the Countryside and Rights of Way Act 2000 (CROW Act). Local authorities have given authority to an 'AONB partnerships' who is supported by a working group whos' primary focus is to: I) to provide a strategic, independent unit dedicated to the conservation and enhancement of the South Devon AONB; and II) to co-ordinate and drive the implementation of the Management plan. With a well thought through management, the South Devon AONB constitutes a good example of contemporary and responsible use of cultural landscapes.

I. Characteristics of architectural monument

I.1. General information

Located on the Southwest coast of Britain, the South Devon AONB can be argued to be one of the country's finest protected landscapes. It is well-known for its significant landscape features including rugged cliffs, sandy coves, peaceful countryside, picturesque villages, rolling hills, wooded valleys, colourful hedge banks and secretive estuaries. The diverse landscape is a living heritage: an ancient cultural landscape with strong links to the sea and generations of human activity carved into the surroundings. Covering an area of 340sq. kms including a 97 km long unspoilt coastline, five river estuaries, just over 27,000 hectares of agricultural land and 2,500 hectares of woodlands, the AONB offers varying landscape features.



Figure 2 - Location of South Devon AONB in Southwest England, Devon, UK.

The Area of Natural Beauty (AONB) designation for South Devon was confirmed by the government in 1960. South Devon AONB is one out of England's 34 Areas of Outstanding Natural Beauty (AONBs) which cover a total 15% of the UK. AONBs' primary purpose is to conserve and enhance natural beauty, but also to take account of the needs of rural industries and communities. Unlike national parks, however, which have their own planning authorities, decisions on development in AONBs are made by local authorities and planning inspectors. Most of the South Devon AONB (98%) lies in the South Hams/Devon County Council. The AONB spans 43 parishes, two Town Councils and two wards (South Devon AONB Partnership, 2019c).

In this handbook, the South Devon AONB landscape is not only considered as a place of high beauty value but also in its individual and social dimensions, as a continuous cultural process shared by people and influencing the well-being either of resident communities or visitors. As landscape has always been made object of representation, narration, and communication, it also functions as place of cultural associations which, if correctly understood and interpreted, in some ways supports the character and identity of places (Di Fazio and Modica, 2018). The South Devon AONB landscape is therefore not only characterized by the functional aspects related to land use but also by a historic and cultural dimension: the living nature of landscape itself; the role played by human communities in shaping it and exploiting its resources; and the importance of the social/cultural perception.

The cultural associations are particularly important in a landscape like South Devon, as the common knowledge of the landscape as a beautiful has made it a popular tourist destination and holiday home. Still its cultural representation is sparse in comparison to other English countryside landscapes (see for example the Cotswolds (Brace, 1997) or Lake District (Scott, 2012)). There are for example few noteworthy names with a strong historic association to the area. The most well-known representation of the South Devon landscape in popular culture is through Agatha Christie's novels, who had a holiday home in the area, and wrote and set some of her novels within the AONB (e.g., 'And Then There Were None' was set on Burgh Island (see figure 7)) (South Devon AONB Unit, 2013). Besides Christie's dramatic landscape portrait, other cultural association to the local landscape that should be mentioned could be given to the local agricultural varieties and breeds which are themselves an important historic feature of the area. These include the South Devon breed of cattle, a number of herds still being kept in the area today, and local varieties of apple specific to South Devon orchards (South Devon AONB Unit, 2013). What was once the cider capital of England where every farm had its orchard is now much less common. Strong cultural traditions associated with orchards remain including wassailing¹⁴, cider and juice making and the championing of local apple varieties (South Devon AONB Unit, 2021b).

¹⁴ First mentioned in 1585 that young men would go between orchards performing the rite for a good crop in the forthcoming season (Wikipedia, 2021)

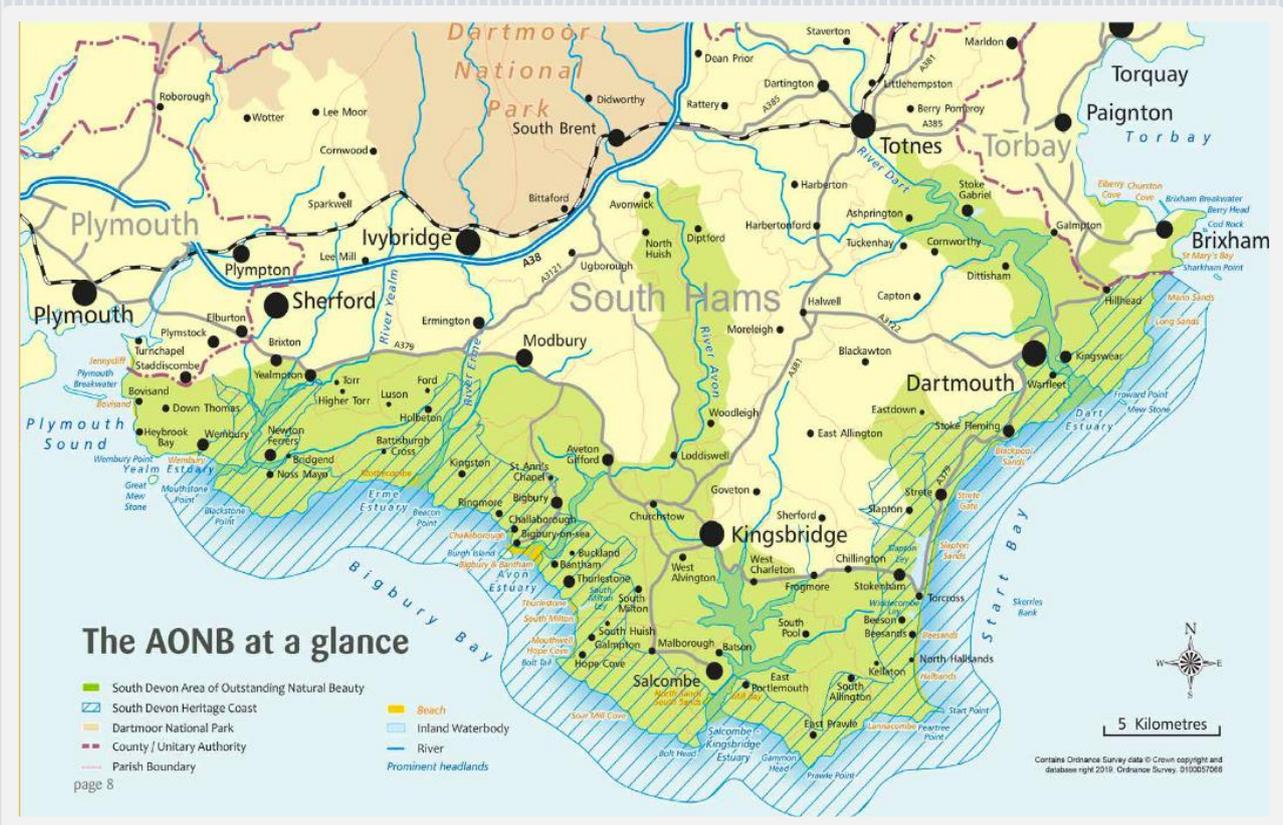


Figure 3 – The green parts of the map show the borders of the South Devon AONB (South Devon AONB Partnership, 2019c).

1.2. Brief history of cultural landscape

The outline of land ownership boundaries, territorial organisation and road was laid out in the Bronze Age and Iron Age, leaving a legacy of coaxial field system, barrows, hill forts, occupation settlements, and ridge routes. However, the presence and age of these landscape elements are not generally visible today, as they have been overlain or altered by successive phases of land use or blotted out by e.g., ploughing or urban development (South Devon AONB Unit, 2013). In the early middle ages, the landscape was developed with a network of open fields and strip farming, with rough grazing on much of the coastal and estuary fringes, and the network of manor houses established. Although the period made an important contribution to landscape organisation, the tangible remains are difficult to read in the landscape today (South Devon AONB Unit, 2013).

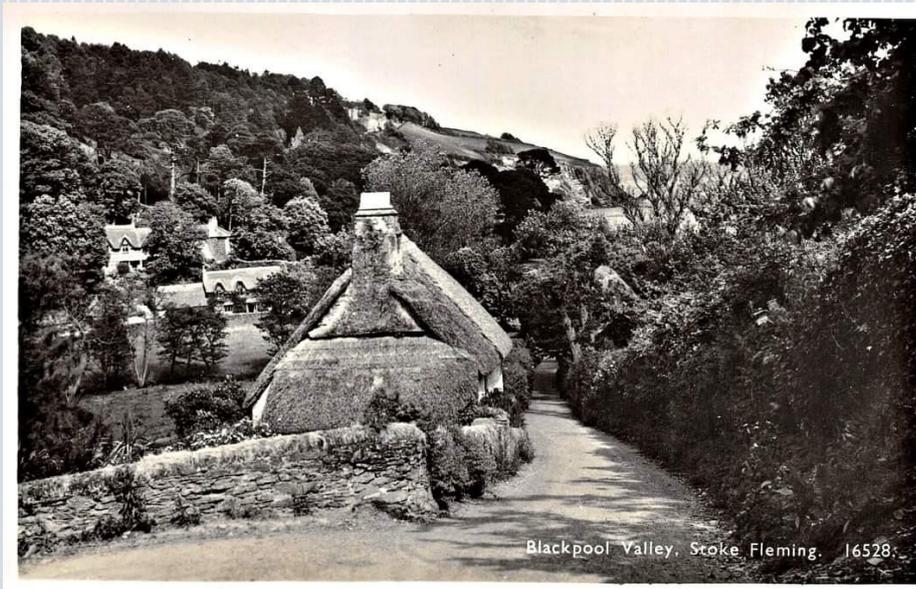


Figure 4 – Village house with thatch roof in Black pool Valley in Stoke Fleming. Photo courtesy of South Devon AONB Unit.

The later middle ages saw the progressive enclosure of strip fields and coastal heathland, the establishment of villages and large estates and the construction of defensive fortifications and churches, and made a very significant contribution to the landscape we recognise today (South Devon AONB Unit, 2013).

This is also when most

of the over 40 parish churches in the South Devon AONB originate, sometime between the 12th and 13th centuries (South Devon AONB Unit, no date). In addition to being a valuable feature for the landscape picture, they are important for their contribution to our overall understanding of past religious practices and social history

The 18th and 19th century brought the rebuilding of large estate houses, additional military defences, the improvement of estate villages, establishment of orchards, the construction of railways and even the gentrification of some towns. This is therefore also a highly significant period in shaping nowadays's landscape (South Devon AONB Unit, 2013). The patchwork of small fields, hedge banks, walls, hedgerow trees, woods, orchards, and farmsteads were created by farmers and foresters over hundreds of years. Smaller curving fields of medieval origin remain on valley and coastal slopes. With a total of 4,060 km of hedge banks (South Devon Partnership, 2019). The rural and agricultural traditions continue to be expressed through agricultural shows, village fairs, wassailing events, and apple days.

The significant maritime related culture is expressed through the large number of regattas and boating events. Other historic coastal features include signal stations, navigation marks, lighthouses (see figure 4), coastguard cottages, and shipwrecks.

Box 1.2. Traditional local building materials

- Slate: used for walls, roofs and boundary wall
- Limestone: buildings
- Grey mica schists and hornblende or green schists: buildings and boundary walls
- Harder volcanics: buildings
- Cob: Farm buildings

(South Devon AONB Unit, 2013).

Among other types of the built heritage, historic villages and settlements with strong vernacular architecture and use of local materials give a strong sense of time depth. Historic villages and towns are clustered at road crossings, bridging points, tidal limits, and strategic waterside locations. The geology varies across the AONB and provides a variety of good quality building stone (see box 1.2 for an overview of the type of stone material used), extracted from a large number of small farm-scale quarries. Buildings used lime mortar extensively, with a pervasive use of lime render and lime wash to increase protection from rain. Even some thatch roofs remains in use in the villages (see figure 4) (South Devon AONB Unit, 2013).

In the last century, the AONB has been significantly affected by in-migration and population movement, which has had the effect of diluting some of the cultural traditions and associations of the area. In short, the 20th century brought holiday and recreation uses (chalet and campsites, hotels, golf courses, marinas), WWII and Cold War military features, road widening and straightening, new housing, communications infrastructure, mains utilities (overhead power lines), and car parks (South Devon AONB Unit, 2013).

1.3. Cultural and natural characteristic of the cultural landscape

Box 1.3 10 Special Qualities

- A fine, undeveloped, wild and rugged coastline
- Ria estuaries (drowned river valleys), steep combes and a network of associated watercourses
- Deeply rural rolling patchwork agricultural landscape
- Deeply incised landscape that is intimate, hidden and secretive away from the plateau tops
- Iconic wide, unspoilt and expansive panoramic views
- A landscape with a rich time depth and a wealth of historic features and cultural associations
- A breadth and depth of significant habitats, species and associated natural events
- An ancient and intricate network of winding lanes, paths and recreational routes
- Areas of high tranquillity, natural nightscapes, distinctive natural soundscapes and visible movement
- A variety in the setting to the AONB formed by the marine environment, Plymouth City, Torbay, market and coastal towns, rural South Hams and southern Dartmoor

(South Devon AONB Partnership, 2019c)

Protected landscapes are described by a set of unique Special Qualities which identify what is distinctive about that area and help to identify what is most important to be conserved and enhanced. In order for people to value and care for their AONB, they need to be able to understand what is important about it and what makes it special (South Devon AONB Partnership, 2019b). Within the South Devon AONB there are ten *Special Qualities* (see box 1.3) that distil the key attributes that make the area special and worthy of designation as an

AONB. *Distinctive Characteristics* are components that define what it is that gives South Devon its sense of place and generally apply to areas smaller than the AONB as a whole. *Key Features* are specific and include detailed locations, places, landmarks, occurrences, events etc. that are of particular significance to South Devon and help illustrate how or where the special qualities, distinctive characteristics and natural beauty can be seen. The interaction between the *Special Qualities*, *Distinctive Characteristics*, and *Key Features* has been visualised in figure 5.



Figure 5 Visualisation of how Landscape Character assessment feed into the Special Qualities. Originally developed by the AONB Unit (South Devon AONB Partnership, 2019b).

Note: See Annex II for a full overview the Special qualities and how the Landscape character types are connected to contribute to the qualities.

The AONB designation was applied 60 years ago. Most recent approaches to landscape protection tend to consider the whole rural landscape as heritage and its historic character as an aspect simply related to its living nature. Therefore the management strategies of all rural landscapes should always be based on thorough consideration of their historic/cultural dimension and aim to a sustainable planning by integrating it with the other economic and environmental dimensions (Di Fazio and Modica, 2018). When the European Landscape Convention (ELC) came into force in the UK in 2007. It establishes the need to recognise landscape in law; to develop landscape policies dedicated to the protection, management and planning of landscapes; and to establish procedures for the participation of the general public and stakeholders in the creating and implementing landscape policies (South Devon AONB Partnership, 2019b). This does not mean that the AONB designation is not important, rather

the opposite, but there is a need to take multiple aspects into account in protecting the area. Arising from the shifting approach to landscape management and in line with the ELC, Landscape Character Assessment (LCA) emerged as a process by which to define the character of the landscape - i.e. what makes one area distinct or different from another. The Landscape character assessment can be used to consider landscape character when planning any type of change (LUC, 2018):

- to inform work on policy development as part of emerging Development Plans;
- to inform development management, guiding development and land management that is sympathetic to local character and special qualities;
- to promote an understanding of how landscapes are changing and how they can be strengthened.

The Landscape Character Assessment makes a key contribution to the implementation of the ELC in the South Devon AONB and reaffirms the importance of landscape, co-ordinate existing work and guide future work to protect, manage and plan these nationally protected landscapes. The landscape character assessment of South Hams that includes the South Devon AONB area recognizes 11 important Landscape Character Types within the borders of the AONB (see table 1). Landscape Character Assessment is a tool to identify what makes a place unique and can serve as a framework for decision making that respects local distinctiveness. Understanding the character of place and evaluating an area's defining characteristics is a key component in managing growth sustainably and ensuring that the inherent quality of the landscape can continue to be celebrated, creating places that people can be proud of. Understanding of character can be used to ensure that any change or development does not undermine whatever is valued or characteristic in a particular landscape. In South Devon AONB, a landscape character assessment is one of other important tools that are used to protect and reassure the special qualities in the landscape.

Landscape Character Types (LCT) are distinct types of landscape that are relatively homogeneous in character. Although, the landscapes may occur in different areas in different part of the same country, in broad terms they share the same combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement patterns. Landscape character types that have been recognised within the South Devon AONB landscape are:

| LCT code | Landscape Character Type |
|----------|--|
| 1B | Open coastal plateaux |
| 3B | Lower Rolling Farmed and Settled Valley Slopes |
| 3C | Sparsely Settled Farmed Valley Floors |
| 3E | Lowland Plains |
| 3F | Settled Valley Floors |
| 3G | River Valley Slopes and Combes |
| 4A | Estuaries |
| 4B | Marine levels and coastal plains |
| 4D | Coastal slopes and combes |
| 4H | Cliffs |
| 5A | Inland Elevated Undulating Land |

Table 1. List of landscape character types that are found within the AONB (LUC, 2018).

1.4. Assessment of the values of the cultural landscape: why it is protected as a cultural landscape

Within the diversity of the English countryside, South Devon AONB is considered a landscape of exceptional beauty, shaped by nature and the communities which live there. Protected landscapes are described by a set of unique Special Qualities which identify what is distinctive about that area and help to identify what is most important to be conserved and enhanced (see section 1.3). Before Natural England proposes an area becomes

an AONB, it must meet the 'natural beauty criterion'. This could be a combination of factors, such which are highlighted in box 1.3.

The 34 Areas of Outstanding Natural Beauty (AONB) in England cover approximately an eighth of the land surfaces. AONBs were brought into being by the same legislation as National Parks, the National Parks and Access to the Countryside Act of 1949 and have consistently been confirmed by parliament as having equal importance for landscape and scenic beauty. At an International level, the South Devon AONB is classified as a 'Category V protected landscape' by the International Union for the Conservation of Nature (South Devon AONB Partnership, 2019c). According to the V category by IUCN, the main purpose is to protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices (IUCN, 2021).

Its landscape character has been analysed and described at a range of levels in different assessments. The high level, over-arching term natural beauty includes landscape and scenic quality, relative wildness and tranquillity, natural heritage features and cultural heritage, that come together to make an area distinctive. The special qualities have been developed from a wide range of assessments identifying the key attributes that make the area special and worthy of designation as an AONB. Ten special qualities summarise the unique natural beauty for which the South Devon AONB is designated as a nationally important protected landscape (see box 1.3). Distinctive characteristics are those components that define what it is that gives South Devon its sense of place and generally apply to areas smaller than the AONB. Key features are specific and include detailed locations, places, landmarks, occurrences, events etc. that are of particular significance to South Devon and help illustrate how or where the special qualities, distinctive characteristics and natural beauty can be seen. Each component of natural beauty identifies what is special about the landscape and should be afforded 'great weight' in planning decisions. (South Devon AONB Partnership, 2019d).

Box 1.3 Meet the AONB criteria:

- Landscape quality, where natural or man-made landscape is good quality
- Scenic quality, such as striking coastal landforms
- Relative wildness, such as distance from housing or having few roads
- Relative tranquillity, where natural sounds, such as streams or birdsong are predominant
- Natural heritage features, such as distinctive geology or species and habitat
- Cultural heritage, which can include the built environment that makes the area unique, such as archaeological remains or historic parkland

(GOV.UK, 2018)

1.5. Assessment of the integrity and authenticity

The authenticity of a cultural landscape, just like a heritage site, is guaranteed when its cultural values are truthfully and credibly expressed through a variety of attributes. The South Devon AONB has a complex and varied landscape that is constantly influenced by its inhabitants and visitors. The landscape offers a full picture of living use, from the Bronze Age and Iron Age to Medieval age, and to 18th and 19th century. Modern human impact such that has brought holiday and recreation uses, new housing and car parks have been allowed where needed. The South Devon AONB landscape is a living heritage, constantly evolving, changing, and thereby as authentic as it can possibly be.

For what concerns the value of integrity, intended as wholeness and intactness of the cultural landscape, it can be argued that the landscape has preserved the significant features. With protections, legislations, and policies around the designated area, the impact

brought on by change in by modern lives on the landscape is monitored (see indicators of change 4.4). However, how increased use of the landscape, climate change, and development pressure will affect the integrity to landscape will be a test of time (see section covering threats from a use point of view 3.4 and from a management angle under 4.3).

Box 1.4 Key aims for conservation, management and use as an AONB:

- Landscape quality, where natural or man-made landscape is good quality
- Conserve and enhance the natural and cultural heritage of AONBs, ensuring they can meet the challenges of the future
- Promote public understanding and enjoyment of the nature and culture of AONB and encourage people to act for their conservation
- Support the economic and social well-being of local communities in ways which contribute to the conservation and enhancement of natural beauty
- Value, sustain and promote the benefits that Areas of Outstanding Natural Beauty provide for society, including clean air and water, food, carbon storage and other services vital to the nation's health and well-being

(GOV.UK, 2019)

1.6. Technical condition assessment of the cultural landscape: conservation and protection needs



Figure 6 – Start point is a well-known landscape view of the AONB. Photo courtesy of South Devon AONB Unit.

The high-quality environment within the AONB is reflected in the clean air, low levels of light pollution, clean bathing waters and tranquillity. This environmental quality provides a healthy environment for people living in and visiting the AONB landscape. At the same time, the landscape character of the South Devon AONB is under increasing threat due to social, economic, and environmental pressures. Activities such as land use, planning and the changing climate, all have an influence on the character and condition of the landscape. The cumulative impact of small scale changes is being felt at a landscape scale and the need to respect distinctive local character is increasingly needed to avoid further damaging cumulative damage (South Devon AONB Partnership, 2019c). Due to the popularity as a holiday destination, both for visitors and second house

owners, the potential of unwanted gentrification processes has been flagged for (DEVON COUNTY COUNCIL RESPONSE, 2006; South Devon AONB Unit, 2013). It is necessary to monitor cumulative impact and damaging change on the environment to ensure that the special qualities are not degraded beyond repair.

While some water bodies have seen quality improvements over the last few years, there has been a reduction in tranquillity in some areas with new developments and new leisure activities (South Devon AONB Partnership, 2019c). The biodiversity and geodiversity of the South Devon AONB is under threat from natural degradation, inappropriate development and recreational activities. This is partially a result of the pressure of use for visitors. A large numbers of visitors can cause damage to fragile shingle vegetation due to wear and tear caused by access on foot and vehicles (LUC, 2018). There is significant pressure from built development along estuary shorelines, with cumulative impacts on landscape, habitats, species and water quality. Some of the landscape charactererecteric types are affected by intrusive development (LUC, 2018).



Figure 7 – Iconic view over the Big Burgh Island. Photo courtesy of South Devon AONB Unit.

All change is not a result caused by increased tourism or in-migration but also results of changing agricultural practices. Some modern farming practices are thought to be contributing to a continuing gradual decline of many formerly common species and their habitats. Farms are becoming larger, more specialised and industrialised, while the number of traditional,

small, mixed farms are continuing to decline (South Devon AONB Unit, 2011). Adapting to modern agricultural practices has the potential to damage the traditional agricultural landscape that has shaped the South Devon AONB landscape. The viability of farm businesses has led to farming practices that are unsustainable and damaging both to the environment and to the long-term assets of the farms themselves. The medium sized mixed farms traditional to South Devon seem well-suited to support biodiversity, but the future for these enterprises can be thought to be uncertain. The fragmentation of habitats has reduced the ability of less mobile species to move successfully, leading to isolation and loss. The extent, condition and integrity of the network of “local sites” that generally receive lower levels of protection, resources and attention continue to be of concern (South Devon AONB Partnership, 2019b).

1.7. Programme (existing) of protection: conservation, use, adaptation, modernisation

As required under Part IV, Section 89 of the Countryside and Rights of Way Act 2000, the South Devon AONB has set up a Management plan that formulates local authority policy and action in relation to the management of the area. It provides guidance and support to statutory undertakers and any public body or person holding public office to fulfil the Section 85, ‘duty to have regard to the purpose of conserving and enhancing the natural beauty of the AONB’ (South Devon AONB Partnership, 2019c, 2019a). In agreement with the designation requirements, a management plan of the AONB must consider conserving and enhancing the natural beauty of the AONB with continuity and consistency over time. The current Management of the AONB concerns the years 2019-2014. It does include, as stated by the government requirements: 1) an assessment of the special quality of the AONB, such

as a landscape character assessment that includes its condition and vulnerability to change; 2) cross reference to existing plans, such as local transport plans or biodiversity action plans; 3) a strategy, such as a 5 year plan, of how you'll manage change; 4) other special sites that exist in the AONB, such as scheduled ancient monuments or sites of special scientific interest; 5) an action plan, for example who's doing what, why and by when; 6) and a monitoring plan to show how you'll measure the AONB's condition and effectiveness of management (GOV.UK, 2019; South Devon AONB Unit, 2021a).

1.8 Summary and conclusions.

The South Devon AONB is located in Southwest England, UK. The area is known for its significant landscape features including rugged cliffs, sandy coves, peaceful countryside, picturesque villages, rolling hills, wooded valleys, colourful hedge banks and secretive estuaries. The South Devon AONB is the result of a continues interaction between people and the environment which gives the area its local identity: an ancient cultural landscape with strong links to the sea and generations of human activity carved into the surroundings. With a 97 km long unspoilt coastline, five river estuaries, just over 27,000 hectares of agricultural land and 2,500 hectares of woodlands, the AONB offers varying landscape features.

At the same time, the landscape character of the South Devon AONB is under increasing threat due to social, economic, and environmental pressures. Activities such as land use, planning and the changing climate, all have an influence on the character and condition of the landscape. The cumulative impact of small-scale changes is being felt at a landscape scale and the need to respect distinctive local character is increasingly needed to avoid further cumulative damage.

2. Characteristics of the protection of the cultural landscape

2.1. Legal status of the cultural landscape: formal and practical protection system

The purpose of an Area of Outstanding Natural Beauty is to conserve and enhance the area's natural beauty. The South Devon AONB was formally designated in August 1960 under the National Parks and Access to the Countryside Act 1949 (South Devon AONB Partnership, 2019c). An area of outstanding natural beauty (AONB) is land protected by the Countryside and Rights of Way Act 2000 (CROW Act). Under the CROW Act, the relevant local authority, must make sure that all decisions have regard for the purpose of conserving and enhancing the natural beauty of the AONB. The local authority decisions and activities must consider the potential effect it will have within the AONB and land outside its boundary. Local authorities are suggested to give authority to an 'AONB partnerships' to manage the AONB and to create a management plan, this is also the structure within the South Devon AONB. The South Devon Partnership Committee provides a strategic lead in the protection, conservation and enhancement of the South Devon AONB and consists of 18 representatives: 1) Local authorities; 2) Agencies (e.g., Natural England, Historic England); 3) Organisations (e.g., Plymouth University); 4) Community representatives (e.g., landowning or farming community) (South Devon AONB Partnership, 2019c). However, it should be underlined that AONBs do not have the authority to make decisions on development proposals or strategic planning (GOV.UK, 2018).

Beyond the AONB designation, there are multiple protected designations within the AONB itself. Each site/monument is inscribed to national or local acts are thereby protected separately. Below is a short list of designation sites within the AONB:

| Protection type | Number/size within the South Devon AONB |
|--|--|
| Nature conservation designations | |
| Sites of Special Scientific Interest (SSSIs) | 18 |
| Special Areas of Conservation | 6 |
| National Nature Reserves | 2 |
| Geological Conservation Review Sites | 9 |
| Historic environment designations | |
| Scheduled Ancient Monuments | 58 |
| Listed Buildings | 1317 |
| Registered Historic Parks and Gardens | 7 |
| Historic Conservation Areas | 39 |
| Protected Wreck sites | 4 |

Table 2 – A list of designation sites within the South Devon AONB (South Devon AONB Partnership, 2019b)

2.2. Formal requirements regarding protection of the cultural landscape

As stated above, to become an AONB certain requirements are needed to fulfil (see section 1.4). To further remain an AONB, local authorities are suggested set up an AONB partnership who, in turn must create a management plan (see section 2.1). It is required to deliver a management plan, and further suggested for AONBs work with land managers and farmers and their representative bodies and with the public to educate and promote heritage conservation in their respective areas (see section 3.2 and 4.3).

2.3. Protection of values, authenticity and integrity, technical condition

In 2016 over 74% of the South Devon AONB was identified as used for agricultural. Agri-environment schemes provide funding to the farmers to implement environmental improvements to their farming practices. This could include the introduction of wildflower edges around crops, a reduction in the percentage of hedges cut and organic farming practices (South Devon AONB Partnership, 2019b).

As mention under section 2.1, there are numerous protected designation sites within the AONB. Across the UK, Sites of Special Scientific Interest (SSSIs) are legally protected under the Wildlife and Countryside Act 1981. Most SSSIs are in private ownership and their management is shared responsibility with Natural England. Units based on habitat, tenure and management. Out of the 403 SSSI units in the South Devon AONB, 356 are in a favourable condition. The remaining 47 units are in an unfavourable condition with 14 in a declining condition, 6 showing no change and 27 recovering. These percentages have broadly remained constant over the five-year period.

Within the South Devon AONB 8% of its area is covered by woodland. Of the wooded areas three quarters of this has been classified as broadleaved woodland and in 2017 about 40% of broadleaved woodlands were actively managed. From 2013 to 2017 the percentage of woodland under management changed from 34% to 42%, an 8% increase (South Devon AONB Partnership, 2019b).

2.4. Programme (proposal) of protection and conservation

The South Devon AONB five-year Management plan seeks to ensure that the landscape is conserved, managed and enhanced to support and benefit present and future generations. The plan is grouped into 3 sections: Place, People and Partnership. These sections are further divided in to 14 themes that cover the issues relevant to the whole South Devon AONB area and its setting. The first section focusing on Place aims to discuss how to conserve and enhance the natural beauty of the AONB:

- **Place:** The first section of the management plan looks at the values of the landscape that are needed to protect. This includes the Landscape Character, Natural resources & climate, Biodiversity & geodiversity, Historic environment, Farming & land management, Coast & Marine, Rivers and Estuaries.
- **People:** The second section focus more on use of the landscape, more specially on Tourism, Access & Recreation, Planning and Sustainable Development, infrastructure such as transport and highways, the rural economy and services, and lastly, the community and the culture. This section is further explored under section 3.2.
- **Partnership:** This section explores how the AONB can be managed by looking at awareness and communication, and more specilly at the management, the organisation and the partnerships. This section is further explored under the full section 4.

The above listed sections and sub-sections work as categories in the early working Delivery Plan that support of the South Devon AONB Management Plan strategy (South Devon Unit, 2020).

2.5. Summary and conclusions

The purpose of an Area of Outstanding Natural Beauty is to conserve and enhance the area's natural beauty. An area of outstanding natural beauty (AONB) is land protected by law: the Countryside and Rights of Way Act 2000 (CROW Act). Beyond the AONB designation, there are multiple protected designations within the AONB itself, among them Sites of Special Scientific Interest (SSSIs). Local authorities have given right to an 'AONB partnerships' to manage the AONB through a five year-long management plan. The management plan is broken down into yearly work through a Delivery plan.

3. Characteristics of the use of the cultural landscape

3.1. Description of the primary functions and use

The South Devon AONB landscape is primarily a working landscape where about three quarters of the area is used for agriculture (South Devon AONB Partnership, 2019b). Besides this, the significant maritime related culture expressed through the large number of regattas and boating events. Although the AONB's main economic activity has traditionally been agriculture, they are increasingly seen as multifunctional spaces: attractive for leisure activities, in-migration, and increasing tourism.

3.2. Programme (existing) of use, adaptation, modernization: presentation and critical evaluation

In the AONB Management plan use can be understood as the section *People*. This section aims “to encourage and support sustainable economic development, social engagement and recreational activity, for the people who live and visit” the area. This section has five sub-sections:

- I) Tourism, Access & Recreation (read more under section 3.3);
- II) Planning and Sustainable Development (this if further discussed under section 3.4);
- III) Transport & Highways: As well as providing vital services for communities and workplaces, public transport can help to reduce emissions, taking cars off the road and reducing congestion. The programme supports the development of safe and parallel access routes supports local communities and further encourages sustainable transport. Intense traffic pressure, particularly in the summer months, causes congestion at certain locations and may create an intrusion into the quality of the area;
- IV) Rural Economy & Services: As the AONB is a living and working landscape with a wide range of business and economic activities there are various needs. Parts of the AONB are remote rural areas with poor transport networks, a high proportion of micro businesses and limited markets due to their distance from urban areas. Growth opportunities within the local rural economy include: local food and drink produce; sustainable construction; farm diversification; and tourism. Sensitively located digital infrastructure improvements have the potential to encourage greater opportunities for both businesses and residents within the AONB while reducing the need for travel;
- V) Community & Culture: The AONB Partnership supports opportunities to develop local community initiatives and activity in collaboration with others to help develop skills, improve health, raise awareness, and encourage cohesion. The resident community of South Devon is diverse ranging from very affluent areas to deprived rural communities. Communities are becoming increasingly divorced from land management and farming traditions reflected in the growing disconnection between children and the natural environment, reflected in obesity, sedentary lifestyles, and the loss of independence and confidence in decision making.

Note: specific aims within in each sub-sections can be found in the yearly Delivery Plan (South Devon Unit, 2020).

3.3. Tourism, presentation, information: present state and potential

Tourism is a vital part of the local economy with many staying and day visitors drawn by the stunning beaches, dramatic coastlines, picturesque villages, and field pattern. The natural beauty of the landscape is an asset as well as being a major attraction for most visitors. Whilst it is recognised that sustainable forms of tourism can make a valuable contribution to the local economy and rural development. There are strategic recreational walking routes which follow the course of the rivers, along the coastline, and through the rolling landscape. Besides, land ways, there is high levels of activity, often seasonal, from recreational sailing and other watersports in the estuaries. There is considerable potential for the AONB to further contribute to the health and wellbeing of local people and visitors (LUC, 2018). The AONB partnership underlines the access to public rights of way, open access land and opportunities as important for increasing active lifestyles (South Devon AONB Partnership, 2019c).

In the management plan, the AONB state that they are aspiring to reach a sustainable, year-round tourism industry which benefits from and contributes to the environmental quality of the area will be supported. They will be working sustaining accommodation opportunities and facilities for visitors and recreational users. Besides this, they aspire to see activities and initiatives to extend beyond the main tourism season (South Devon AONB Partnership, 2019c). By providing visitor facilities, improve recreational infrastructure and make information more accessible at the most heavily used destinations, the idea is to concentrate marketing on the more popular and developed sites which are better to accommodate and contain intensive recreational pressure. In addition, co-ordinated information and interpretation about countryside, coastal, marine and estuarine recreation and access will be promoted through a range of media, to help foster greater understanding, appropriate expectations and considerate behaviour (South Devon AONB Partnership, 2019c).

3.4. Proposal programme of use, adaptation, modernisation

After the completion of the last restoration works in 2014, the fortress was expected to be used as follows:

- Basement Plan: archaeological route to be set up
- Raised Floor: Management; Ticket office, Book-Shop.
- First Floor: Exhibitions and frescoed chapel of Sant'Agata.
- Second Floor: Exhibitions
- Attic: Not usable

Today, the archaeological route on the basement plan is not set up yet and it should certainly be realized. A proposal for future programme of use is for sure connected with the historical

and architectural value of the building, which needs to be valorised, for instance by establish not only exhibitions connected to the fairy tales but also with the history of the monument.

3.5. Threats

The landscape character assessment foresees that the many visitors can cause damage to fragile shingle vegetation in some LCT areas due to wear and tear caused by access on foot and vehicles. Among these are high cliffs, as the eroded footpaths may not only wear them down but also act as a potential danger. It is suggested that these may be fenced for safety reasons, however, these features can detract from the relatively natural and unspoilt nature of the coast (LUC, 2018).

Continued development in the countryside at levels indicated in strategic planning documents, together with growth in car usage, are likely to diminish levels of tranquillity, particularly around the urban fringes to the east and west of the AONB. Some prominent coastal sites are spoiled by past poor-quality development, compounded by growing pressure for commercial activities, intensive recreational use, and erosion. Recreational conflicts and disturbance of tranquil areas are sometimes caused by motorised craft and at a small number of beaches users compete for safe launch and water space (South Devon AONB Partnership, 2019c). Generally the highway network is sparse and consists of minor rural lanes, although the LCT is crossed by major transport mainline railway introducing noise and movement which can detract from tranquillity. (LUC, 2018).

There is significant pressure from built development along estuary shorelines, with cumulative impacts on landscape, habitats, species and water quality. The character of the cliffs is affected by intrusive development in the adjacent open coastal plateaux landscape. (LUC, 2018). Established maritime businesses are being gradually displaced from their traditional premises, undermining the viability of essential shore-side support services and increasing pressure on other undeveloped estuary-side locations to accommodate boating uses (South Devon AONB Partnership, 2019c). In the river valley many of the farm buildings have been converted to residences (LUC, 2018),



Figure 8 – Nearby cities are creeping closer to the AONB landscape. Photo courtesy of South Devon AONB Unit (South Devon AONB Partnership, 2019c).

indicating that what was previously housing dedicated to agricultural usage are now being transformed into housing or part time stays. This has often been recognised as way to read gentrification processes in rural areas (Phillips, 2004, 2005; Darling, 2005; Åberg, 2021).

3.6. Programme (proposal) of use, adaptation, modernization: presentation and critical evaluation

One of the main issues of the area, is the increased use and the heavy demand for new housing. The AONB Management Plan is a material consideration in plan-making and decision-taking as part of development management processes. However, AONBs do not have the authority to make decisions on development proposals or strategic planning (GOV.UK, 2018), although the AONB Unit does provide protected landscape advice to the Local Planning Authorities for those applications that have a significant impact on the natural beauty and special qualities of the AONB. Section 85 of the Countryside and Rights of Way Act 2000 places an explicit duty on relevant authorities to have regard to the purpose of conserving and enhancing the natural beauty of an AONB when plan-making and decision-taking. The area remains under intense pressure from housing development on green field sites both inside the boundary and in the adjoining rural setting. The constraints on available land mean that areas within the AONB boundary and its setting are under pressure for the conversion of business, tourism and employment land to residential use (South Devon AONB Partnership, 2019c). To tackle this issue, the local Councils are consulting on a joint local plan, setting out where potential development could take place in the South Devon AONB and how the area will change up to 2034, and they are looking to neighbourhood plans to identify a proportion of their housing allocation target (South Devon AONB Partnership, 2019c).

3.7. Summary and conclusions

The South Devon AONB landscape is primarily a working landscape where about three quarters of the area is used for agriculture. Besides this, the significant maritime related culture. Although the AONB's main economic activity has traditionally been agriculture, they are increasingly seen as multifunctional spaces: attractive for leisure activities, in-migration, and increasing tourism. Tourism is a vital part of the local economy with many staying and day visitors. One of the main issues of the area, is the increased use of the landscape and the heavy demand for new housing. In the management plans a will is expressed to encourage and support sustainable economic development, social engagement and recreational activity, for the people who live and visit the area. The local AONB Unit does not have the authority to make decisions on development proposals or strategic planning.

4. Characteristics of the management of the cultural landscape

4.1. Description of management of the cultural landscape: ownership, structure, staff

The AONB Partnership Committee provides a strategic lead in the protection, conservation and enhancement of the South Devon AONB. As it consists of 18 representatives it is representing a diverse part of the inhabitants. The Partnership is supported by a working group called the AONB Unit. Their primary focus is to: (i) to provide a strategic, independent unit dedicated to the conservation and enhancement of the South Devon AONB; and (ii) to co-ordinate and drive the implementation of the Management plan. The AONB Unit make sure that is committed to providing value for money in delivering an efficient and effective service. It aims to be transparent and responsive to key policy influences, partners and communities whilst being open minded and embracing change

The tangible maintenance to ensure the patchwork landscape of small fields, hedge banks, walls, hedgerow trees, woods, orchards, and farmsteads is something has been and is created by farmers and foresters since hundreds of years. Their continued work is essential in keeping the AONB a distinctive, productive, working agricultural landscape. (South Devon AONB Unit, 2011). Thereby, the farmers are important stakeholders for the AONB Partnership. To ensure the AONB is recognised and valued as a national, regional and local asset and effectively managed, the partnership puts high value in their stakeholder's viewpoint.



Figure 9 – Slopes and combes. Photography by Roger English. Photo courtesy of South Devon AONB Unit.

4.2. Financing: current state, need, possibilities

One of the main tasks of the AONB Partnership is tasks are to make funding applications. Each AONB has have its own administrative process in place when offering technical support to determine eligibility, including application and monitoring processes. Landowners and managers will be required to demonstrate eligibility for support under the scheme as to location and business status. The Department for Environment, Food and Rural Affairs (Defra) provides annual grant aid to each AONB Partnership or Conservation Board to support delivery of the AONB management plan. The relevant local authorities also contribute funding to the AONB core functions which mainly concerns staff costs. Funding for landscape protection and enhancement works will be provided from these budgets and will be determined and managed by each AONB (GOV.UK, 2019).

In pursuance of specific management plan objectives AONBs will offer support to farmers and land managers to conserve, restore and enhance the distinctive landscape and cultural heritage of the area. Such aid may include the provision of grants to carry out conservation and restoration tasks that contribute to the unique character of the area. The AONBs provide advice and training through their own staff where possible or if not through a suitably qualified provider (GOV.UK, 2019). Grants will either be made available to land managers to carry out approved schemes or the AONB team may carry out such work itself.

4.3. Threats

To ensure the AONB is recognised and valued as a national, regional and local asset and effectively managed, the AONB partnership puts a lot of value in engaging their stakeholders. Many residents of the area, especially the young and those in adjoining urban areas, are not engaged with the AONB for a range of reasons including cultural, financial, mobility and social exclusion. To not have a diverse voice in the planning of the AONB can a potential risk in safeguarding the intangible and diverse heritage of the area.

Yet another apparent threat is the decline in farming incomes and increased financial pressures are leading landowners to seek alternative land uses, such as the use of agricultural land for caravan parks, game shoots, tourist attractions, flood alleviation and the creation of wildlife habitats. A decline in family mixed farms accompanied by an ageing farming population, a shortage of new entrants to the industry, and an increasing burden of regulation and administration threatens the culture of farming (South Devon AONB Partnership, 2019c). This is an enormous threat to the landscape character, as small-scale farming has shaped and is shaping the current landscape. Therefore, the Partnership aim to create an awareness and understanding of the South Devon AONB and its special qualities amongst residents, businesses, organisations, and visitors to further strengthen the roles of the farmers.

4.4. Monitoring and indicators

To monitor change in the South Devon AONB, 20 indicators were proposed in 2013. The indicators were then measured against a report from 2017. However, some indicators were not followed up, or had been reported with different metrics. The full list of indicators is found below:

| Management theme | Indicator nr. | Local measure of change |
|-----------------------------|------------------------|--|
| Landscape character | 1 | Area (ha) and % of AONB in agri-environment schemes |
| | 2 | % of AONB recorded as 'most tranquil' |
| | 3 | 10 fixed post photographic monitoring points |
| Natural resources & climate | No indicators proposed | |
| Biodiversity & Geodiversity | 4 | % of SSSIs in 'favourable condition' |
| | 5 | % change in woodland size & type |
| | 6 | % of Regionally Important Geological sites in 'favourable condition' |
| Historic Environment | 7 | Number of assets on the Historic Environment Record |
| | 8 | % of assets on the heritage at risk register |

| | | |
|--------------------------------------|----------------------------------|---|
| | 9 | Scheduled Monuments, Listed Buildings and Registered Park and Garden on the national 'At Risk' register. |
| | 10 | Scheduled Monuments assessed as declining in condition. |
| | 11 | I Management and protection of historic features agri-environment agreements |
| Farming/ Land Management | No local indicators are proposed | |
| Coast/Marine Environment | 12 | South Devon AONB bathing water quality rated excellent |
| Rivers and Estuaries | 13 | WFD river water quality status |
| Tourism, Access and Recreation | No local indicators are proposed | |
| Planning and Sustainable Development | 14 | Number of affordable homes built annually |
| | 15 | Change in % of settlements with neighbourhood plan, parish plan or village design statement parishes with adopted neighbourhood plans |
| Transport and Highways | No local indicators are proposed | |
| Rural Economy and Services | 16 | Total annual values of agri-environment agreements |
| | 17 | % change in farm number and size |
| Community and Culture | 18 | Number of parishes with neighbourhood plan, up-to-date parish plans |
| Awareness and Communication | 19 | Numbers of people engaged with social networks and attending events |
| | 20 | Numbers of people participating in voluntary activities |
| Management | No local indicators are proposed | |

Table 3. List of local indicators and headline performance against management plan theme (South Devon AONB Partnership, 2019b)

4.5. Summary and conclusions

Their continued work is essential in keeping the AONB a distinctive, productive, working agricultural landscape. 84% of today's South Devon AONB is farmed in some way with 598 agricultural holdings. The decline in farming incomes and increased financial pressures are leading land owners to seek alternative land uses, such as the use of agricultural land for caravan parks, game shoots, tourist attractions, flood alleviation and the creation of wildlife habitats. In pursuance of specific management plan objectives AONBs will offer support to farmers and land managers to conserve, restore and enhance the distinctive landscape and cultural heritage of the area. Such aid may include the provision of grants to carry out conservation and restoration tasks that contribute to the unique character of the area. To monitor future change in the South Devon AONB, 20 indicators were proposed in the 2013.

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Annex I. Glossary

Area of Outstanding Natural Beauty (AONB): an outstanding landscape whose distinctive character and natural beauty are so precious that it is safeguarded in the national interest.

Estuary: Estuaries and their surrounding wetlands are bodies of water usually found where rivers meet the sea. Estuaries are home to unique plant and animal communities that have adapted to brackish water—a mixture of fresh water draining from the land and salty seawater (US Department of Commerce, 2021).

Sites of Special Scientific Interest (SSSIs): sites that are legally protected under the Wildlife and Countryside Act 1981 (as amended). Most SSSIs are in private ownership and their management is shared responsibility with Natural England.

Landscape Character Types (LCT) are distinct types of landscape that are relatively homogeneous in character. Although, the landscapes may occur in different areas in different part of the same country, in broad terms they share the same combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement patterns

Special Qualities: AONBs are designated for their natural beauty. Special qualities are used to summarise the natural beauty of a designated landscape, and are an important tool in describing and understanding what it is that makes an area worthy of designation.

Tranquillity: A perceptual landscape quality, increasingly valued in modern society. Often expressed in terms of ‘relative tranquillity’, the term is used to describe a combination of factors including naturalness, wildness, and levels of disturbance.

Distinctive Characteristics are those components that define what it is that gives South Devon its sense of place. They generally apply to areas smaller than the AONB as a whole.

Key Features are specific and detailed locations, places, landmarks, occurrences, events etc. that are of particular significance to South Devon and help illustrate how or where the special qualities, distinctive characteristics and natural beauty can be seen.

(LUC, 2018; South Devon AONB Partnership, 2019b)

Annex II. South Devon AONB Special Qualities

The following overview of the South Devon Special Qualities are based on the report *Understanding the special qualities of the South Devon AONB* by the South Devon AONB Unit (South Devon AONB Partnership, 2019d). The Landscape Character Types that state in the Landscape Character Assessment of South Hams a connection and contribution to certain Special Qualities have been paired (LUC, 2018).

| Fine, undeveloped, wild and rugged coastline | |
|---|---|
| Natural Beauty Criteria | Landscape Quality ✓ |
| | Scenic Quality ✓ |
| | Relative Wildness ✓ |
| | Relative Tranquillity ✓ |
| | Natural Heritage Features ✓ |
| | Cultural Heritage ✓ |
| Rationale | Distinctive characteristics |
| <ul style="list-style-type: none"> • The scale, extent and continuity of fine undeveloped coastline that provided the primary reason for the AONB designation remains a finite and critically important national asset. • The AONB coastline provides a distinct and abrupt contrast with | <ul style="list-style-type: none"> • A natural, dynamic and evolving coastline. • A richly diverse intertidal area of sand, shingle, rock and extensive rocky reefs. • A largely undeveloped coast where limited development is restricted to historic coastal settlements. • Small settlements with a historic relations with the sea. • The diversity and quantity of geological and geomorphological features represented along the entire coast. • Dramatic near-vertical hard cliffs in contrast with areas of low cliffs. • Striking and prominent headlands, secluded coves, bays and beaches providing both scale and contrast. • An extensive coastal rights of way network. |

| | |
|---|--|
| <p>the adjoining coastline of surrounding ones.</p> <ul style="list-style-type: none"> • Many of the natural features exposed at the coast form important qualifying features for nationally important nature conservation designations. | <ul style="list-style-type: none"> • Strong perception of being distant from significant habitation and an apparent absence of human intervention. • The smells, tastes, sounds and movement of the coast. • Exposure to the force of natural weather events and this effect on the senses meaning that character changes dramatically with the weather and seasons. • Sense of awe and wonder derived from the seascape – particularly the uninterrupted wide expanse of sea. |
|---|--|

| | |
|--|---|
| <p>Landscape Character Type</p> | <p>Includes: Open coastal plateaux (1B); Coastal slopes and combes (4D); and Cliffs (4H).</p> |
|--|---|

Ria estuaries (drowned river valleys), steep combes and a network of associated watercourses

| | |
|---------------------------------------|------------------------------------|
| <p>Natural Beauty Criteria</p> | <p>Landscape Quality ✓</p> |
| | <p>Scenic Quality ✓</p> |
| | <p>Relative Wildness ✓</p> |
| | <p>Relative Tranquillity ✓</p> |
| | <p>Natural Heritage Features ✓</p> |
| | <p>Cultural Heritage ✓</p> |

Rationale Distinctive characteristics

| | |
|---|---|
| <ul style="list-style-type: none"> • All five of the AONB's estuaries share a very distinct character. | <ul style="list-style-type: none"> • A consistent high quality and diversity are found throughout the estuarine environment contributing to a strong sense of place. |
|---|---|

- The estuaries contrast markedly with the much bigger scale and more open and heavily developed nature of the nearby estuaries.
- The Salcombe-Kingsbridge estuary in particular is a nationally important example of a ria estuary having very little freshwater input, high salinity levels and a large tidal range. Many truly marine plants and animals are found which seldom occur intertidally in estuaries elsewhere.
- Intertidal rocky foreshore, seagrass beds, mudflats and salt marshes are irreplaceable features associated with each of the AONB estuaries.
- Estuary character changes with the state of the tide and weather conditions.
- Extensive areas of saltmarsh, mudflat, coastal grazing marsh and reedbed.
- Steeply sloping land adjacent to the estuaries, often extensively wooded down to the water's edge.
- Deciduous ancient woodland fringes the estuary sides and sheltered combes.
- Extensive entirely undeveloped areas of the middle estuaries and smaller creeks.
- Development restricted to historic settlements in sheltered locations close to estuary mouths, or at inland tidal extremities.
- Occasional waterside developments and historic features have strong functional relationships with the water.
- Harbour and boating infrastructure is clustered and largely contained within developed areas.
- Flood plains close to the main rivers support rough grazing.
- Combes with rough pasture, dense field boundaries and narrow streams at their bases drain to estuaries or at the coast drain direct to the sea as coastal combes.
- Small woodland copses on valley sides and tree lined streams emphasise landform.

Landscape Character Type

Includes: Sparsely Settled Farmed Valley Floors (3C); River Valley Slopes and Combes (3G); and Estuaries (4A).

Deeply rural rolling patchwork agricultural landscape

Natural Beauty Criteria

| | |
|---------------------------|---|
| Landscape Quality | ✓ |
| Scenic Quality | ✓ |
| Relative Wildness | |
| Relative Tranquillity | ✓ |
| Natural Heritage Features | ✓ |
| Cultural Heritage | ✓ |

Rationale

- The patterned mosaic of predominantly small fields and Devon hedges reflects centuries of harmonious human involvement working in and shaping the landscape.
- The complexity of the agricultural landscape vividly contrasts with the dramatic coastline and expansive apparent uniformity of the sea.
- Mixed farming enterprises have been central to shaping the farmed landscape and its high nature value.
- Away from the coast, wide, tall and mature

Distinctive characteristics

- Elevated land with a pleasing rolling topography.
- The pattern of wide, deep and mature Devon hedges (hedgerows on banks) makes a substantial contribution to character.
- A generally small, irregular field pattern on lower and steeper land changes to one of medium to large fields on plateau tops.
- Sparsely-wooded plateaux with wind sculpted and stunted hedgerow trees prominent in exposed locations near to coast, contrasting with tall mature hedgerow trees further inland.
- Predominantly mixed farming with pasture on the steeper slopes.
- Arable cultivation on flatter areas with larger field systems.
- The sparse but clustered settlement pattern, farmstead layouts and local vernacular building materials make a significant contribution to a distinctive sense of place.

Devon hedges supporting hedgerows enclose land at a very high density.

- Farmsteads are scattered throughout the area, away from ridgelines and nestled in dips often with shelterbelts.
- Sparsely wooded high ground is often accentuated by hill top copses.
- Ancient Semi-Natural Woodland and Plantations on Ancient Woodland Sites are found on steeper valley sides.
- A vivid contrasting tapestry of colours change throughout the seasons from subdued pastels of winter stubble to deep-red newly ploughed soils, the bright yellow of flowering oil-seed rape, deep green young wheat, ripe golden barley, and the pale yellow-white of newly harvested grass.

| | | |
|-----------------------|------------------|--|
| Landscape Type | Character | Includes: Lower Rolling Farmed and Settled Valley Slopes (3B); Lowland Plains (3E); River Valley Slopes and Combes (3G); and Inland Elevated Undulating Land (5A). |
|-----------------------|------------------|--|

Deeply incised landscape that is intimate, hidden and secretive away from the plateau tops

| | | |
|--------------------------------|---------------------------|---|
| Natural Beauty Criteria | Landscape Quality | ✓ |
| | Scenic Quality | ✓ |
| | Relative Wildness | |
| | Relative Tranquillity | ✓ |
| | Natural Heritage Features | ✓ |
| | Cultural Heritage | ✓ |

| Rationale | Distinctive characteristics |
|---|--|
| <ul style="list-style-type: none"> • The ability to quickly immerse oneself in the landscape and “get away from it all” is an important and highly valued characteristic. • When traversing the AONB, the incisions formed by the five main estuaries, the network of watercourses and their associated combes create a rapidly changing character. • The intimate and secretive character afforded by valley locations contrasts sharply with that of neighbouring plateau, coastal and urban locations. • Ancient woodlands form a finite irreplaceable resource of great importance. | <ul style="list-style-type: none"> • Sharp incisions have been formed by rivers, the network of combes and the flooded former river valleys seen today as ria estuaries. • The minor road network is sparse and well hidden generally within sunken lanes bounded with high hedgebanks. The minor road network remains relatively lightly used by traffic. • Long views are afforded from plateau edges over the tops of combes or along valleys. • A perception of isolation is often quickly achieved by dropping from ridgelines or plateau tops to valley bottoms. • Steep valley sides, woodland and tall hedgebanks with mature hedges restrict and constrain views into and out of the combes and give a strong sense of enclosure, seclusion and at times relative isolation. • Dense ancient oak woods in sheltered and inland locations add to the sense of enclosure, restricting views, sound travel and light penetration. • In valley bottoms a more intimate close-to-hand scale is apparent and historic features become more visually prominent. • The sound of running water in the valleys, and the sounds of wildlife, sheep and cattle are all intensified by the more enclosed surroundings and shelter from prevailing winds. |
| Landscape Character Type | Includes: Lower Rolling Farmed and Settled Valley Slopes (3B); Settled Valley Floors (3F); Marine levels and coastal plains (4B); and Coastal slopes and combes (4D). |

Iconic wide, unspoilt and expansive panoramic views

| | | |
|--------------------------------|---------------------------|---|
| Natural Beauty Criteria | Landscape Quality | ✓ |
| | Scenic Qualit | ✓ |
| | Relative Wildness | ✓ |
| | Relative Tranquillity | ✓ |
| | Natural Heritage Features | ✓ |
| | Cultural Heritage | ✓ |

| | |
|------------------|------------------------------------|
| Rationale | Distinctive characteristics |
|------------------|------------------------------------|

- | | |
|--|---|
| <ul style="list-style-type: none"> • Open and uninterrupted panoramic views from high ground offer a real sense of remoteness, wildness and scale. They are a resource of exceptional value. • Vantage points with views that only contain natural features that are consistent with landscape character represent a diminishing, highly valued resource that is very highly regarded. | <ul style="list-style-type: none"> • Coastal locations with high ground offer up to 360 degree panoramas that incorporate expansive seaward views to the horizon at up to 45kms away and contrastingly extensive. • A number of high inland locations have steeply falling topography to at least one side and offer panoramic views, often including the presence of estuary or coastal water. • Long framed views are provided along combes, river valleys, estuary creeks, and along green lanes. • Views from the estuary waters offer a unique and particularly special perspective. • Gate gaps at field entrances form important ‘windows’ to the landscape and provide wider views than those possible from within the constrained channels of lanes lined with tall hedgebanks and hedgerows. • Ridgelines and plateau edges form distinctive, unspoilt and very exposed skylines. |
|--|---|

| | |
|---------------------------------|--|
| Landscape Character Type | Includes: Open coastal plateaux (1B); Sparsely Settled Farmed Valley Floors (3C); Estuaries (4A); Cliffs (4H); and Inland Elevated Undulating Land (5A). |
|---------------------------------|--|

A landscape with a rich time depth and a wealth of historic features and cultural associations

| | | |
|--------------------------------|---------------------------|---|
| Natural Beauty Criteria | Landscape Quality | ✓ |
| | Scenic Qualit | ✓ |
| | Relative Wildness | |
| | Relative Tranquillity | |
| | Natural Heritage Features | |
| | Cultural Heritage | ✓ |

| Rationale | Distinctive characteristics |
|-----------|-----------------------------|
|-----------|-----------------------------|

| | |
|---|--|
| <ul style="list-style-type: none"> The extent, continuity and coherence of historic landscape character across the AONB is of national significance. The AONB was the threshold to Devon and England for millennia forming the “front door” for movements of people, goods and ideas. Layers of archaeological evidence and historic features reveal | <ul style="list-style-type: none"> Prehistoric features include complex field systems, drovers’ tracks, ridge ways, burial mounds, earthworks, hut circles, trading centres, settlement enclosures and hill forts. Later features include farmsteads, field enclosures, orchards, lime kilns, catch meadows, deer parks, rabbit warrens, quarries and toll houses. Historic defensive features include hillforts, castles, gun batteries, pill-boxes and observation posts. |
|---|--|

| | |
|--|---|
| the evolution of the landscape through time. | Note: See a full overview under section 2.2 |
| Landscape Character Type | Includes all LCTs |

| A breadth and depth of significant habitats, species and associated natural events | | |
|---|---------------------------|---|
| Natural Beauty Criteria | Landscape Quality | ✓ |
| | Scenic Qualit | ✓ |
| | Relative Wildness | ✓ |
| | Relative Tranquillity | |
| | Natural Heritage Features | ✓ |
| | Cultural Heritage | |

| Rationale | Distinctive characteristics |
|---|--|
| <ul style="list-style-type: none"> The geographical position combined with the diversity of habitats it supports makes the area important for a range of species at the limits of their natural distribution range. The area's coast, estuary, countryside, aquatic and marine environment combine to form a uniquely diverse landscape and | <ul style="list-style-type: none"> Vegetated sea cliffs; dry calcareous grassland and scrubland; sandbanks slightly covered by seawater all the time; large shallow sheltered marine inlets; and exposed and sheltered rocky foreshores are all of European importance. Sea grass beds; mudflats; coastal vegetated shingle; maritime grassland and heathland; hedgerows on banks; traditional orchards; and oak and wet woodlands are all of national importance. Agriculture-related habitats including Devon hedges, arable field margins, lowland species-rich meadows, small deciduous woodlands and |

seascape providing habitat, niches and conditions for a wealth of species.

hedgerow trees all make an important contribution to the wider ecological network.

- A significant number of species are now endemic to the area.

Note: See a full overview under section 2.x

Landscape Character Type

Includes all LCTs

An ancient and intricate network of winding lanes, paths and recreational routes

Natural Beauty Criteria

Landscape Quality ✓

Scenic Quality ✓

Relative Wildness

Relative Tranquillity

Natural Heritage Features

Cultural Heritage ✓

Rationale

Distinctive characteristics

- The area's relative inaccessibility and reliance on an intricate minor road network means that there is no quick way to cover the ground of the South Devon AONB; it has to be

- Narrow, often sunken historic lanes are bounded by tall often stone-faced Devon banks and topped with thick, wide hedges
- A collection of historic toll houses, mileposts, bridges and signposts.
- Views from vehicles substantially restricted by high banks and hedgerows, with glimpsed views through gateways.

experienced at a slower pace.

- The South West Coast Path and coastal margin form a nationally significant resource and the primary recreational route of the South Devon AONB.

- The more heavily used minor roads typically follow the area’s ridgelines.
- Away from ridgelines, particularly in an east-west direction the minor road network is exceptionally characterful being narrow, steep and winding.
- The speed of vehicle travel throughout the area is suppressed by the narrow winding intricacy of the road network.
- Hedge banks and road verges are rich in wildflowers and colourful natural vegetation with the Devon county flower, the primrose, featuring heavily during spring time.

Landscape Character Type

Includes: Open coastal plateaux (1B); Lower Rolling Farmed and Settled Valley Slopes pen coastal plateaux (3B); Sparsely Settled Farmed Valley Floors (3C); River Valley Slopes and Combes (3G); and Inland Elevated Undulating Land (5A).

Areas of high tranquillity, natural nightscapes, distinctive natural soundscapes and visible movement

Natural Beauty Criteria

| | |
|---------------------------|---|
| Landscape Quality | ✓ |
| Scenic Quality | ✓ |
| Relative Wildness | ✓ |
| Relative Tranquillity | ✓ |
| Natural Heritage Features | ✓ |
| Cultural Heritage | ✓ |

| Rationale | Distinctive characteristics |
|---|--|
| <ul style="list-style-type: none"> • The spiritual, emotional and physical responses to the landscape, particularly its sense of timelessness, wilderness, remoteness and peacefulness are nationally significant. • As a combination of views, movement, sounds, smells, textures and tastes, the way the AONB is perceived is dramatic, yet subtle and varied. • The dark sky and natural nightscape resource of the AONB is particularly highly valued. | <ul style="list-style-type: none"> • The juxtaposition of coastal, estuarine, riverine, farm, village and woodland environments creates a rich experience of many different features, sounds, smells and textures perceived as being natural and contributing to a sense of tranquillity. • Some remote parts of the AONB distant from the primary road network, main population centres and tourist hotspots offer a real sense of high tranquillity at all times of the year. •Sections of the coast are wild and rugged offering a sense of remoteness with few signs of human presence and the perception of a strongly natural landscape and seascape. Extensive areas of semi-natural habitat reinforce this perception. • The coast provides a powerful experience of exposure to the elements, whether from steep vertiginous drops along cliff sections, the sound of waves, or during periods of strong southwesterly winds or easterly storms. • Away from the waterside settlements with harbours, historic cores and areas of moorings, the estuaries remain tranquil, remote and wild with little sense of human activity or presence. • Dark night skies can be viewed in locations away from the intrusive skyglow from the neighbouring urban centres. |
| Landscape Character Type | Includes; Sparsely Settled Farmed Valley Floors (3C); River Valley Slopes and Combes (3G); Estuaries (4A); Marine levels and coastal plains (4B); Coastal slopes and combes (4D); Cliffs (4H) |

A variety in the setting to the AONB formed by the marine environment, Plymouth City, market and coastal towns, rural South Hams and the southern Dartmoor

Natural Beauty Criteria

Landscape Quality ✓

Scenic Quality ✓

Relative Wildness

Relative Tranquillity

Natural Heritage Features ✓

Cultural Heritage ✓

Rationale

Distinctive characteristics

- The setting to the AONB provided by surrounding areas of land, sea and urban settlement together with the intervisibility between the AONB and these areas is of great significance.
- Distant views from locations within the South Devon AONB include many significant features that are not located within the AONB boundary

- Cities located setting at the ends of the area and contrast strongly with the deeply rural nature of the AONB itself.
- Residents from nearby areas choose to visit the AONB in significant numbers throughout the year for both leisure and business purposes. The reverse is also true with a high dependency of South Devon AONB residents for employment opportunities, goods and services provided by the neighbouring towns and city.
- Off-shore rocks and small islands lie outside the AONB boundary but make a significant contribution to the coastal landscape setting. • In addition to its intervisibility with the AONB, the inshore marine environment is strongly linked to the AONB through centuries of maritime history, and modern day fishing industry, lifeboat services, recreational boating and Royal Navy training.

- The inland boundary of the area is mostly not marked by a distinct change in scenery and the landscape character continues seamlessly into the neighbouring countryside.

Landscape Character Type Includes all LCTs

BTU Cottbus-Senftenberg

Chair of Architectural Conservation

Dr. phil. Alexandra Skedzuhn-Safir

Port Arthur – case study of good practice

I Characteristics of the site

Port Arthur Historic Site (Port Arthur) (fig. 1) is located in southern part of Tasmania in Australia, at Carnarvon Bay. It is one of eleven UNESCO 'penal sites' in Australia, all of which were constructed in the 18th and 19th centuries by the British Empire. Port Arthur was established in 1830, and had operated until 1877 as a convict site.¹⁵

In 2010, along with the other ten convict sites, Port Arthur obtained UNESCO World Heritage status and was inscribed on the World Heritage list under criteria (iv) and (vi) as part of the Australian Convict Sites. Port Arthur is listed as one of five of such sites in Tasmania, alongside Coal Mines Historic Site, Cascades Female Factory, Darlington Probation Station, and Brickendon and Woolmers Estates. The remaining sites are located in New South Wales (4), on Norfolk Island (1), and in Western Australia (1).

However, these eleven sites make up only a miniscule fraction of such places: altogether, there were more than 3,000 convict sites on Australian territory,¹⁶ demonstrating the importance of such places to 18th- and 19th-century Australian history. The eleven UNESCO sites were chosen in particular based on key elements that illustrate various ideas of punitive measures for convicts during this period of history. Each of the convict sites was designed with a particular function; besides the purpose of punishment, forced labour was also considered a tool for convict reform.

¹⁵ Australian Government. Department of Agriculture, Water and the Environment, n.d.-b.

¹⁶ Australian Government, 2008, p. 5.

The area of the inscribed site of Port Arthur covers 146.00 hectares, with the buffer zone comprising an additional 1216.15 hectares.¹⁷ Together, this area encompasses convict structures and remains, Carnarvon Bay, and land parcels in a semi-rural area towards the inland.

History and development

The idea of forced migration for criminal offenders goes back to the beginning of the 17th century, and was in use not only in Britain, but was practised in other parts of the world as well as late as 1938.¹⁸



Fig. 2 Individual visitors left their ‘mark’ at Port Arthur, a testimony to its use as a historic touristic destination (author, 2018).

¹⁷ Australian Government, 2008, pp. 8, 56.

¹⁸ Australian Government, 2008, p. 43.

In a period spanning 80 years until 1868, altogether 166,000 prisoners were sent to Australia, sentenced to spend their imprisonment far away from home.¹⁹ Many of them were from working-class backgrounds in Scotland, Ireland, and England.²⁰ In the early period of Australian colonisation, the convicts constituted a large percentage of the people from Britain.²¹ However, convicts from Canada, Bermuda, America, and other British colonies were also sent to Australia.²² Only a relatively small number of them were sent to penal stations or prison, generally if they had committed a crime during the transport, and it is assumed that 20–30 per cent of the prisoners ended up in this type of confinement during their imprisonment.²³

Prior to the establishment of Port Arthur as a convict site, it functioned from 1830 to 1833 as a timber-getting station.²⁴ Port Arthur served as a prison for male secondary offenders, and due to its isolated position and difficult terrain that prevented escape, it has been termed a ‘prison within a prison’. The penal station was designed to be a ‘place of horror’ where prisoners were condemned to strenuous and dangerous physical work and continued surveillance.²⁵ Port Arthur penitentiary was intended to be self-sufficient: besides the forced work in the dockyards, lime kiln, and quarry, convicts also worked on the government-run farm, which provided staples for the site.²⁶ Over time, Port Arthur developed into a successful industrial site, with felling, sawing and preparing the timber for shipment.

Due to the lack of success of this system of confinement, difficulties of rehabilitation, as well as an assumed increase of homosexual activity, in 1853 the transport of prisoners came to an end in Van Diemen’s Land, as it was initially named, and thus also at Port Arthur. The buildings were then employed for other functions: they housed those with mental illnesses, paupers, and invalids.²⁷ This use continued until 1877. As soon as the convict site closed down, parts of the lands were sold off, and the township Carnarvon was established. New buildings were then erected and demolished, and existing ones repurposed: the former Asylum was, for instance, re-used as a city hall, and the military barracks employed were for tourism or private residences.²⁸ In the 1880s, the site gained importance for touristic and recreational purposes, adding to the significance of the place (fig. 2).²⁹

¹⁹ Barnard, 2016, p. 1.

²⁰ Barnard, 2016, p. 1.

²¹ Barnard, 2016, p. 1.

²² Australian Government, 2008, p. 43.

²³ Australian Government, 2008, p. 56.

²⁴ Australian Government, 2008, p. 33.

²⁵ Australian Government, 2008, p. 56.

²⁶ Australian Government, 2008, p. 33.

²⁷ Australian Government. Department of Agriculture, Water and the Environment, n.d.-a.

²⁸ (Australian Government. Department of Agriculture, Water and the Environment, n.d.-b). For further information of the changing function of buildings, see (Tasmanian Heritage Council Tasmanian, 2021).

²⁹ (Australian Government. Department of Agriculture, Water and the Environment, n.d.-b)

Structures

Altogether, roughly 60 buildings make up the site of Port Arthur.³⁰ Thirty of them were built by the convicts themselves.³¹ They were built in different phases, the majority belonging to the period between 1830 and 1853 (fig. 3).



Fig. 3 Remaining structures at the south-western end of Port Arthur (author, 2018).

The most prominent structure of Port Arthur is the Penitentiary (fig. 4), which stands out upon arrival via Carnarvan Bay. This four-storey building housed up to 484 convicts, of which roughly one-fourth stayed in separate cells, whilst the remaining slept in berths.³² Only some remains have survived of the Prisoner Barracks. This structure accommodated convicts, as did the Separate Prison. At Port Arthur, pronounced corporal punishment persisted until 1848, after which point punishment began to take place solely in psychological form: the Separate Prison was erected for precisely that purpose.³³

³⁰ (Australian Government. Department of Agriculture, Water and the Environment, n.d.-a)

³¹ (Australian Government, 2008, p. 33)

³² (Australian Government, 2008, p. 33)

³³ (Australian Government, 2008, p. 56)



Fig. 4 The Penitentiary is an impressive building and easily discernible from land and sea (author, 2018).

The Separate Prison exemplified the emerging idea that punishment should take the form of solitary confinement for unresponsive prisoners. It was built between 1848 and 1852, and ran from 1852 to 1877.³⁴ Distributed across three corridors were 50 cells, in addition to 12 yards designed for exercise, and two cells designated for additional punishment.³⁵ The sense of solitary confinement was yet increased by diminishing the sounds prisoners could hear: soft padding was placed under shoes to lessen the sound of footsteps, and they were forbidden to speak. Communication between prisoners was prevented (fig. 5), and convicts wore a mask with eyeholes covering their face when they moved inside the prison.³⁶ Even the chapel inside the Separate Prison was designed to prevent visual and physical contact between prisoners, as the pews were separated into individual berths (fig. 6).³⁷ This prison followed the Philadelphian system of confinement, in which the prisoner is believed to reflect

³⁴ (Australian Government. Department of Agriculture, Water and the Environment, n.d.-b), (Australian Government, 2008, p. 56)

³⁵ (Australian Government, 2008, p. 33)

³⁶ (Australian Government, 2008, p. 97)

³⁷ (Australian Government, 2008, p. 33)

upon his/her sins, feel penitence, and thus find God through the isolation of him/her from the other prisoners.



Fig. 5 To minimise communication between prisoners, the exercise yards were designed for the use of one prisoner only, whilst surveillance of a prisoner could be guaranteed (author, 2018).

The Point Puer establishment is located at the eastern point of the Carnarvon Bay, and was designed for the confinement of young boys between the ages of 9 and 18. It ran from 1834 until 1849.³⁸ Through basic education, religious and moral training, as well as training in skills for a trade, it was believed that these young men could be reintegrated into society.³⁹ *The Isle of the Dead (figs. 1 and 7) lies within the Carnarvon Bay, to the north of Point Puer, where circa 1,000 people are buried, with the graves of convicts separated from those of the military and civilians; of these, 88 headstones have survived.*⁴⁰

³⁸ (Australian Government, 2008, p. 56)

³⁹ (Australian Government, 2008, p. 56)

⁴⁰ (Australian Government, 2008, p. 33)



Fig. 6 Individual booths in the chapel inside the Separate Prison ensured that communication between prisoners was hindered (author, 2018).

A prominent position is also held by the Church (fig.8), which, along with the Parsonage and the structures for the Visiting Chaplain and Magistrate, are located above the area destined for the convicts.⁴¹ In their proximity lie the Accountant and Government Cottage and the Junior Medical Office. Opposite of these structures are those designated and associated (mostly) with the military and surveillance: the Guard Tower, Watchmen's and Officers' Quarters, the houses of the Commandant and the Senior Military Officer, as well as the Military Barracks and the Law Courts.⁴²

Later additions include the Port Arthur Asylum, which was built for people with mental illnesses in 1868.

⁴¹ Australian Government, 2008, p. 33.

⁴² Australian Government, 2008, p. 33.



Fig. 7 The Isle of the Dead is located at the north-western side of Carnarvon Bay (author, 2018).



Fig. 8 The Church is set within a stunning landscape (author, 2018).

The areas dedicated to forced labour are the Lime Kiln, Dockyard, Dairy, Clerk of Works' House, Quarry, Government Farm, Sawpits and Workshops, and the Master Shipwright's House.⁴³

Values

As with every World Heritage site, criteria are identified which define the site's Outstanding Universal Value (OUV). It is the aim to preserve these qualities, and all changes to the site need to be designed in such a manner that they will not impact these values.

The inscription critterion (iv) states that the

*'[...] Australian convict sites constitute an outstanding example of the way in which conventional forced labour and national prison systems were transformed, in major European nations in the 18th and 19th centuries, into a system of deportation and forced labour forming part of the British Empire's vast colonial project. They illustrate the variety of the creation of penal colonies to serve the many material needs created by the development of a new territory. They bear witness to a penitentiary system which had many objectives, ranging from severe punishment used as a deterrent to forced labour for men, women, and children, and the rehabilitation of the convicts through labour and discipline.'*⁴⁴

Whilst criterion (iv) is relevant as the

'[...] transportation of criminals, delinquents, and political prisoners to colonial lands by the great nation states between the 18th and 20th centuries is an important aspect of human history, especially with regard to its penal, political, and colonial dimensions. The Australian convict settlements provide a particularly complete example of this history and the associated symbolic values derived from discussions in modern and contemporary European society. They illustrate an active phase in the occupation of colonial lands to the detriment of the Aboriginal peoples, and the process of creating a colonial population of European origin through the dialectic of punishment and

⁴³ Australian Government, 2008, p. 33.

⁴⁴ UNESCO World Heritage Centre, n.d.-a, see also Australian Government, 2008, p. 73.

transportation followed by forced labour and social rehabilitation to the eventual social integration of convicts as settlers.⁴⁵

As shown above, the significance of Port Arthur is shown on different levels: for one, the site is a sign of Britain's influence and demonstration of power across even the most remote territories.⁴⁶ Convicts were exploited in terms of their work force, skill, and expertise for Britain's expansionistic desire to conquer and shape the colonies.⁴⁷ The products and goods that the convicts created, such as clothes, shoes, milled timber, ironmongery, or flour were shipped to Britain or consumed within the colony itself.⁴⁸ Secondly, the criminal 'elements' could be removed from Britain by forced transport, preventing them from tainting the morality of the rest of society. Thirdly, the site fostered the development of attitudes towards criminals, their punishment, and rehabilitation.

Within the history of convict sites altogether, Port Arthur plays a significant role insofar as it reflected the approach of the time toward punitive sentences, in which the convicts were to be reformed through work, education, religion, and isolation, rather than by physical punishments.⁴⁹ The surveillance of convicts was augmented by the strategic location of Port Arthur, as a somewhat 'open-air panopticon' in which the only escape route over land was guarded with the help of dogs, and communication between watchmen was facilitated by a system of semaphore signals.⁵⁰

As argued by the ICOMOS Burra Charter, the values of a place span its aesthetic, historical, scientific, spiritual, and social values, which together make up its cultural significance. Other values of Port Arthur include its heritage, scientific, aesthetic, technical, social special associations, and Indigenous values. A few examples will now be outlined here. Beyond its use as a convict site, Port Arthur has other significant structures and periods, such as its Soldiers' Memorial Avenue of 1919, the structures built and linked to the period when Carnarvon was established, as well as the tragic event of the mass murder on 28 April 1996, which contributed to a modification of national gun laws in Australia.⁵¹ Technical values can be found, for example, in the Lemprière's tidal benchmark installed on the Isle of the Dead, which in alignment with historic documents provides a contribution to climate research.⁵² Although this may appear somewhat paradoxical and unethical considering its dark history, aesthetic values can also be found in the picturesque setting of the site, which has been acknowledged by painters and writers from the time of the convict period, and thereafter (fig. 9).⁵³ The scientific values of the site are, for instance, the development of archaeological

⁴⁵ UNESCO World Heritage Centre, n.d.-a, see also Australian Government, 2008, p. 74.

⁴⁶ Australian Government, 2008, p. 33.

⁴⁷ Australian Government, 2008, p. 77.

⁴⁸ Australian Government, 2008, p. 79.

⁴⁹ Australian Government. Department of Agriculture, Water and the Environment, n.d.-b.

⁵⁰ Australian Government, 2008, p. 94.

⁵¹ Port Arthur Historic Site, n.d.

⁵² Port Arthur Historic Site, n.d. For further values see <https://portarthur.org.au/heritage-management/heritage-values/>

⁵³ Port Arthur Historic Site, n.d.

methods, which have later served as the basis for the strategies employed in Australia for archaeological method and theory.⁵⁴



Fig. 9 One of the images published in the novel 'The Kip Brothers' by Jules Verne in 1902, showing Port Arthur (M. e. E. Morris / Jules Verne, Wikimedia Commons).

The social values lie in the site's nation-building value, as a place that is connected to the identity of the descendants of convicts, but also to the soldiers fallen in WWI, and as one of the iconic sites of the convict past. The Indigenous values lie in the landscape of Port Arthur, which has experienced little change since the arrival of the colonists. In addition, several Indigenous sites are located in proximity to Port Arthur, and it is suggested that an Indigenous person is buried at the Isle of the Dead.⁵⁵ Further values identified at Port Arthur are its special association values: this refers to the association with particular people who

⁵⁴ Godden Mackay Logan Pty Ltd et al., 2008, p. 63. Further explications on the individual values can be consulted earlier in this publication.

⁵⁵ Port Arthur Historic Site, n.d.

are important to the history of Port Arthur, including convicts, reformers, administrators, or artists.⁵⁶

The rarity of the site lies in several of the site's features: one of them is the Dockyard, which demonstrates the importance of convict labour for the creation of infrastructure and ships.⁵⁷ This is demonstrated, for instance, through the layout of the site and the location of individual structures that reflects an intentional and purposeful design with the aim of creating a functional and hierarchical convict site.⁵⁸

*However, the Convict Sites carry many more values than those for which they were listed, and different values are more salient to certain communities. In 2007, the records compiled and archived on the convicts were put on UNESCO Memory of the World Register as intangible heritage.*⁵⁹

Integrity

As a serial listing,⁶⁰ the Convict Sites need to demonstrate their integrity by possessing the significant elements that jointly make up the OUV.

The elements identified for fulfilling criterion (iv) are:

- *'Expanding geo-political spheres of influence*
- *Punishment and deterrence*
- *Reformation of convicts*⁶¹

At Port Arthur, all of these elements are present.

Criterion (vi) is characterised by thematic elements that demonstrate

- *'Penal transportation as dominant model*
- *Shift in the punishment of crime [influenced by Enlightenment] in modern era from punishing the body to psychological punishment*

⁵⁶ Godden Mackay Logan Pty Ltd et al., 2008, p. 65.

⁵⁷ Godden Mackay Logan Pty Ltd et al., 2008, p. 66.

⁵⁸ Godden Mackay Logan Pty Ltd et al., 2008, p. 66.

⁵⁹ Australian Government, 2008, p. 76.

⁶⁰ According to the *UNESCO Guidelines for the Preparation of Serial Nominations to the World Heritage List*: 'A serial nomination is any nomination which consists of two or more unconnected areas. A single World Heritage nomination may contain a series of cultural and/or natural properties in different geographical locations, provided that they are related because they belong to: (i) the same historico-cultural group; (ii) the same type of property which is characteristic of the geographical zone; or (iii) the same geological, geomorphological formation, the same biogeographic province, or the same ecosystem type, and provided that it is the series, and not necessarily each of its components taken individually, which is of outstanding universal value.' (UNESCO World Heritage Centre, n.d.b).

⁶¹ Australian Government, 2008, p. 73.

- Influence on emergence of national penitentiary system⁶²

*Only the second element is reflected at Port Arthur with the Separate Prison, the Point Puer and its physical isolation from the remaining convict site, as well as the “open-air” panopticon’.*⁶³

The sites are intact and are preserved in their entirety, and the boundaries correspond to the historical areas, which also encompass the landscape.⁶⁴ The fabric of the place is partially intact, parts of buildings are in ruins, whilst others have completely vanished. The fabric of the site is partially in very good condition and partially decaying. As it is located close to the sea, the high humidity threatens the fabric, especially the salts, and tides and flooding occur occasionally. Fires have also had a damaging effect on the site (most notably in 1895 and 1897).⁶⁵

Authenticity

The Convict Sites are in compliance with the requirements of possessing authenticity, as defined by the Nara Document and most importantly by the UNESCO Operational Guidelines. At Port Arthur, authenticity is also proven by its building fabric as well as design, and through the retention of its form.⁶⁶ Reconstructions, or the indications of the outlines of buildings, were carried out in such a manner to be easily distinguished from the historic building material and to maintain the authenticity of the building fabric (figs. 10 and 11). Minor conservation work involved the use of traditional materials and techniques in accordance with contemporary conservation principles.⁶⁷

⁶² Australian Government, 2008, p. 74.

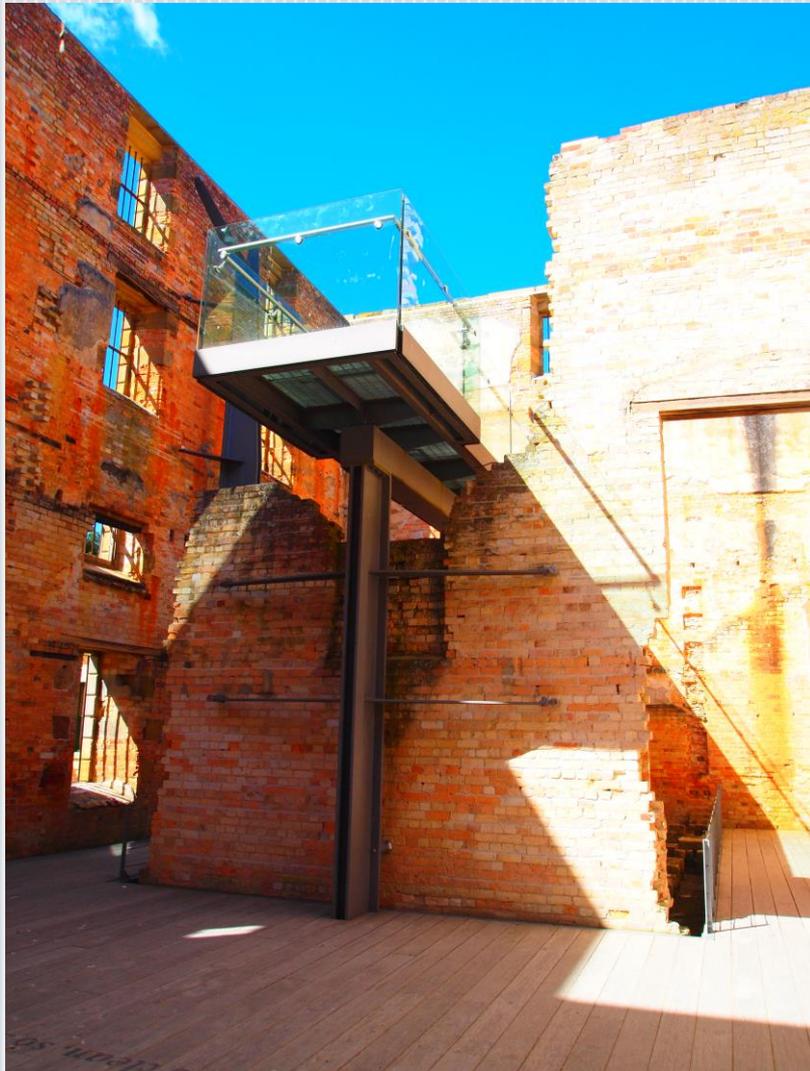
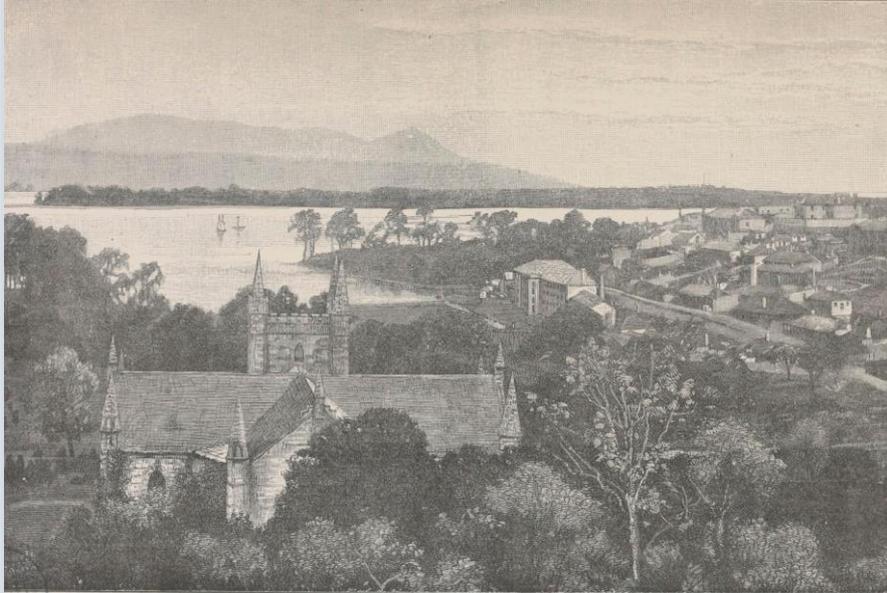
⁶³ Australian Government, 2008, p. 74.

⁶⁴ Australian Government, 2008, p. 117.

⁶⁵ Australian Government, 2008, p. 118.

⁶⁶ Australian Government, 2008, p. 118.

⁶⁷ Australian Government, 2008, p. 119.



Figs. 10 and 11 Interior structures at the Penitentiary: contemporary building materials were employed for partial reconstruction/site interpretation purposes to make them easily distinguishable from the historic fabric (author, 2018).

The authenticity of the site could be preserved due to a continued use of the site. When more than a century ago, Port Arthur became a touristic village, albeit of an informal nature, the buildings continued to be used, and with the development of Port Arthur as a historic site, some of the structures were employed for museum purposes. Also, the surrounding landscape at Port Arthur has retained its former characteristics.

At all of the eleven Convict Sites, Port Arthur included, the documentation of the site is comprehensive, and written records, drawings, and images have survived.⁶⁸ All of them attest to the authenticity of the site as it presents itself today.

Condition assessment



Fig. 12 The salt-laden wind and rising water table contribute to the deterioration of the building fabric at Port Arthur; detail of brick wall of the Penitentiary (author, 2018).

⁶⁸ Australian Government, 2008, p. 121.

Pertaining to the structural aspect of the site, the buildings and ruins alike are in a good condition, as is the landscape.⁶⁹ Two long-term projects – each of them designed as a ten-year program – guaranteed conservation and maintenance measures.⁷⁰

The fabric of the site is threatened by rising sea levels and very strong storms; also, the water tables are rising, all of which contributes to the impact of salt damage to the fabric through rising damp or through salt-laden wind (fig. 12).⁷¹ In addition, at Port Arthur precipitation is quite high, and wooden structures are affected by it, leading, for example, to biological colonisation. Additionally, the brick structures suffer from high levels of rainwater, as the bricks contain a large percentage of clay, and precipitation weakens their fabric.⁷² Features made of metal or plaster surfaces are equally impacted by salt-laden wind.

Maintenance and conservation programme in place

Various maintenance and conservation programmes have been implemented at Port Arthur. Maintenance work occurs on a regular basis and is of a cyclical nature. In order to determine the priority in which conservation measures need to be undertaken, the most endangered and vulnerable building elements are identified through the asset management system, in which individual features such as foundation or masonry walls are recorded.⁷³

Remedial conservation work is regularly carried out, addressing measures of a temporary nature, such as the replacement of joint mortar (fig. 13). Also, preventive conservation measures are in place that are installed to avoid or lessen the impact of damaging factors or events (figs. 14 and 15). To lessen the negative impact of environmental threats, specific vegetation has been planted to act as protective shields.⁷⁴ However, due to climate change and the risk of continuously rising sea levels, the partial or complete loss of structures close to the water front is very likely and will be addressed in management and site interpretation in the future.⁷⁵

⁶⁹ UNESCO World Heritage Centre, n.d., p. 123.

⁷⁰ The two projects were the *Port Arthur Conservation and Development Project* (1980–1990) and the *Conservation Capital Investment Program* (2000–2010) (Australian Government, 2008, p. 123)

⁷¹ Australian Government, 2008, pp. 125, 126.

⁷² Australian Government, 2008, p. 126.

⁷³ Australian Government, 2008, p. 124.

⁷⁴ Australian Government, 2008, p. 126.

⁷⁵ For dealing with a predicted or imminent loss of heritage, see also DeSilvey et al., 2011, and DeSilvey, 2017.



Fig. 13 regular maintenance work, such as pointing of joints, is carried out at Port Arthur, and priorities of measures are assessed based on site monitoring (author, 2018).



Figs. 14 and 15 Flood barrier devices have been installed at sensitive areas of the historic site (author, 2018).

Summary and conclusion

Port Arthur is an intriguing historic site that combines a variety of values, many of which go far beyond those that constitute UNESCO's Outstanding Universal Value. For the protection, use, and management of the site, all activities that will be designed need to not only take into account the OUV and its protection but also those values that are connected to the pre- and post-convict narratives.

Protection

Legal status and practical issues of protection

Port Arthur Historic Site has legal protection implemented on different levels: local, state, and territorial, as well as national.⁷⁶

It has been listed on the National Heritage List since 2005 as a historic site, and since 1998 under the Tasmanian Heritage Register – Historic Cultural Heritage Act 1995.⁷⁷ Additional legislation pertaining to the site are, on the national level, the Environment Protection and Biodiversity Conservation Act (1999); on state or territorial level, they are the Land Use Planning and Approval Act (1993), the Nature Conservation Act (2002), the National Parks and Reserves Management Act (2002), the Aboriginal Relics Act (1993), the State Service Act (2000), the Tasmanian State Coastal Policy (1996), and the Port Arthur Historic Site Management Authority Act (1987); the local level includes the Tasman Planning Scheme (1979) and the Local Government Act (1993).⁷⁸

The site is under state government ownership (State of Tasmania), and is managed by the Port Arthur Historic Site Management Authority (PAHSMA). The buffer zone adds to the protection of the site. The principle road has been diverted to avoid any visual impact on the site.⁷⁹

*There are no significant developmental pressures that would threaten the site, and Port Arthur, like many other heritage sites, has provisions in place in the management plan that protect the site from potentially threatening activities. A motel bordering the listed site has been considered aesthetically inadequate and wishes have been expressed to demolish it and replace it with a hotel design that is appropriate to the site.*⁸⁰

⁷⁶ Australian Government, 2008, p. 134)

⁷⁷ Australian Government. Department of Agriculture, Water and the Environment, n.d.-b, and Australian Government, 2008, p. 133, respectively.

⁷⁸ Australian Government, 2008, p. 134, and Godden Mackay Logan Pty Ltd et al., 2008, p. 78.

⁷⁹ Australian Government, 2008, p. 124.

⁸⁰ Australian Government, 2008, p. 125. As of May 2021, these plans have not materialised, as the motel has neither been demolished nor apparently been significantly redesigned.

There are many levels of protection in place that ensure the conservation of Port Arthur, not only concerning the built heritage, but also including its archaeology and natural features.

II Use

According to the Port Arthur Historic Site Management Authority (PAHSMA), their purpose is to *'conserve and enhance the heritage values of our World Heritage convict sites and to share the stories of these places and the people connected to them.'*⁸¹ To achieve this, a variety of measures have been implemented.

Scientific use

Historical research is conducted at the site: at the Resource Centre, historic documents are archived along with site-relevant publications. The site is also equipped with a convict transcription service.

Privately conducted research is supported for interested academics and non-academics alike.

Research is also continuously undertaken on the archaeology of the site. The results obtained from this research are shared through exhibitions and form part of specialised tours.⁸² The methods in archaeological research were published in the Port Arthur Procedures Manual, which was a significant source for the development of standards in archaeological practice in Australia.⁸³

The records archived on convicts are available online and ensure the research of interested academic and non-academic public; further records available are the Records of the Admiralty. An information sheet provides useful hints in successful research methods into these records.⁸⁴

Currently, an intriguing research project is being carried out on the spatial history of Port Arthur, focussing on the management of convict labour. In this project, the combination of written records, archaeological research, and digital humanities will be able to create maps that showcase the location of work activity, as well as other aspects of the convicts' lives.⁸⁵

⁸¹ Port Arthur Historic Site Management Authority, 2020, p. i.

⁸² Port Arthur Historic Site Management Authority, n.d.b, p. 1.

⁸³ Port Arthur Historic Site Management Authority, n.d.b, p. 1.

⁸⁴ Port Arthur Historic Site Management Authority, n.d.e.

⁸⁵ Gibbs et al., 2018.

Community archaeology and public outreach

In line with the democratisation of heritage and thus also of archaeology, Port Arthur offers a variety of outreach projects that aim at engaging and actively involving communities. This understanding of archaeology developed together with the idea that heritage fulfils more than scientific or educational purposes, and that its purpose is to create and consolidate cultural identity. Against this backdrop, archaeology is no longer undertaken without taking into the account various communities and heritage consumers, and is meant to enable discussion on different perspectives and claims on knowledge.⁸⁶

Since 1982, volunteers have participated in large-scale archaeology at Port Arthur in the summertime, and the Summer Archaeology Program has been offered since 1998.⁸⁷ The Public Archaeology Program has been offered since 2001: this programme includes public excavations, signs, and talks explaining and interpreting research work at trench-sides, as well as putting exhibits on display at the museum that focus on the theme of archaeology.⁸⁸ On a regular basis, an excavation is especially designed for children to participate.⁸⁹

Through these initiatives, PAHSMA intends to make visitors aware of the use of archaeology as a discipline, to foster direct contact between archaeologists and visitors, to share new research results, and to provide visitors with a memorable experience.⁹⁰ By engaging the visitors, public support for research and management matters can be gained much sooner.

Community-driven projects enhance an awareness of the significance of this heritage site as well. Collecting Memories was one of these projects: it was coordinated by PAHSMA and invited visitors to share their personal memories of the sites.⁹¹ In addition, volunteer work plays a significant role: for young people between the ages between 17 and 24, the project Green Army established and funded by the Commonwealth Government, with the initial aim of addressing nature protection programmes. At Port Arthur, however, the Green Army Project tasks were designed to also incorporate cultural heritage preservation projects.⁹²

⁸⁶ Steele et al., 2008, p. 72.

⁸⁷ Steele et al., 2008, p. 72.

⁸⁸ Steele et al., 2008, p. 69.

⁸⁹ Port Arthur Historic Site Management Authority, n.d.b, p. 1.

⁹⁰ Steele et al., 2008, p. 77.

⁹¹ Steele et al., 2019, p. 261.

⁹² Steele et al., 2019, p. 259.

Leisure, recreation and tourism

Visitation at Port Arthur has risen considerably over the last decade: As of 2008, visitor numbers reached an approximate 230,000,⁹³ whilst in 2019–20 there were about 270,000.⁹⁴ The year before that, in 2018, it had reached 357,411 visitors.⁹⁵ Visitor numbers are expected to rise to 400,000 per year by the year 2030, with peaks arriving at more than 2,300 daily, compared to the 2014 peak⁹⁶ of roughly 1,400 visitors.⁹⁷



Fig. 16 The ‘Ghost Tour’ is offered at dusk, with the lit buildings lending a suggestive atmosphere (author, 2018).

⁹³ Australian Government, 2008, p. 149.

⁹⁴ Port Arthur Historic Site Management Authority, 2020, p. 4. One needs to take into account that through COVID 19 the site remained closed from March to June 2020.

⁹⁵ Port Arthur Historic Site Management Authority, 2020, p. 14.

⁹⁶ Peaks are usually in the summer months January and February (Steele et al., 2008, p. 69).

⁹⁷ Mackay, 2016, p. 8.

There are different and overlapping reasons to visit Port Arthur: It is a popular destination for family outings in the charming and lush countryside, but it is also one of the places that is associated with dark tourism.⁹⁸ The convict past represents a site of death, suffering, oppression, or loss. Some individual places demonstrate this clearly, such as the Isle of the Dead or the Separate Prison, and as such, the entire site may be considered a *traumascape*.⁹⁹ One of the tours offered at the site specifically caters to the theme of dark heritage, the ‘Ghost Tour’ (fig. 16).

The visitor facilities at Port Arthur encompass services that are especially focused on families and family recreational purposes, with picnic tables and large green areas, toilets, and pathways designed for strollers and wheelchairs. Furthermore, the site has storage lockers and provides portable seats (‘Walk a Seat’) and so-called people-movers. Especially in this rather isolated space, the café, buffet and restaurant, and other food outlet services are essential for visiting the site.



Fig. 17 One of the interactive displays at the Visitor Centres, offering interpretation on the lives and activities of individual people of Port Arthur (author, 2018).

⁹⁸ Marketing research conducted in 2008 by PAHSMA has shown that 20% of visitors come to the site for emotional and spiritual aspects associated to the convict past and the more recent event (Reiser & Wells, 2012, p. 326).

⁹⁹ For a discussion on *traumascape*s see Tumarkin, 2005. These places are marked by violence, suffering and loss, and are site where traumatic and tragic events occurred, such as genocide, exile, terrorism or catastrophes.

Site interpretation is provided through self-guided or guided tours, audio guides or guidebooks, and interpretation panels. Information about the significance of the site can be obtained at different places: the Visitor Centre with the interpretation centre (fig. 17), the former Asylum, and the House Museums. Signage at the site is designed to have a minimal impact for aesthetic reasons as well as to avoid any ‘museum-ification’ of the site.¹⁰⁰ Given that the site interpretation and exhibits can be found in various areas spread around the historic site, the pressure on these sites can also be lessened, allowing for a better experience overall (fig. 18). The experience of the visit is further heightened by the possibility of choosing – according to individual interests – the respective museum or area of the site and its specific narrative.



Fig. 18 Presentation of the sawing pit of Port Arthur: in lieu of a complete reconstruction of buildings, their outlines have been recreated to reduce visual impact (author, 2018).

¹⁰⁰ Steele et al., 2008, p. 76.

The site's interpretation is based on academic research results and incorporates the cultural significance of the site to provide an understanding of the site in its contexts (social, historical, geographical).¹⁰¹ The interpretation at the site is designed to address not only those themes in line with the OUV as an Australian Convict Site, but also narratives concerning the pre- and post-convict settlements.¹⁰² In addition, visitor satisfaction is regularly monitored through surveys and market research.¹⁰³

Education

Many of the educational programmes at Port Arthur are dedicated to young visitors and school children. There are documents available for download and consultation for use by educators prior to the site visit, designed for learners of different age groups.¹⁰⁴ Self-guided tours in which tasks and activities are outlined are available as well. On the website, a list of educational resources is provided, which are primarily designed for children (and in part for the casual/non-academic adult visitor).

To provide school children with a first-hand experience, a so-called Discovery Box is lent to schools for a limited time. These boxes contain historic artefacts and other documentary evidence concerning the site and serve as a teaching/learning aid to help students understand the meaning of the site.

An on-site visit can be enriched through booking additional tours, such as to the Point Puer Boys' Prison or the Isle of the Dead.

Training and capacity building

Students studying in Australia have the possibility to participate in the Summer Archaeology Programs, which provide training in recording, excavating, and cataloguing archaeological finds.¹⁰⁵

There are a variety of initiatives for training and employment opportunities for young people: for instance, young people receive training in horticulture and business and kitchen operations, and employment is offered in the Conservation and Infrastructure Department

¹⁰¹ Godden Mackay Logan Pty Ltd et al., 2008, p. 126.

¹⁰² Steele et al., 2019, p. 255.

¹⁰³ Godden Mackay Logan Pty Ltd et al., 2008, p. 147.

¹⁰⁴ Port Arthur Historic Site Management Authority, n.d.d.

¹⁰⁵ Port Arthur Historic Site Management Authority, n.d.b, p. 1.

(painting) or in the Tourism Operations sector.¹⁰⁶ Pre-employment programs are geared at training in hospitality, tourism, and guiding.¹⁰⁷

Identity and nation building

The convict past was an uncomfortable past for Australians. This is especially true for Tasmanians, who have experienced the convict past to have a tainting effect: the middle-class generations of the second half of the 20th century preferred to not be linked with this part of history.¹⁰⁸ All the more it is important to note that a shift has taken place in society in which the past has been acknowledged and dealt with. Here, the Australian Convict Sites play an important role as a tool to revisit the past with new approaches, to come to terms with this uncomfortable heritage, and to find in it a meaning for society at large.

The narratives of Port Arthur concentrate on the men and young boys transported from Britain to Van Diemen's Land, today's Tasmania. The narratives serve to shape and strengthen an identity of today's Non-First Nation People and those who were imprisoned on British ground for criminal offences.¹⁰⁹

A more particular bond between today's descendants and the imprisoned is forged via the practice of being tattooed.¹¹⁰ The tattooing of the prisoners very probably also took place on the way to Australia, and motifs appear in clusters in a group of prisoners who were travelling on the same ship; a tattoo may be read as a sign of a shared experience.¹¹¹ However, tattoos were also used as identification marks at the time of a prisoner's arrival or release and were documented in each prisoner's records as identification marks.¹¹² Tattooing thus became a sign of a particular identity and culture. It has been argued that this tattooing practice was continued in some of the following generations.¹¹³

Although Port Arthur's narrative around convicts is the predominant one, additional ones forge a sense of identity as well and refer to painful historic events. This is exemplified with the Soldiers' Memorial Walk, established in 1919,¹¹⁴ as well as with the Memorial dedicated

¹⁰⁶ Port Arthur Historic Site Management Authority, 2020, p. 17.

¹⁰⁷ Port Arthur Historic Site Management Authority, n.d.c.

¹⁰⁸ Reiser & Wells, 2012, p. 324.

¹⁰⁹ In fact, as Mary McAleese (President of Ireland, 1997–2011) pointed out, the history of the transport of women 1845 on board the *Tasmania 2* and later housed at Cascades Female Factory, near to Port Arthur, '*created bonds of affinity between Ireland and Australia that resonate still down the generations*' (McAleese, 2015). It has been estimated that about 40,000 Irish were sent to Australia's penitentiaries, of which one-fourth ended up in Tasmania during the period between 1788 and 1867 (McAleese, 2015). The voyage from Ireland to Tasmania took three months, in the case of *Tasmania 2*.

¹¹⁰ Barnard, 2016.

¹¹¹ Barnard, 2016, p. 11.

¹¹² Barnard, 2016, pp. 4, 114.

¹¹³ Barnard, 2016, p. 114.

¹¹⁴ The site commemorates Tasmanian soldiers. An association was formed to take care of the conservation of the memorial site including its more than 300 trees (Friends of Soldiers Memorial Avenue Inc, 2021).

to the lives lost in the 1996 mass murder. Each of these is powerful in establishing and reinforcing national identity through commonly experienced grief and loss.

Although the narrative of the site interpretation focuses on the history of the detainees, the histories and interests of the different communities at the site overlap. Now attention is also focused more on those who were on the other side of the law: the military. The history of the Aborigines is also closely linked to the emergence and development of the convict sites in general, which had impacted their lives in different ways: These include the use of resources, forced displacement from ancestral places, confrontations between Aboriginal peoples and the military, and the use of prisoners, as well as the outbreak of syphilis.¹¹⁵ In addition to the destructive and negative encounters and influences, there were also those that can be seen as positive, such as the support of escaped prisoners by Aboriginal people, or consensual partnerships between Aboriginal women and convicts.¹¹⁶ A focus on this narrative, however, is still missing at Port Arthur.¹¹⁷ This may be grounded in the forced migration and killing of Aboriginal People in Tasmania/Van Diemen's Land prior to 1833,¹¹⁸ resulting in a situation where contact between Aboriginal People and colonists was either non-existent or extremely reduced. One Aboriginal woman was buried on the Isle of the Dead, and two Aboriginal convicts were imprisoned at Port Arthur.¹¹⁹ Against the background that dominant narrative of Port Arthur – especially as a World Heritage site – is that of a convict site beginning in 1833, this historic layer is often excluded. However, to look at the site more holistically with all its significant layers, these complex interactions also need to be addressed.

Community and commercial use

On the grounds of Port Arthur, some of the somewhat traditional community activities continue to take place, such as the Wood Chop on Boxing Day, whereas other recreational activities, like cricket, have been moved to another place outside of the historic site.¹²⁰ Other social events, such as fishing, music performances, or public talks have been made possible for the Tasman Peninsula community.¹²¹ The community of the Tasman Peninsula is still very much connected to Port Arthur and there is a strong sense of belonging. Free of charge access to the site is granted to this community.¹²²

¹¹⁵ Australian Government, 2008, p. 44.

¹¹⁶ Australian Government, 2008, p. 44.

¹¹⁷ Hyde Park Barracks, which is part of the Australian Convict Sites includes the impact of convict sites on Aboriginal People in their interpretation plan; see <https://hydeparkbarracks.sydneylivingmuseums.com.au/period/aboriginal-experience/> (accessed online 19 May 2021).

¹¹⁸ Ryan, 2008.

¹¹⁹ Godden Mackay Logan Pty Ltd et al., 2008, p. 20.

¹²⁰ Godden Mackay Logan Pty Ltd et al., 2008, p. 82.

¹²¹ Godden Mackay Logan Pty Ltd et al., 2008, p. 82.

¹²² Godden Mackay Logan Pty Ltd et al., 2008, p. 82.

Long- and short-term leases have been given to different commercial and non-commercial activities concerning accommodation, the use of jetties, grazing of stock, and the use of the St David's Church by the Anglican congregation.¹²³

Memorial site

Port Arthur has gained prominence not only as one of the Australian convict sites, but also through a tragic and painful event that occurred in 1996, when 35 people were killed and a further 19 were injured from gunshots.¹²⁴ This incident deeply moved individuals with a personal connection to the event and effected the Australian nation as a whole. This traumatic event has obtained a meaning far beyond that of a devastation and loss to one of action: the Australian laws on the possession of firearm were amended and tightened. The significance of Port Arthur was enriched yet once more, and it has become an important cultural landmark. To commemorate this event, a memorial site was erected next to the interpretation centre in the place where the former Broad Arrow Café once stood. However, it should be noted that PAHSMA does not promote this tragic event as an attraction.

Summary and conclusion

As one of the former convict sites, Port Arthur has an exceptional position as *lieu de mémoire* in which it holds a symbolic meaning for significant events that are important on a national level. The combination of World Heritage Listing, site interpretation and management, as well as public outreach programs contribute to importance of Port Arthur as a nationally and internationally significant site in dealing with uncomfortable heritage and providing the opportunity to come to terms with the past, and to identify instead means that foster social cohesion. As a consequence, the past associate with the convict period constructs (one of) the Grand Narratives of Australia.

¹²³ Godden Mackay Logan Pty Ltd et al., 2008, pp. 82 –83.

¹²⁴ Australian Government. Department of Agriculture, Water and the Environment, n.d.-b.

III Management

Stakeholders

At Port Arthur Historic Site there are numerous stakeholders, including, for instance:

- a) Community and associated people. These include, for instance, the Tasman Peninsula community, descendants of people who had lived and worked at Port Arthur during its function as penal station, the Aboriginal community of Tasmania, people associated with the 1996 tragic event, as well as PAHSMA staff or volunteers (former and present).¹²⁵
- b) Government Agencies; this includes both local and state government agencies, such as the Commonwealth Department of the Environment, Water, Heritage and the Arts, Heritage Tasmanian and the Tasmanian Heritage Council, or Tourism Tasmania.¹²⁶
- c) Other stakeholders; these encompass the Port Arthur Conservation Advisory Committee, the Port Arthur and Tasman Tourism Association, the Tasman Aboriginal Land and Sea Council, and the Neighbours of the Historic Site.¹²⁷

This list is not exhaustive, and the current stakeholders can be consulted in the respective reports.¹²⁸

The Friends of Soldiers Memorial Avenue Inc. (FOSMA) are an association which was established in 2002. Their interest lies in the conservation of the memorial site, including its numerous trees that are an inherent part of the memorial. The organisation drew up its own management plan in 2004, which addressed the threat of fire, site interpretation, restoration of the memorial avenue, and the care and replacement of trees.¹²⁹

Local management structures, staffing and funding

Conservation management principles are the foundation of the Port Arthur Historic Site Statutory Management Plan, implemented in 2007. With this plan, it is possible to determine the heritage resources and its overall significance, and guidelines have been set forth that concern conservation, site interpretation, use and management of the place, as well as

¹²⁵ Godden Mackay Logan Pty Ltd et al., 2008, p. 86.

¹²⁶ The complete list is in Godden Mackay Logan Pty Ltd et al., 2008, pp. 86 – 89.

¹²⁷ Godden Mackay Logan Pty Ltd et al., 2008, pp. 90 – 91.

¹²⁸ See Port Arthur Historic Site Management Authority, 2020, p. 65. One of the stakeholders is also Deakin University, which has a long-standing collaborative relationship with PAHSMA: students have the possibility to study the effect of site interpretation, and presentation, as well as visitor satisfaction. The author wishes to thank PAHSMA and Dr. Steven Cooke (Associate Professor, Culture and Heritage Studies, Deakin University) for the opportunity to co-lecture a module in December 2018 at Port Arthur.

¹²⁹ Friends of Soldiers Memorial Avenue Inc, 2004, pp. 2–3.

communication strategies that involve stakeholders in the conservation planning processes.¹³⁰

The management plan is fully reviewed at least every 10 years, and parts thereof are reviewed every 5 years, unless there arises the need to do so at an earlier stage.¹³¹

PAHSMA consists of a board of directors and highly qualified staff members: their expertise lies in a number of disciplines, including archaeology, tourism, heritage management, site interpretation, and marketing.¹³² The Chief Executive Director's responsibility lies in the general administration and management of Port Arthur Historic Site.¹³³

External experts make up the Port Arthur Conservation Advisory Committee and are affiliated with organisations such as Australia ICOMOS, the University of Tasmania, and Heritage Tasmania.¹³⁴ As of 2008, the total number of staff amounted to 131 people, divided into administration (10), customer services (79), maintenance (23), professional and technical staff (12), and executive members (7).¹³⁵ However, PAHSMA's responsibility has been extended in 2011 to the Coal Mines Historic Site and the Cascades Female Factory Historic Site.¹³⁶ This means that the number of staff for all three sites amounts, as of June 2020, to 169 employees (93 part-time/54 full-time/22 casual),¹³⁷ without counting the executive members. PAHSMA strives to actively include interested individuals or representatives of stakeholders through calls for nomination for contributing to management.¹³⁸

Port Arthur receives funding from different sources. Most of it derives from the Tasmanian State Budget, the Tasmanian Conservation Funding Program, the Tasmanian Community Fund, the Regional Tourism Investment Program, the Capital Investment Program, and income generated at the site itself.¹³⁹ The latter income source is quite substantial, with which the visitor services, conservation works, and the infrastructure at the site can be assured.¹⁴⁰ The full report on revenue and liabilities for individual positions can be consulted in the yearly reports.¹⁴¹

¹³⁰ Australian Government, 2008, pp. 143–144.

¹³¹ Godden Mackay Logan Pty Ltd et al., 2008, p. 101.

¹³² Australian Government, 2008, p. 148.

¹³³ Godden Mackay Logan Pty Ltd et al., 2008, p. 75.

¹³⁴ Australian Government, 2008, p. 148.

¹³⁵ Australian Government, 2008, p. 153.

¹³⁶ Port Arthur Historic Site Management Authority, n.d.

¹³⁷ Port Arthur Historic Site Management Authority, 2020, p. 16.

¹³⁸ Port Arthur Historic Site Management Authority, 2018.

¹³⁹ Australian Government, 2008, p. 145.

¹⁴⁰ Australian Government, 2008, p. 146.

¹⁴¹ Port Arthur Historic Site Management Authority, 2020.

Policies and Actions

A Strategic Management Framework was established for the Australian Convict Sites in 2008, which combines legislative and planning strategies spanning all three governmental levels and with conservation management plans drawn up individually for each site.¹⁴² The management plans were drawn up by heritage experts, employing the ICOMOS Burra Charter for the guiding principles in managing the cultural significance of sites.¹⁴³ Additional ICOMOS charters provided further guidance.¹⁴⁴

These strategies encompass the sharing of research results, interpretation resources, risk management methods, as well as the aim of improving conservation and management overall.¹⁴⁵ The implementation of this framework is monitored by the Australian Convict Sites Steering Committee.

In addition to the primary Port Arthur Statutory Management Plan, there are other management plans that specialise in specific areas, such as Port Arthur Historic Site Archaeology Plan and Archaeological Procedures Manual.¹⁴⁶ These plans are referred to as secondary plans, whereas tertiary plans concern the activities to be undertaken on a day-to-day basis that include, for instance, conservation or maintenance work.¹⁴⁷ Furthermore, PAHSM draws up individual plans for projects, conservation work, or more encompassing master plans.¹⁴⁸ Separate individual management plans exist for every sector of the site, including marketing, human resources, or communications.¹⁴⁹

Furthermore, for the managing of Port Arthur Historic Site, sustainability in both visitation and site operations is now emphasised.¹⁵⁰ The concept of wellbeing is now also included in management plans, and the last report focussed on the actions taken in management during Covid-19.¹⁵¹ Wellbeing is also directed towards management measures at the site, such as relevant exercises for maintaining physical wellbeing, or strategies for first aid response or dealing with harassment.¹⁵²

¹⁴² Australian Government, 2008, p. 142.

¹⁴³ Australian Government, 2008, p. 142.

¹⁴⁴ For a full list of these relevant international charters, see Godden Mackay Logan Pty Ltd et al., 2008, pp. 79 – 80. National policies are The Australian Natural Heritage Charter: for the Conservation of Places of Natural Heritage Significance (2002) Australian Heritage Commission; Ask First: A Guide to Respecting Indigenous Heritage Places and Values (2002), Australian Heritage Commission; Previous Possessions, New Obligations: Policies for Museums in Australia and Aboriginal and Torres Strait Islander Peoples (1993), Museums Australia.

¹⁴⁵ Australian Government, 2008, p. 142).

¹⁴⁶ Further individual secondary plans regard the landscape, assets, the collections and the site interpretation. (Godden Mackay Logan Pty Ltd et al., 2008, p. 76).

¹⁴⁷ Godden Mackay Logan Pty Ltd et al., 2008, p. 76.

¹⁴⁸ Godden Mackay Logan Pty Ltd et al., 2008, p. 77.

¹⁴⁹ Godden Mackay Logan Pty Ltd et al., 2008, p. 77.

¹⁵⁰ Port Arthur Historic Site Management Authority, 2020, p. 5.

¹⁵¹ Port Arthur Historic Site Management Authority, 2020, p. 5.

¹⁵² Port Arthur Historic Site Management Authority, 2020, p. 18.

Overall, any management activities need to assure that they can fulfil various obligations, aims and principles, including the preservation/addressing of heritage values, community engagement, generation of income, visitor and staff safety, and demonstration of benefit.¹⁵³

Monitoring

The fabric of the site is regularly monitored and has been for the past decades, drawing thus from a rich experience. To help with monitoring activities, both for documentation purposes and to understand the rate of deterioration, sensitive fabric is recorded with laser scans.¹⁵⁴ The site maintenance includes a site assessment on a yearly basis, and a structured monitoring program has been established.¹⁵⁵ The assessment of the cyclical monitoring activities will determine the necessary conservation work. External conservation experts from relevant organisations are brought in for consultation on new conservation projects.¹⁵⁶

The management of the site also incorporates potential visitor pressures into its program, operating within an established capacity and management framework.¹⁵⁷ To alleviate pressures arising from visitors, the visitor centre, car park, guided tours as well as a wide range of activities offered to visitors have been implemented. A further measure is the possibility of booking tickets and activities in advance online. Self-guided tours and maps indicating points of interest help to steer visitors into areas that are not or little impacted by wear and tear.

Guided tours prevent a damaging effect on the fabric through discouraging visitor access into fragile areas. In addition, walkways guide visitors, which assures not only easy/easier access for wheelchairs and strollers (see fig. 19), but also contributes to the protection of sensitive fabric. Areas that have a particularly fragile fabric are restricted for visitor access.¹⁵⁸

¹⁵³ Godden Mackay Logan Pty Ltd et al., 2008, p. 100.

¹⁵⁴ Australian Government, 2008, p. 127.

¹⁵⁵ Australian Government, 2008, p. 157.

¹⁵⁶ Australian Government, 2008, p. 157.

¹⁵⁷ Australian Government, 2008, p. 128.

¹⁵⁸ Australian Government, 2008, p. 129.



Fig. 19 Access to difficult terrain is facilitated with walkways, which also protect against the negative impact of wear and tear on the historic fabric (author, 2018).

Risk preparedness

Site monitoring and risk preparedness go hand in hand, and a disaster mitigation program is in place at Port Arthur. The main threats to the fabric of the site have been identified as pertaining to rising sea level, rising water table, and salt-laden winds. Earthquakes, tsunamis or cyclones do not present a significant threat, whereas flooding or fire are considered to be a minimal risk.¹⁵⁹

Although the risk of fire is relatively low, Port Arthur is equipped with its own firefighting squad, which collaborates with the local firefighters.¹⁶⁰ An Emergency Management Plan is in place that determines procedures prepare for and deal with natural disasters, whereas the Collections Protection Plan deals with the threats to the collection.¹⁶¹ The Risk Register was

¹⁵⁹ Australian Government, 2008, p. 126.

¹⁶⁰ Australian Government, 2008, p. 127.

¹⁶¹ Australian Government, 2008, p. 127.

drawn up to highlight the potential risks that could prevent reaching management objectives and that propose tools for control.¹⁶²

Summary and conclusion

PAHSMA manages the historic site Port Arthur in a transparent manner, under highest management standards, and embraces innovative and holistic approaches. Its self-reflection and approach to understand management rather as a process is a solid basis to maintain high standards.

¹⁶² Australian Government, 2008, p. 127.

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Cinzia Cortesi
Fondazione Flaminia

Basilica of Sant'Apollinare in Classe



Part I – An Introduction - Protection, Management and Use of Architectural Heritage

Since the first decades of its constitution, the states adhering to the European Community have begun to define common parameters for intervening on cultural heritage, trying to intervene through common practices and trying to establish a legislative system and a package of rules for the protection and enhancement of landscape assets. and environmental. In this sense, some measures have also been adopted in the spirit of identifying guidelines and shareable definitions of architectural heritage ". From this procedure, complexes including the following real estate are generally considered as architectural assets: all works particularly notable for their historical, archaeological, artistic, scientific, social, technical interest including installations or decorative elements forming part of the works themselves, and specifically defined: monuments; the architectural ensembles, that is the homogeneous agglomerations of urban or rural constructions notable for their historical, archaeological, artistic, scientific, social or technical interest and sufficiently coherent to be the subject of a topographical delimitation. A further category are also the sites, that is a set of combined works of man and nature partially built and constituting spaces sufficiently characteristic and homogeneous to be the subject of a topographical delimitation, notable for their historical, archaeological, artistic, scientific interest and for their social or technical importance.

In order to accurately identify the monuments, architectural ensembles and sites likely to be protected, the member states of the community undertook at various times to prepare an inventory and, in the event of a serious threat to the asset considered, to establish as soon as possible a series of dossiers with appropriate documentation.

Some regulatory elements have been identified to these architectural assets to be applied by virtue of the legal protection of the assets considered, in order to define the control and authorization procedures appropriate for their conservation and enhancement. This regulatory plan, still to be ratified, after more than forty years, is aimed at preventing cultural heritage from being distorted, degraded or demolished. In this perspective, each member state has undertaken, on several occasions, to introduce into its legislation provisions that provide for the submission to a competent authority of all demolition projects or interventions on monuments already protected, or under protection procedure, as well as any another project concerning their environment. Suitable laws have also been prepared in order to submit to a competent authority the initiatives concerning all or part of an architectural ensemble or a site and direct to works: - demolition of buildings - construction of new buildings - important modifications that would have an effect on the overall architectural or site character;

The risks of physical degradation of the architectural heritage are also considerable and increasingly accelerated by the conditions of climate transformation and it is extremely

necessary to support scientific research aimed both at identifying and analyzing the harmful effects of pollution and defining the means to reduce or eliminate themselves. For effective protection, specific problems relating to the protection of architectural heritage need to be taken into consideration in the pollution control policy.

In recent decades, an integrated conservation policy has been launched which has as its objectives a strong implementation in the protection mechanisms of the architectural heritage among the essential elements of the territorial structure and urbanization and which ensures the right importance of this need in the various stages of elaboration of the plans of arrangement and in the authorizations of works. Measures aimed at implementing new restoration and maintenance programs of the architectural heritage and which make the protection, activity and enhancement of the architectural heritage a considerable element of the policy regarding culture, environment and territorial planning are essential. Such measures should also encourage, as far as possible, in the context of land use and urbanization processes, the conservation and use of buildings whose importance would not justify adequate protection, but which would have a boundary value from the point of view of the urban or rural environment or the quality of life. Finally, the conservation policy of the architectural heritage should favor the application and development, indispensable for the future of the heritage, of traditional techniques and materials.

These practices are aimed at encouraging, while respecting the architectural and historical character of the heritage: - the use of protected assets taking into account the needs of contemporary life; - to adaptation, when the opportunity arises of ancient buildings for new uses.

Taking into account the great interest presented by the various monuments, the new enhancement facilities should aim to facilitate the visit by the public of the protected assets, each Party undertakes to ensure that the consequences of this opening to the public, especially the accommodations access, do not affect the architectural and historical character of those assets and their environment. To carry out this program it is necessary to enhance the conservation of the architectural heritage in public opinion both as an element of cultural identity and as a source of inspiration for creativity for present and future generations.

To this goal, we have chosen the basilica of Sant'Apollinare in Classe as a case study for this proposal to enhance the architectural heritage, a monument of extraordinary international interest where, however, it is still necessary to strive to promote a training and awareness-raising policy for this purpose. above all with the help of modern techniques of dissemination and cultural activities having in particular the objective: to increase the sensitivity of the public, from the school age, to the protection of heritage, to the quality of the built and to the architectural expression. A second, but no less important objective is to highlight the unity of the cultural heritage and the existing links with the architectural heritage of the arts,

popular traditions and ways of life at the European, national or regional level of this exceptional Ravenna monument.

Part II – Best Practice – Basilica of Sant’Apollinare in Classe

I. Characteristics of architectural monument

I. General information about the monument

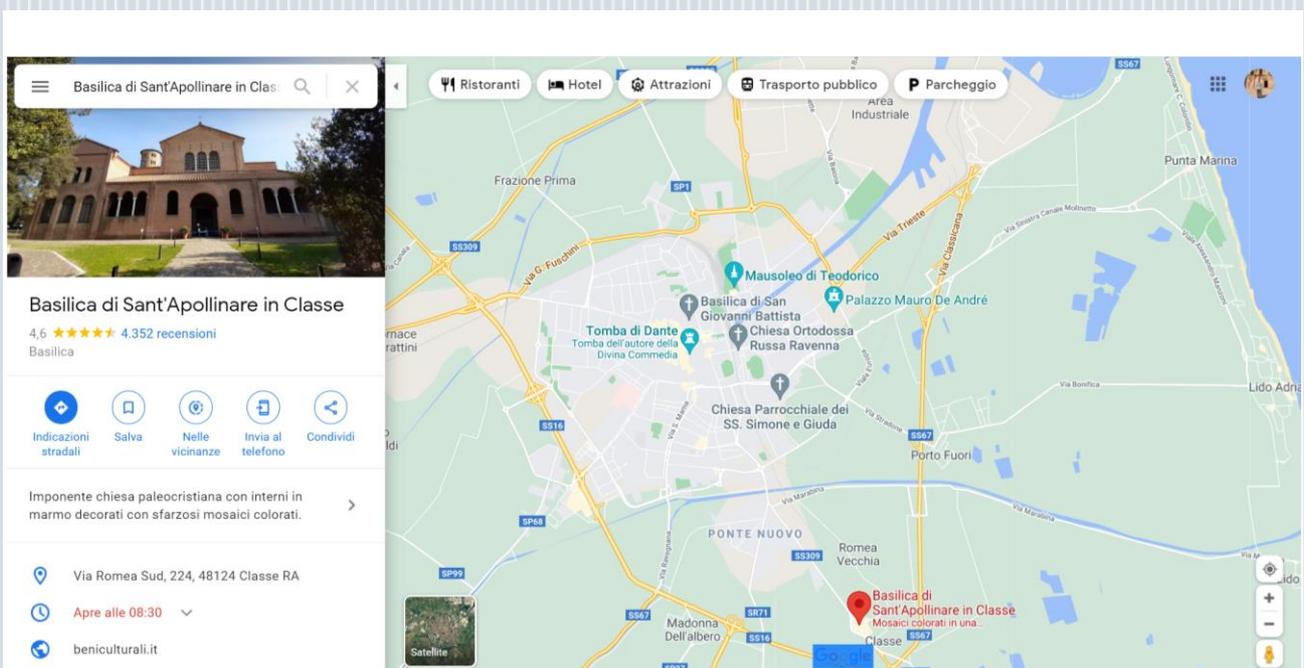
Address: Via Romea Sud, 224, 48124 Classe, Ravenna

Date of construction: 549 AD

Owner: Public Property, Soprintendenza Archeologia, Belle Arti e Paesaggio per le province di Ravenna, Forlì-Cesena e Rimini.

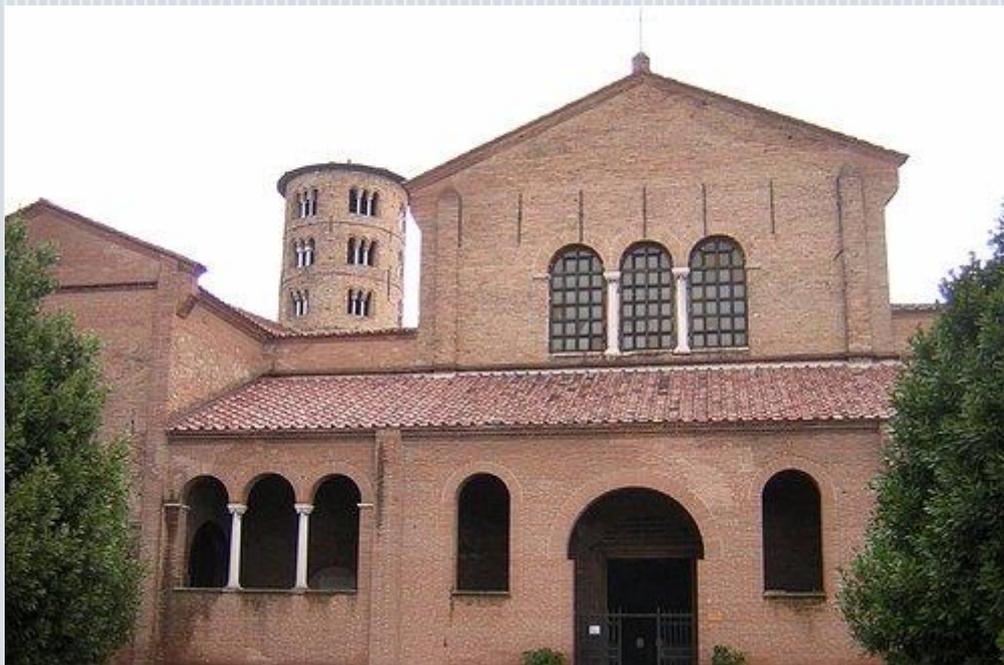
Management: Fondazione Parco Archeologico di Classe / Ravennantica

The Basilica of Sant' Apollinare in Classe, "Saint Apollinaris in Classe", is an early medieval church, built in the suburbs of Ravenna, Italy, consecrated on 9 May 549 by the bishop Maximian and dedicated to Saint Apollinaris, considered by the christian community the first bishop of Ravenna and Classe. It is considered one of the most important monument of Byzantine art, and 1996 it was inscribed with seven other nearby monuments at Ravenna in the UNESCO World Heritage List, which described it as "an outstanding example of the early Christian basilica in its purity and simplicity of its design and use of space and in the sumptuous nature of its decoration.



2. *Brief history of the monument*

The basilica of Sant'Apollinare in Classe is one of the most important monuments of Byzantine art in the world, and in 1996 was inscribed with seven other nearby monuments in the UNESCO World Heritage List, which described it as "an outstanding example of the early Christian basilica in its purity and simplicity of its design and use of space and in the sumptuous nature of its decoration". The church has a clearly reference to the most ancient architectural tradition in its forms. In some architectural elements, however, it expresses a stylistic language that is the result of the continuous cultural exchanges that the city of Ravenna has had with the cities of the eastern Mediterranean. Examples are: the wall structure, consisting of the typical elongated bricks; the apse, polygonal on the outside and semicircular on the inside; the rooms that flank the altar area. The gabled façade of the basilica is extremely simple and rigorous. Originally it was preceded by a front porch, here defined 'ardica', a large quadrilateral space surrounded by arcades, as it was used in late antique basilicas. Today, instead of the ancient ardica, there is a portico, rebuilt during the restoration work carried out in the early twentieth century.



Between the mid-9th and 10th centuries a Benedictine monastery was built south of the church, only partially preserved. On the north side of the basilica stands the circular bell tower more than thirty-seven meters high, dating back to the 10th century.



The interior, large and bright, is divided into three naves by twenty-four columns of Greek marble. The Byzantine capitals that surmount the columns are worked with acanthus leaves that seem to be moved by the wind. On the capitals of the columns there are the round arches that support the side walls of the central nave. This large band of masonry houses frescoes with portraits of part of the bishops and archbishops of Ravenna. The medallions were made in 1775 by Antonio Cantoni, Giovanni Battista Roberti from Forlì and Domenico Barbiani.

The terracotta floor we see today has replaced an ancient mosaic made with marble and stone materials. Only a few square meters of such beauty have been preserved, visible in the side aisles.

The side walls of the Basilica were once covered with precious marble. Almost intact until 1449 AD, the beautiful coatings were removed by Sigismondo Pandolfo Malatesta, lord of Rimini and audacious leader.

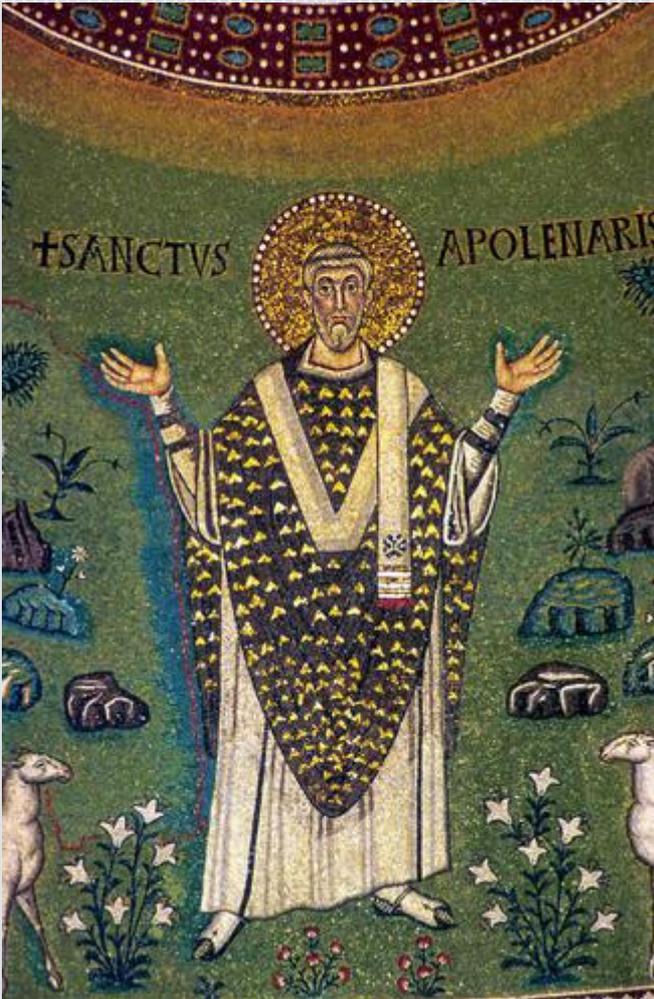
The side aisles house a unique collection of sarcophagi dating from the 4th to the 8th century. These funerary monuments have an immense value, both for the beauty and quality of the sculpture, and because they give the possibility to evaluate the changes in style that have occurred over the centuries. No other Ravenna church contains so many examples of such significance and of such different historical periods.



2.1. Description of the mosaics

The mosaic depictions at the top of the triumphal arch are contemporary with those of the apse and therefore with the consecration of the basilica. In a sky full of blue and reddish clouds the four Evangelists, symbolically rendered, approach the medallion with Christ the Savior. In the second area, built in the seventh century, some lambs that symbolize the apostles or more generally the Church, come out of Bethlehem and Jerusalem; they ascend to Christ at the top. On the two sides of the central band a mosaic decoration dated to the 7th century: the palms, symbol of Paradise, followed by the figures of the archangels Michael and Gabriel, dating back to the 6th century, who proudly flaunt the banner with an inscription Greek praising the Holy Trinity. In the lower register, the two virile busts representing two apostles are mostly the result of 12th century restorations.

In the decoration of the apse, which can be considered one of the greatest artistic creations of Ravenna-Byzantine art, everything is flooded with a light that unites earth and sky in a soothing understanding. The mosaic was thus conceived to speak to the soul and mind of the faithful by Archbishop Maximian, a high cultural exponent of the time. In the mosaic representation, in axis with the cross, at the bottom, the great figure of Apollinaris stands out wearing the white tunic, the chasuble and the white pallium resting on his shoulders; with outstretched arms and in an ancient gesture of prayer he addresses the faithful. The twelve lambs that converge towards the saint represent the first faithful of the Ravenna Church, who turn to Apollinaris to gain access to the bliss of Paradise. The first bishop of Ravenna is immersed in an enchanting green lawn on which evergreen trees, white and volatile flowers with colorful plumage are arranged.



Above the figure of the titular saint is represented, in a golden background, the episode of the transfiguration of Christ on Mount Tabor. The episode, taken from the Gospels, is rendered in part abstractly and in part figuratively. The work intended to proclaim faith in Christ, true God and true man, challenged by various heresies, including the Arianism that was widespread in Ravenna in the Gothic era. An imposing medallion encloses a large cross wrapped in a star-studded sky. At the intersection of the arms of the Latin cross set with gems, the Transfigured and Risen Son of God. The inscriptions inside the medallion underline the meaning of the cross, an instrument of Jesus' sacrifice, but a symbol of salvation and triumph for the whole of humanity. Higher up, the Hand of God the Father, which comes out of the clouds, attests to the presence of God at the moment of the transfiguration of the Son, to which the

prophets Moses and Elijah also offer their witness. Under the busts of Moses and Elijah, in the soft green meadow, three lambs are represented, metaphorically the apostles Peter, James and John, who look towards Christ who has been transfigured before their eyes.

The figure of Apollinaris placed in the center of the apse is intended to exalt the Church of Ravenna: the same message is communicated through the four figures of bishops placed between the windows below the basin. In the lower part of the apse, in fact, within niches surmounted by a shell, there are four portraits of bishops including Ursicino who was the client who began the construction of the Classican church in full Gothic domination, but the consecration took place at the time of Bishop Maximian and more precisely on May 9th, 549.

Proceeding in the description of the apsidal wall, we come across two large mosaic panels at the edges; the panel on the right proposes the theme of the Eucharist: Abel offering the lamb as a sacrifice, Melchizedek, high priest, king of Salem, while giving the bread and wine and Abraham destining his son Isaac to God. The mosaic on the left, on the other hand, depicts a historical episode that took place in 666, when the Emperor Constantine IV Pogonato handed over the granting of autonomy from the church of Rome to a messenger of Archbishop Mauro. These panels, dating back to the seventh century and of lesser artistic

quality than those in the apse, have undergone numerous tampering and were largely restored in the eighteenth century.



3. Technical and architectural characteristic of the monument

The church was built with new bricks has a central nave with two side aisles, a standard basilica design. An ancient altar in the mid of the nave covers the place of the saint's martyrdom. The church ends with a polygonal apse, sided by two chapels with apses.

The nave contains 24 columns of Italian marble. The carved capitals of the columns depict acanthus leaves, but unlike most such carvings the leaves appear twisted as if being buffeted by the wind. The faded frescos depict some of the archbishops of Ravenna, and date to the 18th century. The lateral walls are bare, but were certainly once covered with gorgeous mosaics. These were likely demolished by the Venetians in 1449, although they left the mosaic decoration in the apse and on the triumphal arch, the church's most striking features. This large-aisled basilica may have a different architectural form from its contemporary but is primarily built in the same sixth century brick masonry technique. Sant'Apollinare consisted of 3400 cubic meters of brick. With the addition of brick aggregate in mortar using the same percentage from San Vitale, this translates to the use of more than 599,000 sixth century bricks

4. Assessment of the values of the monument

Sant'Apollinare is one of the World Heritage Sites, designated by UNESCO for having cultural, historical, scientific or other form of significance. It was inserted in the list of the Early Christian Monuments of Ravenna- The city was the seat of the Roman Empire in the 5th century and then of Byzantine Italy until the 8th century. It has a unique collection of early Christian mosaics and monuments. All eight buildings – the Mausoleum of Galla Placidia, the Neonian Baptistery, the Basilica of Sant'Apollinare Nuovo, the Arian Baptistery, the Archiepiscopal Chapel, the Mausoleum of Theodoric, the Church of San Vitale and the Basilica of Sant'Apollinare in Classe – were constructed in the 5th and 6th centuries. They show great artistic skill, including a wonderful blend of Graeco-Roman tradition, Christian iconography and oriental and Western styles. The site is considered an outstanding and universal value being church of remarkable significance by virtue of the supreme artistry of the mosaic art that the monuments contain, and also because of the crucial evidence that they provide of artistic and religious relationships and contacts at an important period of European cultural history. The original name of the nominated property has been changed to "The Early Christian Monuments of Ravenna".

5. Assessment of the integrity and authenticity

The monument even when it was seriously damaged by allied bombing during World War II (overall the façade) has numerous originals integer and authentic structures, mosaics and the gorgeous and characteristic cylindrical bell tower.

6. Technical condition assessment of the monument /conservation and protection needs/

The building has been partially rebuilt and restored several times and is now in a good state of conservation. Much attention has been paid to the bell tower both for the evaluation of the seismic resistance and for the simpler static seal.

7. Programme (existing) of protection /conservation, use, adaptation, modernization/

Recently (end of last century) it was decided to raise the overall security level of the basilica. We acted on the various sources of risk by adjusting the electrical system, enhancing both the fire and intrusion systems.

In 2005, serious damage and alterations to the geometry of the wooden trusses covering the central nave built after the war were also found. In some cases, some elements had deformed by coming out of their seats. The support shelves have also been changed. The wooden trusses have been overhauled and consolidated. The monument is under careful observation by the Superintendency and the state administration, as well as by a foundation with public participation that deals with its management.

Summary and conclusions

Sant'Apollinare in Classe is a unique testimony of the artistic contacts and developments in a highly significant period of the cultural development in Europe. The church constitutes an epitome of religious and funerary art and architecture during the 6th century AD. The mosaics are among the best surviving examples of this form of art in Europe and have added significance due to the blending of western and eastern motifs and techniques.

The basilica is a monument without parallel because of the crucial evidence that provides of artistic and religious relationships and contacts at the beginnings of the Middle Ages, with a great echo's of Mediterranean ancient culture.

Sant'Apollinare in Classe shows great artistic skill, including a wonderful blend of Greco-Roman tradition, Christian iconography and oriental and western styles typifying the culture of the later Roman Empire.

This serial property includes all the essential elements necessary to demonstrate its Outstanding Universal Value. The church is one of the most representative example of architectural and artistic development during the half of the sixth century AD, in particular regarding mosaic art. This monument is an evidence of the role that Ravenna played, first as one of the main political center of the Western Roman Empire, later as residence of the Ostrogoths of Theodoric and his successors, then as the capital of the Byzantium Exarchate in Italy, and lastly as center of the Archbishop power, one of the main European leader, used also during the 11th century to contrast the arrogance of the Roman Pope.

The major pressures on the property are subsidence, condensation damp caused mainly by tourist flow, and pollution, which are being addressed by the site managers.

The authenticity of Sant'Apollinare that make up this site is high. The church has undergone various modifications in the centuries since it was originally built, but these modifications have their own intrinsic historical value and as such do not adversely affect the overall authenticity of the property.

More recently, the monument has undergone several restoration projects. The works, performed by the *Soprintendenza per i Beni Architettonici e Paesaggistici di Ravenna*, in

compliance with the principles of the 1964 Venice Charter, have permitted the monuments' conservation until today.

The cultural tradition and technique of mosaics, which play an active role in the city's cultural identity, are kept alive through a range of activities aiming to promote knowledge, training, conservation and valorisation of mosaic art.

II. Characteristics of the protection of the monument

1. Legal status of the monument /formal and practical protection system/

This monument is under protection of the Ministry of Italian Culture and inserted in the Unesco List as one of the eight Early Christian Monuments of Ravenna. Sant'Apollinare is subject to the Italian cultural heritage protection and conservation legislation (Legislative Decree 42/2004) which establishes specific legal protection tools for the eight monuments, and require prior authorisation from the local offices of the Ministry for Cultural Heritage and Activities for all interventions. Town planning regulations reiterate the national legislation, thereby only permitting scientific restoration projects.

2. Formal requirements regarding protection of the monument /formulated by authorities or specialists/

The property is managed by a group of institutions, operating on different levels and with different skills. These include, in particular, the Ministry for Cultural Heritage and Activities, which is responsible through its local offices for the protection and conservation of cultural heritage, while the Municipal Authority – *Comune di Ravenna* - is responsible for drafting and implementing the City's conservation and management strategies using town planning tools and regulations for territorial activities. The other local authorities (Regional and Provincial councils) collaborate with protection, conservation and management activities, as well as cultural heritage promotion. The Municipality of Ravenna carries out particularly important coordination activities for the management of the property. The management is entrusted to a Management Committee in which all the main institutional stakeholders formally responsible are represented, including the Regional Cultural Heritage Department, the Local Office of the Ministry for Cultural Heritage and Activities – *Soprintendenza* - the Municipality of Ravenna and *Opera di Religione* of the Ravenna Diocese, the local reference body for the Catholic Church, owner of some of the monuments included in the property. The Coordination Committee is responsible for implementing the Management Plan, paying particular attention to conservation, valorisation and promotion activities for monuments.

Priority actions in the Management Plan include a specific action plan for mosaic conservation, including studies and monitoring of the state of the mosaics in the property conducted by the School of Restoration; an action plan dedicated to the transfer of knowledge and training on mosaic art in schools, from primary schools through to the Fine Art Academy; and a communication action plan implemented using innovative technological tools.

3. Protection of values (p.I.4), authenticity and integrity (p.I.5), technical condition (p.I.6)

The actual coordinated management (Municipality of Ravenna, the Superintendence for Architectural Heritage and Landscape for the provinces of Ravenna, Ferrara, Forlì–Cesena and Rimini, the Archdiocese of Ravenna– Cervia, the Regional Directorate for Cultural Heritage and Landscape of the Emilia– Romagna Region, Ravennantica Foundation) guarantees the protection of values of the monument, taking care of the authenticity and integrity, overall looking at the original mosaics and the other parts of the church. Technical conditions of the monuments are favourable for public visiting and for a large sustainable tourism.

4. Indications resulting from values assessment (p.I.4), authenticity and integrity assessment (p.I.5), technical condition assessment (p.I.6)

Standing to a general indication of values assessment Sant'Apollinare in Classe is a very well preserved monument and a great attractive point, where its original aspects, nevertheless the great destructions operated after World War II bombing, is still authentic and integer and the technical conditions of the monument including the medieval bell-tower, so that the assessment is completely high in values.

5. Programme (proposal) of protection, conservation and research

The church and its landscape are inserted in a vast program of conservation and protection. The various institutions connected to the management of this Unesco monument are trying to maintain alive, even after pandemic's effects, all the previous conditions, because that was the most visited monument of the entire region. A great help in the restoration and protection management could come towards the involvement of the School of Conservation and Restoration of Cultural Heritage of the University of Bologna, where students of different level might help the use of innovative methods of conservation programmes. Another element of dynamic change in the qualification of the monument could also be a

new archaeological research planning with the objective of new discoveries around the original landscape and the understanding of the medieval monastic complex, actually poorly visible in the site explanation tour, when this community was one of the most important in the medieval Europe.

Summary and conclusions

The elevation of this monument in the list of the World Heritage List, within the eight Early Christian Monuments of Ravenna, helps the major institutions involved to protect and manage at his best level the church, and the recent pact with the Ministry of Culture, conceding the management to a public Foundation, is a good movement to a better preservation program and valorisation of the basilica. A new step could be the opening of the property to researcher for a more active implementation of his restoration needs and for the development of a sustainable tourism exploitation.

III. Characteristics of the use of the monument

I. Description of the primary functions and use

The Church was created to celebrate the place where the first Bishop of Ravenna's Clerge, Apollinaris, was built, along the Roman road *Popilia*, at the suburbs of Classis, the city originated by the ancient nucleus of merchants and soldiers liked to the Augustan fleet of Ravenna. The construction was patroned by bishop Ursicinus (533-536 AD), during Ostrogothic times and celebrated/dedicated after Justinian won in Roman-Gothic War (549 AD). Essentially was a funerary church, where the main citizens and the ecclesiastical Ravenna's elites buried their dear departed. All around the church and above its pavement is preserved a large cemetery. The southern side of the basilica was surrounded in the 9th cent. by a rectangular cloister flanked by a Benedictine monastery, used until the 15th cent. At the opposite side the abbey ordered the construction of a brick cylindrical bell-tower between the end of the 10th and the 11th cent. The monastery managed a lot of productive activities and monks built several workshops, stables and warehouses, destroyed and covered by times.

2. Programme (existing) of use, adaptation, modernization /presentation and critical evaluation/

The basilica is still used as a church for special happening but it is specially moved to tourism visits. Sometimes musical events are planned by the famous RavennaFestival.

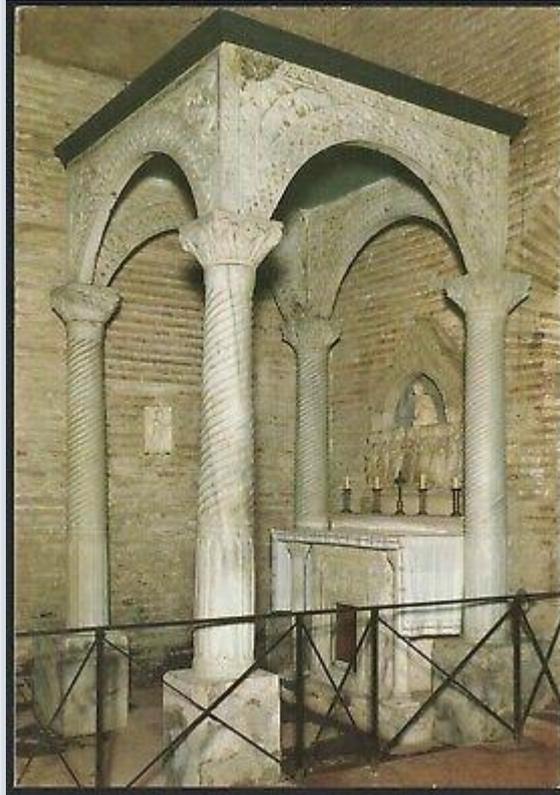


The organizers have been generally quite able to preserve the integrity of the building during these occasions. At the entrance is also set up a book-shop, managed by Ravennantica Foundation. The visit inside the monument is a great occasion and normally is astonishing the impact with the apse mosaics. Experts and specialists are also attracted by sarcophagi and by ecclesiastical/liturgical elements, such as altars, ciboria and the several marbles. Everything is a bit suspended in an old-fashioned touristic view, pointing out the only fact that the monument is gorgeous and incredible.



3. Tourism, presentation, information /present state and potential/

Tourism in Sant'Apollinare in Classe is very active and the church is one of the main goal of massive touristic itinerary-tours. Before Covid-Age the monument registered a high number of tourists, very close to 200.000 people. That was also favoured by a comfortable Pullman and camper Parking, mostly the lonely Ravenna's stop for North-Italian visitors. A part from the fantastic mosaics, the visit itself is aseptic and there is no effort to increase the potentiality of this monument. That could also be a philosophy in the idea of sustainability and good for the preservation of the integrity of the monument. A part from that we must say that explanations of the history of the buildings, panels and general information are poor. One could also ignore why a 9th cent. fantastic marble Ciborium in the corner of the church is in that position, but after the visit, this doubt will rest without any explanation.



Any minimum effort to give a sense of modern communication could be helpful to increase the potentiality of attraction of the monument and to teaches tourists something more about its fascinating past and history. Nothing is explained about the monastery around the site and is also poor the explanation about the various epigraphs put over the wall of the naves. A total loss is the connection with the Museum Classis, quite impossible to reach if you do not want to risk to be knocked down by a car and in fact there is no (easy) connection or simply an invitation to move to this very close and important Museum, also for the great community efforts in funding. One can imagine the institutions are not very friends, but when you discover they are the same management institution... A simple safe road that connect the monument to the Museum could be an increase in the connectivity of the two main cultural heritage sites of Ravenna and Classe.

4. Programme (proposal) of use, adaptation, modernization/

A serious programme of use, adaptation and modernization of Sant'Apollinare in Classe could start from the idea that the present installation is totally a non-installation. The monument is free of any effort to attract people. One of the main problems we encounter is the public's poor understanding of what they observe. The absence of teaching aids or the presence of some inadequate makes the visiting experience sterile and unsatisfactory. The first element could be the realization of a web-system, connected with simple QR codes or

by visual recognition elements to a secure page that give information about what visitors are looking. In these page could also be insert reconstruction and augmented reality software.

Putting a great variety of images and "archival" content at the disposal of all tourists who approach the magnificent basilica equipped with smartphones or tablets is now very common and it is a suggestive way to bring back to life the history and prestige of this monument. The information, in fact, thanks to augmented reality and geolocation, appears exactly where it is right, often creating a highly engaging visual contrast.

At a more structural level it could be planned to insert the monastery in the monument visit, also virtually, and invest in commodities to give access to the bell-tower. More important is the plan to create a safe road to connect the monument to the Museum Classis. It is now impossible for Pullman to park in front of the museum, but they can leave people to S. Apollinare in Classe, and after a visit, they could walk 4 minutes and reach the Museum. The only problem is the difficulty of the road, without preparations to make the passage safe and comfortable. This road is also necessary for the possibility to reach the longer bike-road that connect Classe to Ravenna, in an easier and eco-sustainable way to move towards the other World Heritage Monuments and the major city itself, for tourists and citizens.

Summary and conclusions.

Sant'Apollinare in Classe is an unmissable monument and several tourists visit it. They are satisfied because the church is gorgeous, but nothing is made to get them back again. A new system of information, using modern technologies and a safe road to connect the church to the other cultural sites of the city is necessary to increase the touristic potentiality of the monument.

IV. Characteristics of the management of the monument

I. Description of management of the monument /ownership, structure, staff, etc./

The basilica has been included, since 1996, in the list of Italian World Heritage Sites by UNESCO, within the serial site "Early Christian Monuments of Ravenna". It is a property of the Italian Ministry of Culture, owned by the Emilia-Romagna museum complex, and recently managed by the Foundation Ravennantica, a semi-public Society constituted in 2001 for the enhancement, including for tourism purposes, of the archaeological, architectural and historical-artistic heritage constituted by the ancient city of Classe and Ravenna.

2. **Financing /current state, need, possibilities/**

Until present day the monument has reached overall Italian ministry of culture financing, used for the various restoration and for the evaluation for the resistance to seismic stress. Tickets and bookshop are managed by Ravennantica, that give the possibility to the monument to rest opened. With a program of touristic valorisation, the site could be better presented to people and also investigated by archaeological research, a way to keep the site updated and insert in a wider network of sites, connected to close monuments and extended to more numerous visitors.

3. **Threats**

There's no really threats for the monument, except fall into oblivion. Structures are well preserved and frequently restored. The managing is active.

4. **Monitoring /indicators/**

Despite it does not seem to need particularly attention, mosaics and marbles need a frequent monitoring and also the structures must be observed for seismic solicitation, as recently demonstrated by recent accidents happened in this region.

Part III – Summary and Conclusions



The 6th-century church of Sant'Apollinare in Classe is one of the most important monuments of the city of Ravenna. The site is known for its exceptional Byzantine mosaics and for its elegant architecture and a fine collection of marble sarcophagi. It stands also out for its large basilica forms, the cylindrical bell tower and the spatiality of the interior. The church is one of the eight World Heritage Monuments in the Early Christians sites of Ravenna, since 1996. Numerous people reach Sant-Apollinare in Classe and it is one of the most visited centres in Emilia Romagna, with quite 200.000 tourists. Despite these excellent numbers the church has an old exhibition system and there is a bad system of connection with the other monuments of the city: poor bus service, an absent train connection and a deserted road that few people can effort without insolation risks. Worst is the connectivity with the Museum of Classis and with the Archaeological Park 'Antico Porto'. An effort in these two directions, safe and comfortable roads more than a modern exhibition system of the interior of the basilica, without effecting the conservation and authenticity of the monument, could increase the attractive potentiality of the site and to the whole city.



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Rebuilding War-Destroyed Cities as Reaction for Needs of Use – Case Studies from Poland

Introduction

After the II World War one can expect that the rebuilding of war-destroyed monuments would be the episode in the history of heritage protection. Unfortunately, the wars still last, the monuments are still intentionally destroyed, and therefore heritage specialists must again decide, how to deal with the damaged monuments, and even the whole historic towns. In Poland, two times – after I and after World War II, we had to decide what to do with the totally destroyed heritage. We decided that the historic cities should be rebuild.

The process of rebuilding after the II World War had different stages, and they comparison allows us to conclude that the reconstruction of historical cities was the proper decision, both from the point of view of society and heritage conservation. Such an assessment is fully justified from the point of view of the public perception of the rebuilt historical cities and their contemporary use. All rebuilt urban areas are positively received by the public tyre. This applies in particular to historic complexes that have been reconstructed in a historical form. This means that their users accept their form.

Usually, that rebuilding of a historical town is an action concerning an old-town entirely destroyed in exceptional circumstances (war, fire, earthquake, flood). However, in Poland the process of rebuilding has not been completed and continues. The Second World War ended over 75 years ago but destruction caused by the war affected so many towns (hundreds of towns and thousands of monuments), that their reconstruction exceeded the possibilities of a single generation.

Therefore in Poland conservators deal with reconstruction to this day. In the meantime all the external circumstances have changed. The political, economic and social system has

changed. Norms and technical standards have changed. Trends and theories in architecture and urban sciences have changed. The paradigm in monument conservation has changed as well.



Fig. 1 Starówka in Warsaw after II WW

Thus, “Rebuilding of historical towns in Poland” does not mean a single and homogenous action, but a lasting and complex process, that consists of different stages and numerous realizations. For this reason it is difficult to show any exact time or substantial boundaries of this process. However from the conservators point of view, we can adopt a classification concerning three factors:

- Relation to the monumental architectural form,
- Relation to the monumental urban form,
- Functional adaptation of the old-town area for modern purposes.

These three criteria describe the three most important elements defining an old-town area - architecture, urban planning, function. Adopting such criteria for the post-war reconstruction of old-town complexes in Poland we can distinguish three crucial stages.

Table: Stages of rebuilding of historical towns in Poland after II WW

| Characteristics | Stage I | Stage 2 | Stage 3 |
|-------------------------------|--------------------------------------|--|--|
| Description | Historical Rebuilding | Modern Housing | Rebuilding in Traditional Forms |
| Duration | Late 1940's – early 1950's | Late 1950's – early 1980's | 1980's and early 1990's |
| Architecture | Rebuilding and reconstruction | New /modernistic/ forms | Neohistorical stylisations |
| Urban planning | Maintenance of the urban composition | New urban composition /residential district/ | Traditional urban composition |
| Function | Multifunctional centre | Residential area and centre | Housing, business services, center |
| Number of realizations | Several | More than a hundred | Several dozens |

In the presented typology of reconstruction of destroyed cities, architectural, urban and conservation factors are of fundamental importance. And they are really important. However, in practice, the concept of using the Old Town area was of key importance for the form of reconstruction.

In the first post-war stage, it was assumed that the cities would function more similarly to those before the war. It was expected that these would be central districts combining residential and commercial functions. Therefore, traditional tenement houses were rebuilt. For historical reasons, they were rebuilt in their former form.

In the second stage, the concept of the city completely changed. In modernist urban planning, the functions of individual urban areas were separated. The residential (mono-functional) districts were built on the destroyed historical districts. The historical forms of the buildings did not meet these needs and were expensive. Therefore, also in historical areas, apartment blocks were built.

In the third stage, the market economy and private property were overturned. The buildings could also be built by private investors. Post-modernist cities again needed multifunctional centers. There was also a need for an architectural form that could include various functions. Such forms were the structure of a traditional city and the form of a traditional bourgeois tenement house. These conditions meant that conservators could return to buildings referring to historical patterns in the destroyed Old Town areas.



Fig. 2 Old city in Gdansk after II WW

The characteristics of the 3 stages of reconstruction of the destroyed historic urban districts in Poland show that the forms of this reconstruction are largely dependent on the current concept of urban use.

I. „Historical rebuilding” - 1st stage of rebuilding

When presenting the rebuilding of historical towns in Poland it is always necessary to keep in mind, that the task was extremely huge. During the Potsdam Conference the Allied decided that approximately 46% of Poland’s eastern territory would become part of the Soviet Union. Also Poland was to receive 104 thousand square kilometers of land in the West and North.



Fig. 3 Rebuilding of Starówka in Warsaw

Silesia, Pomerania and East Prussia became Polish. More than 300 towns were located in those regions. Those were historical towns in the full sense of the word. And the scale of their destruction was enormous.

According to post-war data in nearly 200 towns, over 50% of the housing had been destroyed. In the most affected towns, damages of old-town area was estimated for 80%-90%. Total destruction required radical decisions, which had no precedence in conservatory practice. Abroad it was authorities decided not to rebuild the historical forms – the damage of war was used as an opportunity to modernize city centers. Polish authorities decided otherwise.

The main reason why the conservatory rebuilding was carried out, was the destruction of Polish capital city. Warsaw was destroyed more than once. In September 1939, during the Warsaw Uprising and after the fall of the Uprising. Polish capital city and its monuments didn't exist.



Fig. 4 Rebuilt Starówka in Warsaw

In Warsaw 89% of the monuments registered before the war was destroyed or seriously damaged. The housing of the historical center – called 'Starówka', was totally destroyed. The Royal Castle, churches, all tenements and reminders of the city wall around the old-town

were all ruined. The scale of destruction, and above all its intentionality, united the Polish society in the wish to rebuild Warsaw's historical forms.

The main argument for rebuilding was of emotional and symbolic character: The Polish did not want to accept the permanent destruction of the historical center of their capital city. Therefore, the decision has been made to rebuild whole old-town complex.

Conservators were given the leading role in this process. During the reconstruction they realized projects, managed and consulted.

There were enterprises founded, that specialized in conservation reconstruction of monuments. Conservators overtook decisive role in old-town areas. This model took root in Poland.

The rebuilding program was created mainly for Warsaw and there it was implemented most quickly. The social acceptance for the reconstruction caused for similar complex projects to be introduced in Poznan, Wroclaw, Gdansk and several smaller cities.

The principle was to rebuild and reconstruct monumental sites. The rebuilding of monumental sites consisted in recreating the dominants, well-known and characteristic elements, which were associated with the old-town sites. Reconstruction program also included urban fortifications – city walls, towers, gates. The complex reconstruction also encompassed tenement houses. This action were reasonable, because in most of the buildings cellar and parterre survived.

By the reconstruction the guideline was to rebuild the most valuable historical forms, not necessarily the ones that existed directly before the destruction. However, some modernizations has been done. Above all it was decided, not to rebuild annexes. Due to those means, space for green areas or even business facilities has been gained. The traffic in the rebuilt complexes was restricted, bypasses were created for the main routes.

The entire program was only realized in a few cities. In others - Racibórz, Opole, Oleśnica, Olsztyn, the program was limited only to old-town markets and neighboring streets. It means that most old-town districts remained in the late 1950's un-rebuilt.

2. „Modern housing” - 2nd stage

In the late 50s, when in several cities the process of historical forms' rebuilding has not been fully completed, a new stage began. Since the socialist realism has ended, the main factor, by which polish architects and city-planners may have been influenced was the modernism.

After years of isolation critical opinions on value of postwar reconstruction started to reach Poland. Economic considerations also favored limiting the program of reconstructing of historical forms. It has been stated that traditional technologies of building were too expensive and time-consuming.



Fig. 5 Tenement Houses in Gdańsk

Szczecin was the very first city that was rebuilt in accordance with the new ideas. The project envisaged the construction of modern residential area. The buildings still referred to the historical scale of the complex, had similar volume and were covered with tiles. However, the contemporary high-rises came into being nearby. The architects waived the historical plots and applied typical housing.

At first, when traditional technologies still have been used, creative solutions have been searched for. The housing of old-town areas corresponded to the historical surroundings. In several cities architectural competitions have been announced, which aim was to find new forms, which would not exclude monumental values. Examples of such solutions are interesting realizations in small cities - Jawor, Paczków, Trzebiatów, Jelenia Góra, Pułusk. Similar projects were undertaken in cities, which have not been rebuilt before - Opole, Bolesławiec, Bolków, Oleśnica.

Soon, however, the conservators lost their significant influence on the housing of old-town areas. The housing issue was the biggest problem to be solved at that time in Poland. Therefore, systems of mass and quick building, so called prefabricated building have been gradually implemented.



Fig. 6 Traditional forms of new tenement houses

The individualism of solutions has been thus eliminated. Therefore, the number of typical projects has been limited. It was recommended to build 5- and 11-floor buildings.

In this case the program of rebuilding of old-town areas has changed. Accordingly, the contemporary forms started to dominate as far as the process of rebuilding old-town areas was concerned. It was extremely modest architecture and urbanism.

Contemporary forms dominated in the process of rebuilding of the historical areas in 70s and even in 80s. They have been implemented commonly - Wrocław, Kołobrzeg, Koszalin, Słupsk, Lubin, Kętrzyn, Świdnica, Oleśnica, Pyrzyce, Resko, Drawsko, Choszczno, Żagań, Krosno Odrzańskie. On the ruined old-town areas residential buildings were built.



Fig. 7 Contemporary, modest forms introduced on historic areas

Nevertheless, these activities didn't have any common rule or conservation program. The tradition of a particular place has not been taken into consideration – mostly the only remaining of the past was a market square and churches. In this manner most of historical areas destroyed during the war has been rebuilt.

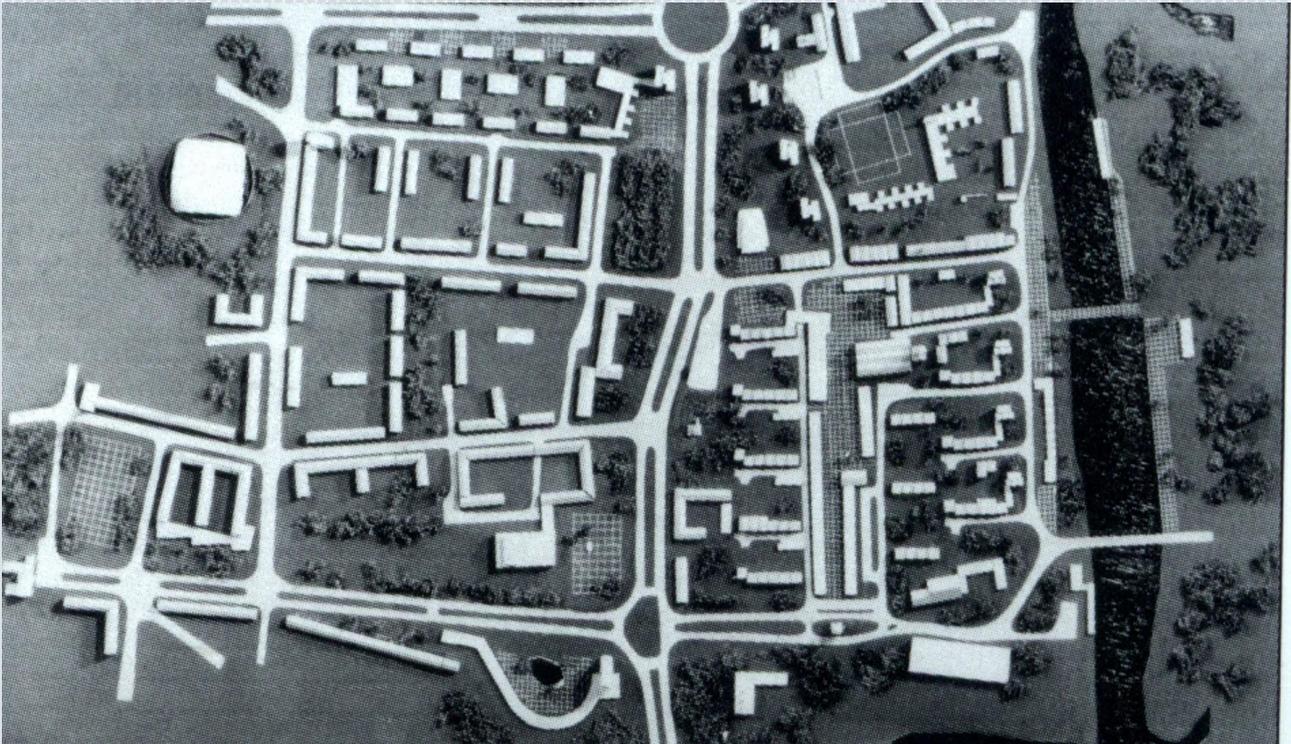


Fig. 8 New urban forms on historic areas

3. “Rebuilding in traditional forms” - 3rd stage

Third stage of rebuilding began in the late 70s. The rebuilding process during the first and second stage didn't fulfill destroyed areas of many dozens of historical towns.

A new concept of rebuilding of historical centers was conditioned by many factors. Among them one can outnumber:

- criticism of esthetics and ideology of modernism
- negative attitude towards „non-active” forms of heritage protection
- negative attitude towards socialist urbanism and architecture
- change of political, social, economic system (fall of communism)
- growing importance of local communities

Such factors destroyed modernistic form of rebuilding and also created new forms of activities.

In Poland in early 80s in architecture the ideas of post-modern architecture were widespread. Post-modernism rehabilitated traditional form of city.

This fact was crucial from conservator's point of view. What was important, that, post-modern rehabilitation of the city include three coherent elements:

- urbanism (space)
- architecture (buildings)
- functions



Fig. 9 Contemporary architecture in traditional forms - Elbląg

For the un-rebuilt historical areas new chance for conservations programs was created. An important support for return to traditional form of rebuilding was wide recognition of rebuilding – called restitution – of Royal Castle in Warsaw conducted in 70s. The respect for historical setting was valid again. New forms of rebuilt city had to integrate with traditional ones.

However this time new architecture should not copy historical forms. Architecture should be contemporary but should respect „characteristic features of historical setting”. In practice, the historical dominants – sacral buildings, town halls, public buildings – were respected. The maintenance of historical spatial patterns was a general rule. The reconstructions of historical buildings were exceptional – only when reliable documentation was available.

One can say, that architects designed „contemporary versions of tenement house”. The correspondence to historical patterns relies on proper scale, proportions, shape of roofs, vertical and horizontal divisions of facades. During the conservations works the traditional materials were used; also historical architectural details. The important element of continuation of historical traditions were functions – combination of housing, trade and service.



Fig. 10 New tenement houses in Gdańsk

One can say that the new form of rebuilding of historical towns was form of building of towns in traditional way. Such programmes were executed in many towns. The biggest programmes were conducted in Szczecin, Kołobrzeg, Głogów, Lubin, Legnica, Olsztyn, Gdańsk, Bytów, Stargard Szczeciński.

However, the most interesting and comprehensive programme was executed in Elbląg. The complex plan of rebuilding of Elbląg consists of recreation of historical urban networks and of all buildings – almost 600 tenement houses.

The foundations of this programme can be characterized as follows:

- very complex archeological surveys (all area of the city)
- full maintenance of historical city plan (based on protection of historical foundations and basements)
- protection of historical scale of the city (with rebuilding of all dominants)
- new buildings are contemporary (not reconstruction) – but respect historical setting

- maintenance of historical spatial division of area (thanks to protection of historic basements)

According to these rules rebuilding of Elblag was realized almost 30 years. These method was called „retrowersion”. And this programme was recognized as protection of heritage.



Fig. 11 Aerial view of Elblag – process of rebuilding in progress

Of course, the third stage of rebuilding process in Poland was very varied. Programmes realized in particular towns are very different because they don't have common foundations formulated by the conservators. That was possible in previous, central system only. Nowadays, in market economy and democracy, variety of solutions is the only possibility.

At the end, one should ask: what is contemporary opinion about rebuilding of historical towns in Poland?

Time perspective, allows us to say, that Polish conservators had right. They took control over the destroyed historical districts, using different forms of activities. That seems reasonable, especially knowing that contemporary concept of heritage is wider and wider.

In many destroyed European cities there were introduced completely new forms of architecture and urbanism. However, after few decades these forms lost their modernity. In rebuilt historical towns in Poland the first reconstructed “historical buildings” are already protected as “historical monuments” and are fully accepted by society. Therefore in Poland the rebuilding of historical towns is recognized as success of conservators.

Medieval transformations of prestigious buildings and Modern use of cultural heritage. Orsanmichele in Florence.

The history of the church of *Orsanmichele* (Kitchen Garden of St. Michael) in Florence constitutes a model for the transformation and exploitation of historic buildings that effectively underlines the concept of the use of cultural heritage both in relation to the past and with reference to the present. no longer exists. The church is located on the Via Calzaiuoli in Florence. The building was constructed on the site of the kitchen garden of the monastery of San Michele, in the centre of the city.

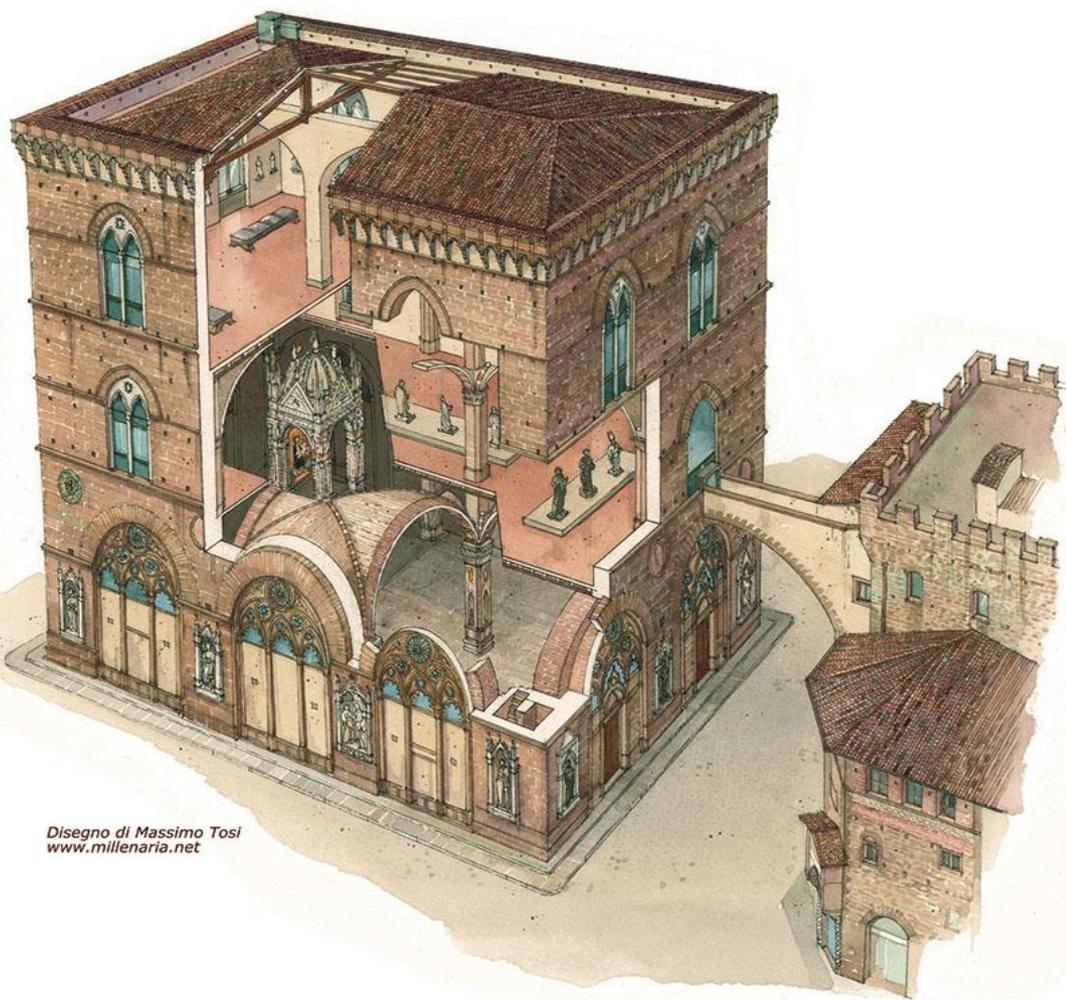


The origins of the building date back to Longobard times (8th century), when on this site an oratory of San Michele in Orto was erected. The building is first documented in 895, and was demolished in 1239. In its place the architect Arnolfo di Cambio built, around 1290, a loggia for the sale of grain. From a place of commerce it soon became a place of devotion, and miracles were attributed to an image of the Virgin painted on a pillar of the porch.

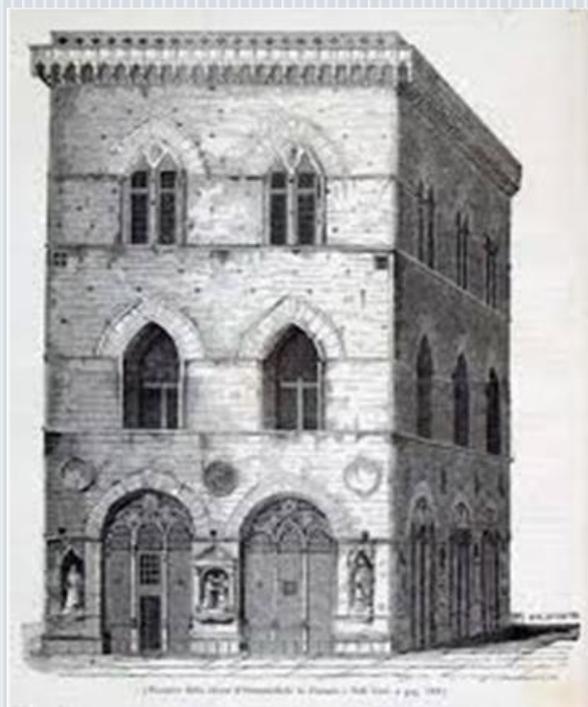
In 1304 a fire severely damaged the loggia. In 1337 the Silk Guild commissioned a new front porch, finished in 1349, from the architects Neri di Fioravante, Benci di Cione and Francesco Talenti.

Meanwhile the image of the Virgin had faded and was replaced by Bernardo Daddi's Madonna and Child (1346), known as the Madonna delle Grazie, still in situ, before which public and private oaths were sworn.





Disegno di Massimo Tosi
www.milenaria.net



Devotion towards the image increased, especially after some miraculous cures during the terrible plague of 1348. Probably conceived as an ex-voto, the monumental marble altar with Virtues and scenes from the life of the Virgin in relief, was commissioned a year after the plague from Andrea di Cione, known as Orcagna, but not finished until 1359. The loggia could no longer be regarded as a suitable place for a market, which was moved elsewhere at least by 1357.



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In 1380 the building, which had always fulfilled both a civic and a religious function, had two upper storeys added onto it, so that it could be used as a granary. Chutes for the wheat are still to be seen inside the piers. The loggia was closed in, to a design by Simone di Francesco Talenti, involving elegant mullioned windows in the late gothic style, and stained glass by Niccolò di Pietro Gerini showing Scenes and miracles of the Virgin (1395-1405).



Orsanmichele was completed in 1404. The tabernacles around the outside were assigned to the 'Arti Maggiori' or principal guilds (the Cloth-Merchants or Calimala, the Judges and Notaries, the Bankers, the Woolworkers, the Furriers, the Physicians and Apothecaries, the Silkworkers), to the 'Mediane' or medium guilds (the Butchers, the Cobblers, the Stonemasons and Woodworkers, the Blacksmiths, the Linenworkers and Ragmen), and to the guild of the Armourers and Swordmakers. The most important tabernacle, in the centre of the façade facing Via de' Calzaioli, was assigned first to the Parte Guelfa, the most important political faction, and then to the Tribunal of the Mercatanzia.

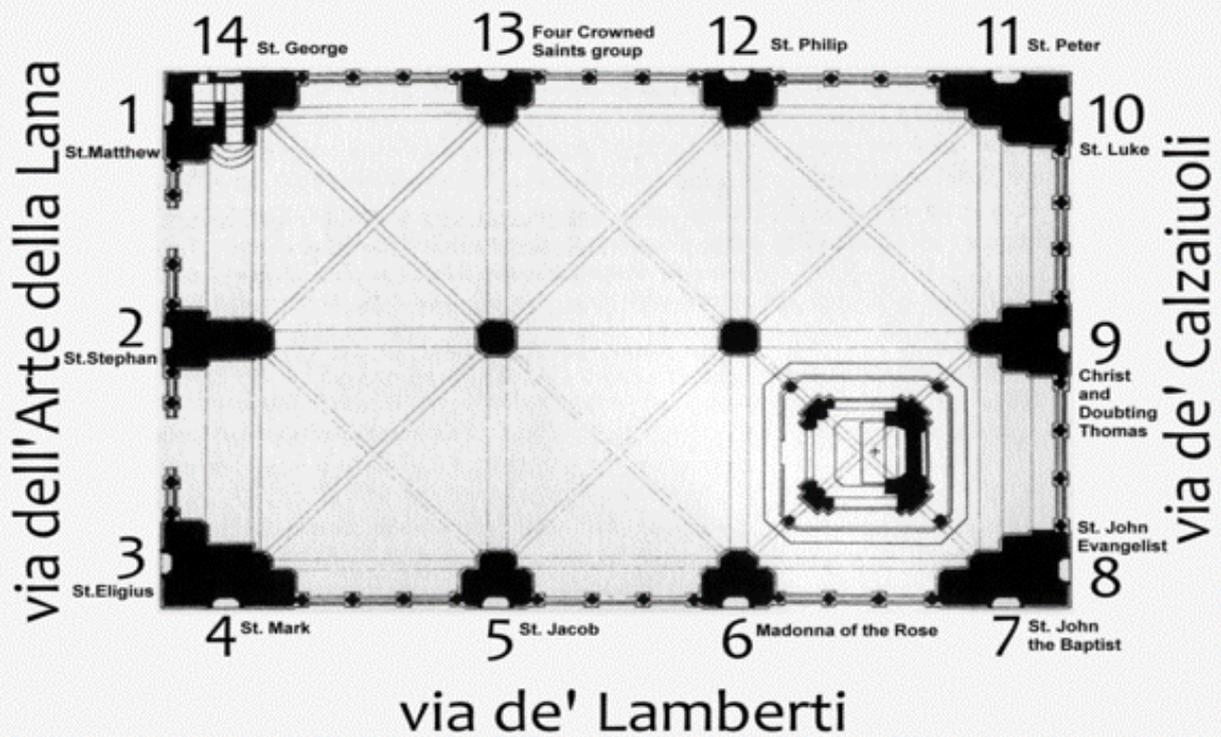


All these institutions commissioned sculptures of their patron saints for their tabernacles, from the foremost Florentine artists of the 15th (Nanni di Banco, Ghiberti, Donatello) and 16th century (Giambologna). The patron saints of the individual guilds massed together on the four sides of the building, thus became the patron saints of the church of Orsanmichele itself.

The interior of Orsanmichele preserves its late gothic appearance almost intact. Its square layout, uncommon for a church, and the positioning of the piers recall the arrangement of the original open loggia. This explains the unusual position of the Madonna delle Grazie altar, not in the centre but to the right. To the left of the nave is the votive altar of St. Anne, built by order of the Signoria in 1379, with a marble group of St. Anne, the Virgin and Child by Francesco da Sangallo (c. 1526).

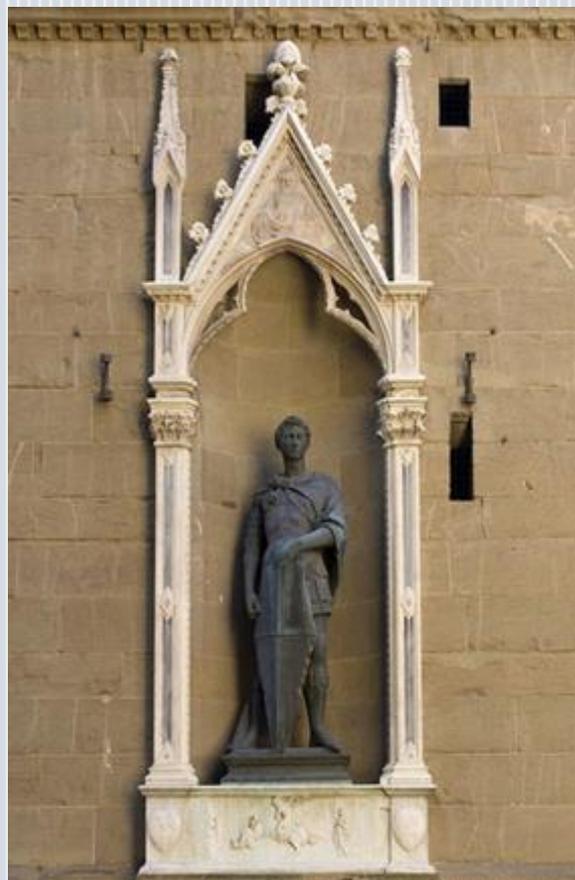


via di Orsanmichele



Orsanmichele was an unique building. It was a temple of the city's arts and a place of special worship dedicated to the Virgin Mary. This complex structure, formerly a simple loggia housing a venerated Marian image and then a church in its own right, hosted some of the most popular preachers of the century, such as the Dominican Giordano da Pisa, as well as the organisation of important ceremonies and processions in honour of the Madonna and her mother Anna. It was, in fact, a mixture of triumphalism, but also of bewilderment, that led the Signoria, in 1365, to proclaim Mary special advocate of the republic, ordering that on the Feast of the Assumption (15 August) the regiment itself, 'in majesty' (in procession), should go to the aforementioned oratory to make the ritual offering of waxes (candles) and fruit. In the wake of the disasters that had raged over the previous decades, the citizens turned to their supreme Advocate and Her sanctuary. Only She and her maternal spirit, subtly traceable to the archaic sediments underlying the ancient fertility rites, appeared to be the guarantors of the common good and of the great public granary situated above the portico which, to the memory of the ancient monastery dedicated to the Archangel Michael, now associated the devotion reserved for the Mother of God.

Orsanmichele's statuary is a relic of the fierce devotion and pride of Florentine trades, and a reminder that great art often arises out of a competitive climate. Each trade hoped to outdo the other in commissioning original, groundbreaking sculptures for public display on Florence's most important street, and the artists hired and materials used (especially bronze) indicate the importance that was placed on this site.





Today, all of the original sculptures have been removed and replaced with modern duplicates to protect them from the elements and vandalism. The originals mainly reside in the museum of Orsanmichele, which occupies the upper floor of the church.



The evolution of a historic building such as Orsanmichele, which is now unequivocally defined as a cultural asset, shows the way buildings of exceptional value (religious, political, symbolic, artistic and architectural) can be subject to frequent re-use and re-purposing which, while respecting the building itself, leads to a functional transformation that does not obliterate its significance as an eminent structure. Orsanmichele has been a garden, a monastery, a portico, a grain warehouse and a religious building. All these uses, stratified over time and for certain periods even contemporary, have increased the building's polysemic value, which thanks to its multiple uses over time can now be defined as a cultural asset. the protection of historically important buildings cannot be separated from their use. This was valid in the past and can still be valid today. What must motivate the willingness to use and re-use a cultural asset is respect for its history and significance. Once this element is guaranteed, the contemporary use and valorisation of the cultural good is legitimate and possible.



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**Cultural Landscapes Modern Use and Digital Cultural
Heritage technologies Case Study.¹⁶³**

**The use of GIS for the production of a zoning and
environmental management plan for Angkor World
Heritage Site, Cambodia**

¹⁶³ This chapter has been authored by the UNINET Cultural Heritage research group of the University of Ioannina: Alexandros Peteinarelis, Nikolas Patsavos and Angelos Papageorgiou.

Angkor - Ref: 668 - Retrieved from: <https://whc.unesco.org/en/list/668>

Cambodia: Province Siem Reap

Date of Inscription: 1992

Criteria: (i)(ii)(iii)(iv)

Property: 40,100 ha



Description: Angkor, in Cambodia's northern province of Siem Reap, is one of the most important archaeological sites of Southeast Asia. It extends over approximately 400 square kilometres and consists of scores of temples, hydraulic structures (basins, dykes, reservoirs, canals) as well as communication routes. For several centuries Angkor, was the centre of the Khmer Kingdom. With impressive monuments, several different ancient urban plans and large water reservoirs, the site is a unique concentration of features testifying to an exceptional civilization. Temples such as Angkor Wat, the Bayon, Preah Khan and Ta Prohm, exemplars of Khmer architecture, are closely linked to their geographical context as well as being imbued with symbolic significance. The architecture and layout of the successive capitals bear witness to a high level of social order and ranking within the Khmer Empire. Angkor is therefore a major site exemplifying cultural, religious and symbolic values, as well as containing high architectural, archaeological and artistic significance.

The park is inhabited, and many villages, some of whom the ancestors are dating back to the Angkor period are scattered throughout the park. The population practices agriculture and more specifically rice cultivation.

Outstanding Universal Value

Criterion (i): The Angkor complex represents the entire range of Khmer art from the 9th to the 14th centuries, and includes a number of indisputable artistic masterpieces (e.g. Angkor Wat, the Bayon, Banteay Srei).

Criterion (ii): The influence of Khmer art as developed at Angkor was a profound one over much of South-east Asia and played a fundamental role in its distinctive evolution.

Criterion (iii): The Khmer Empire of the 9th-14th centuries encompassed much of South-east Asia and played a formative role in the political and cultural development of the region. All that remains of that civilization is its rich heritage of cult structures in brick and stone.

Criterion (iv): Khmer architecture evolved largely from that of the Indian sub-continent, from which it soon became clearly distinct as it developed its own special characteristics, some independently evolved and others acquired from neighboring cultural traditions. The result was a new artistic horizon in oriental art and architecture.

Integrity:

The Angkor complex encompasses all major architectural buildings and hydrological engineering systems from the Khmer period and most of these “barays” and canals still exist today. All the individual aspects illustrate the intactness of the site very much reflecting the splendor of the cities that once were. The site integrity however, is put under dual pressures:

1. Endogenous: exerted by more than 100,000 inhabitants distributed over 112 historic settlements scattered over the site, who constantly try to expand their dwelling areas;
2. Exogenous: related to the proximity of the town of Siem Reap, the seat of the province and a tourism hub.

Authenticity: Previous conservation and restoration works at Angkor between 1907 and 1992, especially by the École Française d’Extrême-Orient (EFEO), the Archaeological Survey of India, the Polish conservation body PKZ, and the World Monuments Fund have had no significant impact on the overall authenticity of the monuments that make up the Angkor complex and do not obtrude upon the overall impression gained from individual monuments.

Protection and management requirements

The property is legally protected by the Royal Decree on the Zoning of the Region of Siem Reap/Angkor adopted on 28 May 1994 and the Law on the protection of the natural and cultural heritage promulgated on 25 January 1996, the Royal Decree on the creation of the APSARA National Authority (Authority for the protection of the site and the management of the Angkor Region) adopted on 19 February 1995, the No. 70 SSR government Decision, dated 16 September 2004 providing for land-use in the Angkor Park: “All lands located in zone 1 and 2 of the Angkor site are State properties”, and the sub-decree No. 50 ANK/BK on the organisation and functioning of the APSARA National Authority adopted on 9 May 2008, specifically provided for the establishment of a Department of Land-use and Habitat Management in the Angkor Park.

In order to strengthen and to clarify the ownership and building codes in the protected zones 1 and 2, boundary posts have been put in 2004 and 2009 and the action was completed in 2012.

As off 1993, the ICC-Angkor (International Coordinating Committee for the Safeguarding and Development of the historic site of Angkor) created on 13 October 1993, ensures the coordination of the successive scientific, restoration and conservation related projects, executed by the Royal Cambodian Government and its international partners. It ensures the consistency of the various projects, and defines, when necessary, technical and financial standards and calls the attention of all the concerned parties when required. It also contributes to the overall management of the property and its sustainable development.

The successful conservation of the property by the APSARA National Authority, monitored by the ICC-Angkor, was crowned by the removal of the property from the World Heritage List in danger in 2004.

Angkor is one of the largest archaeological sites in operation in the world. Tourism represents an enormous economic potential but it can also generate irreparable destructions of the tangible as well as intangible cultural heritage. Many research projects have been undertaken, since the international safeguarding program was first launched in 1993. The scientific objectives of the research (e.g. anthropological studies on socio-economic conditions) result in a better knowledge and understanding of the history of the site, and its inhabitants that constitute a rich exceptional legacy of the intangible heritage. The purpose is to associate the “intangible culture” to the enhancement of the monuments

in order to sensitize the local population to the importance and necessity of its protection and preservation and assist in the development of the site as Angkor is a living heritage site where Khmer people in general, but especially the local population, are known to be particularly conservative with respect to ancestral traditions and where they adhere to a great number of archaic cultural practices that have disappeared elsewhere. The inhabitants venerate the temple deities and organize ceremonies and rituals in their honor, involving prayers, traditional music and dance. Moreover, the Angkor Archaeological Park is very rich in medicinal plants, used by the local population for treatment of diseases. The plants are prepared and then brought to different temple sites for blessing by the gods. The Preah Khan temple is considered to have been a university of medicine and the NeakPoan an ancient hospital. These aspects of intangible heritage are further enriched by the traditional textile and basket weaving practices and palm sugar production, which all result in products that are being sold on local markets and to the tourists, thus contributing to the sustainable development and livelihood of the population living in and around the World Heritage site.

A Public Investigation Unit was created as « measure instrument » for identifying the needs, expectations and behaviors of visitors in order to set policies, monitor its evolution, prepare a flux management policy and promote the unknown sites.

The management of the Angkor Site, which is inhabited, also takes into consideration the population living in the property by associating them to the tourist economic growth in order to strive for sustainable development and poverty reduction.

Two major contributions supporting the APSARA National Authority in this matter are:

1. The Angkor Management Plan (AMP) and Community Development Participation Project (CDPP), a bilateral cooperation with the Government of New Zealand. The AMP helps the APSARA National Authority to reorganize and strengthen the institutional aspects, and the CDPP prepares the land use map with an experimental participation of the communities and supports small projects related to tourist development in order to improve the income of villagers living in the protected zones;

2. The Heritage Management Framework composed of a Tourism Management Plan and a Risk map on monuments and natural resources; a multilateral cooperation with the Government of Australia and UNESCO. Preliminary analytical and planning work for the management strategy will take into account the necessity to preserve the special atmosphere of Angkor. All decisions must guarantee physical, spiritual, and emotional accessibility to the site for the visitors.

Gallery



All Images: UNESCO Angkor © UNESCO: <https://whc.unesco.org/en/list/668/gallery/>

The site of Angkor (Cambodia) was inscribed on the World Heritage List in December 1992, and was placed on the list of World Heritage in Danger at the same time. The inscription was contingent on the Cambodian authorities precisely defining boundaries of the site and its buffer zones and establishing a legal and administrative framework to protect the site.

UNESCO was requested to assist the Cambodian authorities in satisfying the conditions set by the World Heritage Committee within a three-year probationary period. At the request of the Cambodian authorities, a process to develop a Zoning and Environmental Management Plan (ZEMP) for the Angkor World Heritage Site within the context of the socio-economic development of the surrounding area was initiated.

The purpose of the ZEMP was to describe and evaluate the cultural and natural resources of the area, and to propose zones and guidelines for management that would both improve the economic and social conditions of the region, and preserve the Angkorian above- and below-ground heritage.

GIS project objectives

The objective of setting up a GIS as part of this project was to provide an integrated information management and analysis tool to aid the ZEMP team in data collection and analysis activities. Evaluation of the GIS output would then assist the team in defining suitable protection zone boundaries for the Angkor site.

Study area

A study area of 5,000 sq. km was defined. Within this area, archaeological sites are scattered throughout the northern slopes of the Ton Le Sap drainage basin bounded to the north by the Dangrek Escarpment and to the south by the Ton Le Sap Lake. The Siem Reap River was the main source of water for the ancient city of Angkor, as it is for the modern town of Siem Reap.

The study area roughly corresponds to the drainage catchment area of the Siem Reap River and consists of predominantly alluvial soils, with an outcropping sandstone plateau called Phnom Kulen to the northeast of the ancient city. The basic drainage pattern is characterized by radiating streams that have been modified and rechannelled to direct the flow of water into the great barays (ancient water storage tanks) and to feed the agricultural land that slopes south from the ancient city to the lake.

The fertile soil that spreads 10 km north of the lake is cultivated with receding rice, which is planted as the water level of the lake drops. Nearer the lake, deep water or floating rice is cultivated. Along the lakeshore, which is subject to an annual cycle of flooding, flood forests, grass and shrubs predominate. Other key vegetation-cover classes in the study area include (from southwest to northeast) dry-land rice, shrub-land and grassland, secondary forests, undisturbed evergreen forests and undisturbed upland forests. To better understand the distribution and value of the cultural and natural resources in this study area, GIS was used to analyse resource data and produce thematic maps.

Spatial data capture

Three sources of spatial data were used to create the GIS base map layers:

1. Landsat 5 TM satellite images, 1: 100.000 scale, 1991.
2. Aerial photographs, 1:25.000 scale, 1992.
3. Existing paper maps at various scales, 1:40.000 to 1: 100.000.

The aerial photographs and satellite images used were not geometrically corrected as the level of error inherent in the uncorrected data was within an acceptable limit for the initial assessment. To generate the highest quality data possible without the use of expensive equipment, all map features interpreted and abstracted from aerial photographs and satellite images were plotted onto a common base-map and digitized.

Transparent overlays were placed on the aerial photographs and satellite images (source documents). Interpreters with the relevant professional and technical expertise located features of interest such as vegetation cover classes or settlements from the images and these features were then traced onto transparent overlays. The overlays were then placed on a light table and a base-map (enlarged or reduced to the same scale as the source document) placed on top. The objects were next traced onto the base map and digitized. This process reduced some of the geographical displacement errors inherent in the uncorrected images.

Archaeological sites and monuments, Angkor, Cambodia

A map (Figure 45) indicating the location of monuments was produced from existing monument inventories and interpretation of aerial photographs. Aerial photograph interpretation was used to identify and inventory sites of archaeological potential, such as ancient habitation sites and hydrological features. Identified sites were then assessed to determine archaeological potential or value, condition, priority for excavation and tourism potential. A total of 1.000 archaeological sites were inventoried, more than half of which were previously unrecorded.

Attribute data for known monuments were extracted from existing inventories produced by the Ecole française d'Extrême-Orient. For each monument details of construction, date, style, condition and conservation activities were recorded.

Many monuments in remote locations were identified for the first time from aerial photograph interpretation. Only limited data were available for these sites and many could not be visited due to the unstable security situation. The GIS database, therefore, provided the only record of these sites and their importance to and need to be included in the ZEMP protection plan.

Figure 1.1 Archaeological sites and monuments, Angkor, Cambodia

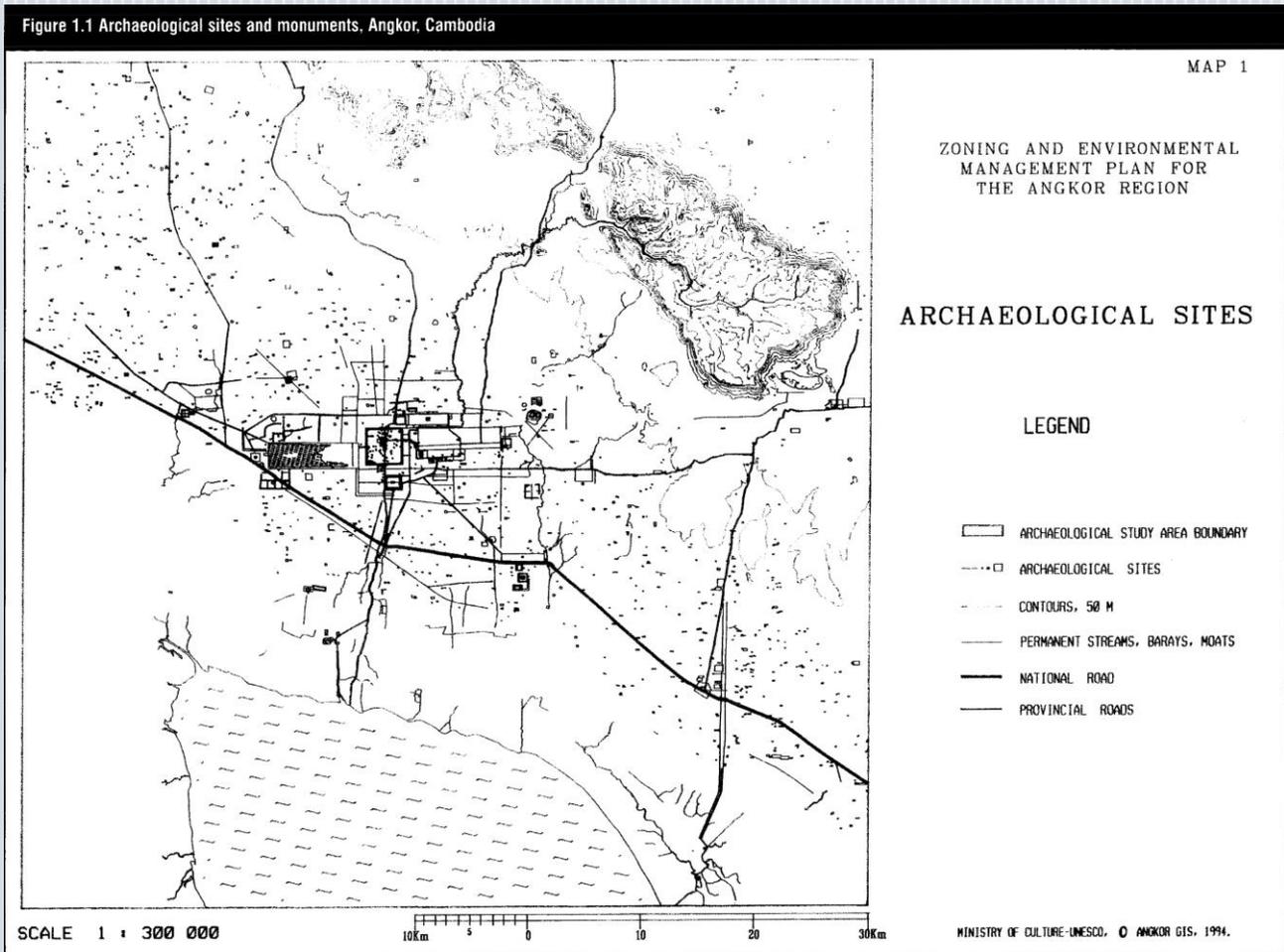


Figure 45. Archaeological sites and monuments map (UNESCO 1999)

A separate database was used to record attribute data for sites of potential archaeological interest identified from aerial photographs. Each site was assigned values of between one and five (low to high) to indicate the following:

1. Excavation priority
2. Disturbance of the site
3. Archaeological research potential

Land use and population density, Angkor, Cambodia

Land use and vegetation cover classification maps (Figure 46) were to be produced from aerial photographs but this resulted in data that was too detailed to be digitized within the timeframe of the project. Therefore, a Landsat satellite image of the study area was interpreted to generate land use and vegetation cover maps. The land use map comprised 14 classes of use and the vegetation cover map comprised 26 habitat types.

A count of houses in the study area was made from aerial photographs. A point was placed at the centre of each cluster of dwellings (not necessarily villages) to represent it, and the number of houses recorded for each dwelling cluster. A multiplier of household size was applied to each dwelling to derive an estimated population for each settlement and these were added to calculate the population for the whole study area.

Attribute data concerning habitats within the study area were generated by an ecologist. For each vegetation class within the study area, values of between one and five were assigned based on the following four categories:

1. Botanical potential
2. Botanical sustainability
3. Wildlife value
4. Wildlife sustainability

Figure 1.2 Land use and population density, Angkor, Cambodia

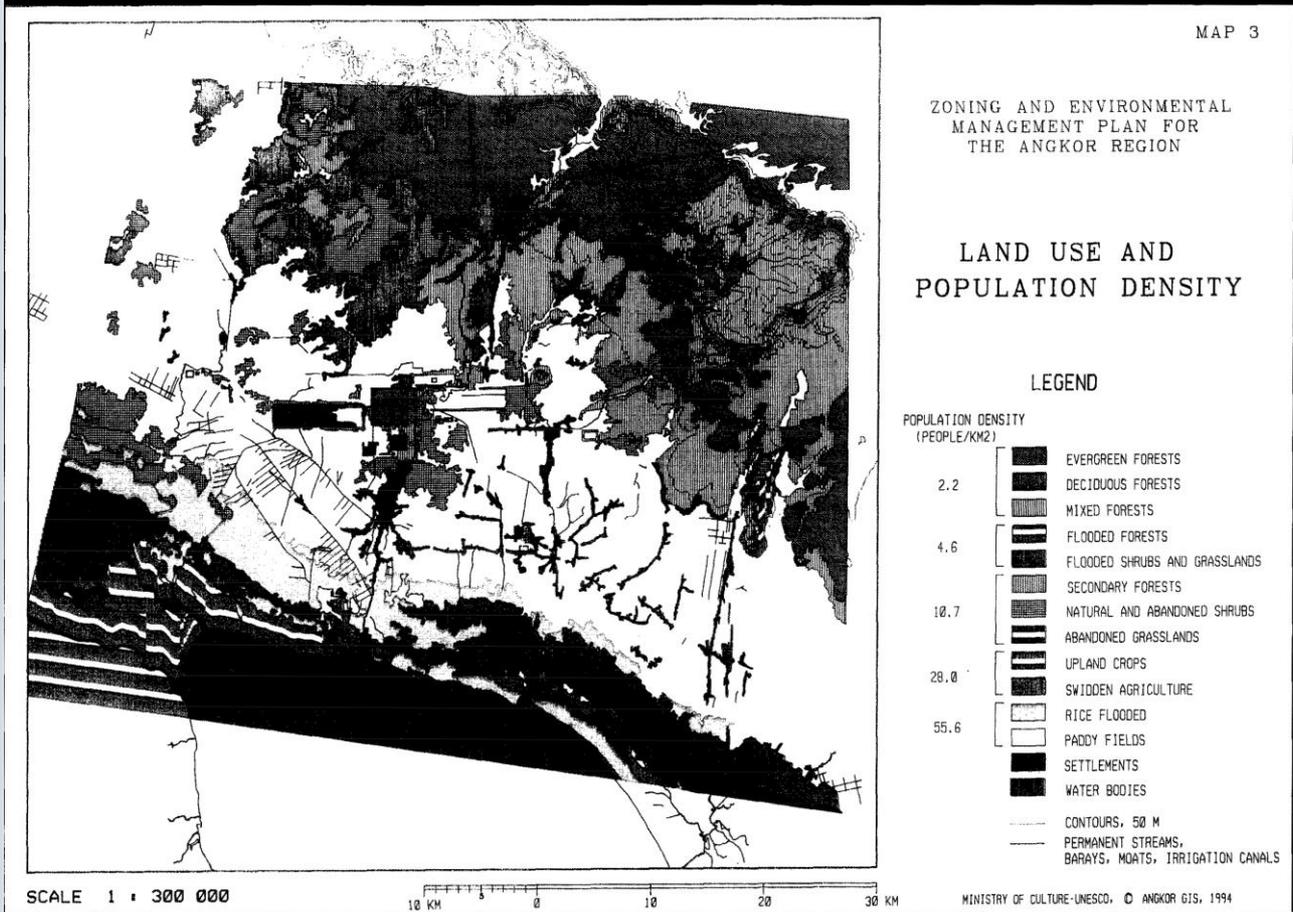


Figure 46. Land use and population density map (UNESCO 1999)

Archaeological values, Angkor, Cambodia

Ratings of archaeological 'value' (an overall assessment of the comparative value of the cultural heritage resources present) and tourism 'value', on a scale of one to five (low to high), were assigned to each monument by the archaeological team (Figure 47). To evaluate the overall distribution of archaeological sites and monuments a surface map was produced. The 'combined archaeology' surface map was generated using the 'archaeological value' rating for each monument and the archaeological potential rating for each archaeological site.

Figure 1.3 Archaeological values, Angkor, Cambodia

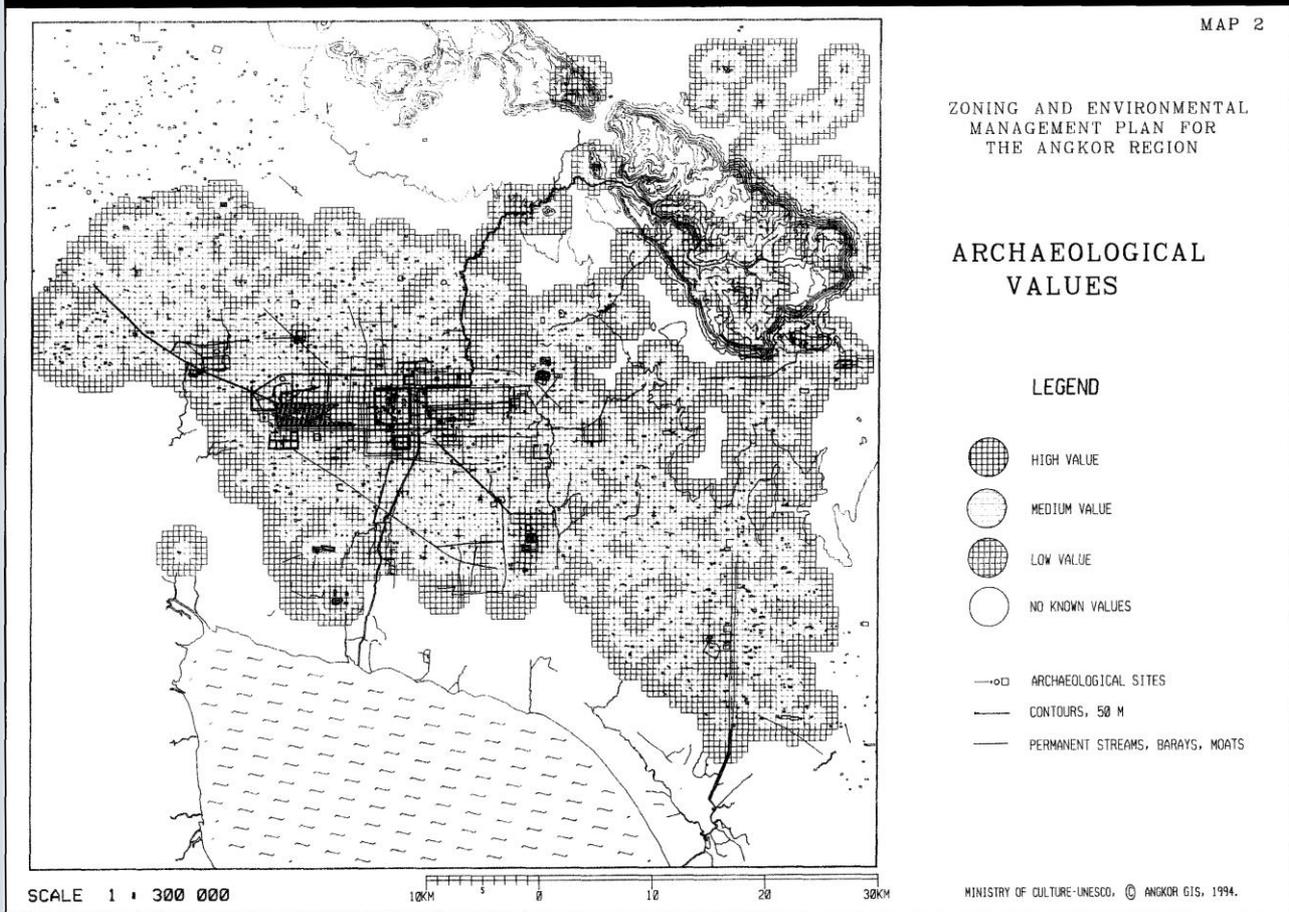


Figure 47. Archaeological values map (UNESCO 1999)

Angkor Archaeological Park, Angkor, Cambodia

The project team was able to view the GIS generated map layers in any combination to examine alternative potential zoning strategies. First, the natural and cultural value surface maps were overlaid to visualize coincident areas of high cultural and natural values. This combined resource value surface map was then overlaid with the population growth map to identify areas with high resource values and high population growth rates. These were determined to be areas where land-use conflicts might develop. The villages with high growth rates are likely to exceed the carrying capacity limits of the land area currently being utilized. The consequences of this could be the introduction of unsustainable land use practices that negatively impact the cultural and natural resources of the protected area.

The thematic maps outlined in the previous sections were used to assist the ZEMP team in deciding the geographical and legal extent of protection zones. Alternative protection zones were plotted onto hardcopy maps. This output enabled the team to visualize relevant multidisciplinary data and to assess the effectiveness of different protection plan strategies.

Based on judgements made by the project team, boundaries that would ensure the correct level of protection for the natural and cultural resources of the site were proposed. The final protection zone boundaries that were adapted by the Royal Cambodia Government are shown in Figure 48.

The plan defined the following protection zones:

- 1.** A socio-economic and cultural zone of the Siem Reap Angkor region (a buffer or support zone for the whole region).
- 2.** Cultural sites
- 3.** Monumental sites
- 4.** Archaeological sites
- 5.** Cultural landscapes
- 6.** Sites of archaeological, anthropological or historic interest.
- 7.** Ecologically sensitive areas: Ton Le Sap wetlands and water corridors

Additional ZEMP zones included

- 1.** Phnom Kulen National Park
- 2.** Rural development areas
- 3.** Urban conservation areas
- 4.** Urban expansion zones
- 5.** Tourist development zones

Łukasz Pardela, Ph.D., Eng.

ICOMOS – POLAND

Case study: A historic fort versus multi-family residential buildings' adaptation

Historical fortifications undergo conservation protection and are adapted for modern purposes worldwide. Many, including some European examples, may be found on the World Heritage List. These include the Fortifications of Vauban, the Fortress of Suomenlinna or the Defence Line of Amsterdam. However, many fortifications do not enjoy such a high level of protection. They are usually entered in the registry of historical monuments [ewidencja zabytków], and less frequently in the registry of cultural property [rejestr zabytków]. At the same time, the degree to which they are protected affects how they may be adapted or used in other ways. Very often one area may feature several forms of protection resulting from the provisions of separate acts. This is when conflicts most often arise between various groups of stakeholders involved in the processes of revitalisation and regeneration of historic fortifications. One interesting example of this is the ongoing development of the historic Fort VIIa in Poznań in western Poland (52 ° 24'23.6 "N 16 ° 51'28.2" E).

Fort VIIa changed role and ownership over the years. Currently, it belongs to a private development company, which plans to build a complex of multi-family residential buildings with underground garages in this area ("Fort M" – 346 apartments in 12 buildings, plot 4/13), reconstruct and extend the fort ("Fort Z" – an accompanying investment with service facilities, gastronomy, social economy enterprises) along with accompanying technical infrastructure throughout the whole area (e.g. a total of 692 parking spaces). The residential buildings are to be built into the historic glacis and the area will be open to the public. Therefore, extensive earthworks are planned along with the necessary transport routes, material storage, etc.

The historic Fort VIIa, is not only plagued with spatial planning problems that arise in Poland when the so-called “lex developer”¹⁶⁴ special housing act (regarding a post-military area) is applied alongside derogations in the application of the provisions of the spatial development plan (MPZP). There are also contemporary challenges faced by local governments, conservation services (registered facility) and authorities responsible for environmental protection (environmental decision) in connection with Natura 2000 areas. The development campaign, which accompanies the plans to revitalise the historic area with a major participation of EU funds, faces strong opposition from local residents as well as pro-ecological and scientific circles. Therefore, the issue of the protection and development of Fort VIIa is complex and is not merely limited to conservation or social aspects. It is a striking example of how much the importance of nature protection (including the so-called fourth nature), ecosystem benefits or protection of veteran trees has grown in shaping the landscape and the *genius loci* of historic fortification areas, entered into the registry in the 1980s.

A historical overview

Fort VIIa ‘Strotha’ was erected between 1887–1890 as part of the outer ring of fortifications of the Poznań Fortress during the times of the German Empire¹⁶⁵. Shortly before the outbreak of World War I, it underwent minor functional modifications. After the Greater Poland uprising of 1918–1919, it passed into Polish hands and was named after Zygmunt Zieliński. After the start of World War II, it was taken over by the German army, which occupied the facility until the capitulation of the Poznań fortress in 1945. During the period of the Polish People’s Republic, Fort VIIa was used by the Polish People’s Army. A change in function to meet the requirements of the air force was accompanied by the construction of new buildings. In the Communist era, the fort was painted in camouflage patterns (photos 1,3). In the years 1968–1987, new surfaces, a sentry tower, terrain stairs and various extensions to the existing bunkers were added to the fort (Fig. 2). In 1983, Fort VIIa was entered into the registry of cultural property. After the army left the fort, it passed to the Military Property Agency until 2002. This is a state agency subordinate to the Ministry of National Defence, which manages military grounds after the political transformation in 1989. Fort VIIa ended up on the free market when the agency sold it to a private company for little money and without any limitations and protection boundaries concerning further development and heritage protection. Then, the property was divided internally, disintegrating the historic fortress plot, and thus separating the glacis from the inner part of the fort within the limits of the moats. In 2008, a special area for the protection of bat

¹⁶⁴ *The Act on facilitating the preparation and implementation of housing investments and associated investments of 5 July 2018* (Journal of Laws of 2018, item 1496).

¹⁶⁵ Rolf, R. 2000. *Die Entwicklung des deutschen Festungssystems seit 1870*, Heerlen.

habitats – Natura 2000 “Fortifications in Poznań” – was designated within the limits of the moats. For many years, the fort remained undeveloped or used only sporadically, fenced off and closed to the general public. Currently, Fort VIIa is still unused and inaccessible. It is gradually being prepared for building development, including staged felling of trees and shrubs growing on the earth forms both above and outside the buildings (Fig. 1).



Fig. 1. The central part of the fort with barracks and bunkers on the main rampart (author: R. Kalak).

Elements of the spatial arrangement shaping the landscape of the fort

Fort VIIa is a type of a permanent fortification, a defensive structure adapted to circular defence. It was built according to a so-called scheme of “intermediate work of a new type for a large fortress” (Zwischenwerk, “1887”)¹⁶⁶ (fig 2). It consists of military buildings, wall structures and extensive earthworks connected functionally via internal communication (overground and underground) in a relatively small area.

¹⁶⁶ Ba-Ma, Freiburg, sygn. PH2-1330, PH2-1767, PH2-1768, Engineering Committee, *The design intermediate work of a new type for a large fortress* (mod. „1887”), 30 June 1887.

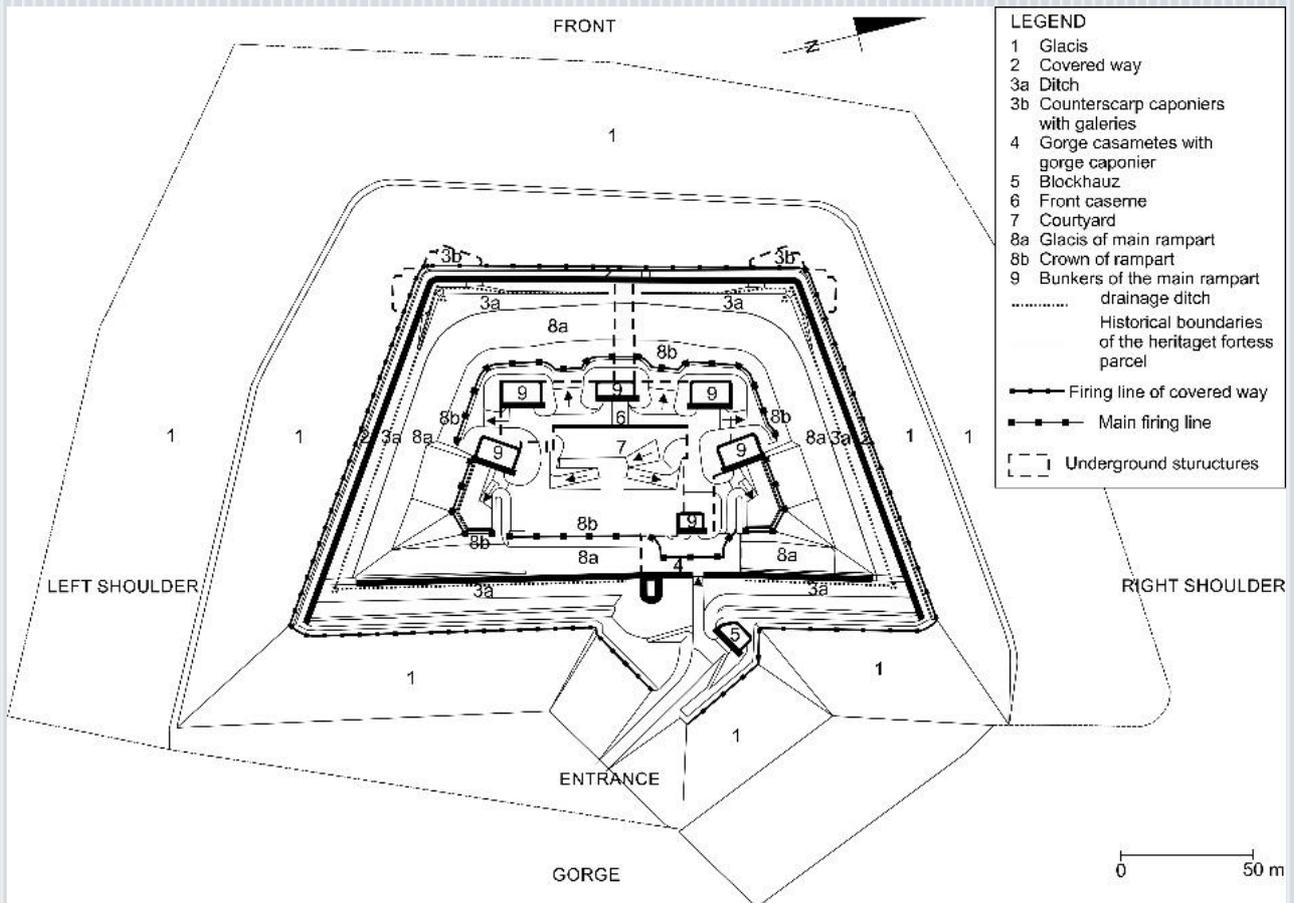


Fig. 2. Historical functional and spatial plan of Fort VIIa (Source: own elaboration).

The outermost part of the fort was a flattened sloped glacis 80–90 m wide with wire entanglements. This masked the outline of the fort against the horizon. Part of the glacis was occupied by fortress greenery in the form of tree and shrub plantation¹⁶⁷. This provided the necessary building materials and performed a number of functions necessary for the proper running of the fort. After demilitarisation, the fort's land cover was transformed (especially visible on the glacis and earthwork profiles).

The main front and flank rampart with traverses was the most elevated earthwork throughout the fort. The Hauptkampflinie (main firing line) ran gently along it, towering over the surrounding area with gun positions with an open line of fire in every direction.

Between the glacis and the main rampart there was a deep ditch that controlled access to the fort. It was equipped with a pair of counterscarp caponiers and galleries, accessible by an underground tunnel.

¹⁶⁷ Historic Aerial photos of 1914-15. The collection of the University Library in Poznań.

In the central part of the fort there was a front caserne with a courtyard, to which a corridor with a gorge caserne led. The upper floors could be accessed by staircases located in shelters and by ramps erected in the front of the front caserne. In the gorge site, the gorge place-of-arms and gorge caponier were located. The only way to access the fort was by the entrance located in the gorge site, which was protected by a small gorge blockhouse.

The historical, scientific and research value of the fort in terms of its adaptation for new functions

In terms of historical value, Fort VIIa is preserved in its original layout. The tremendous scientific and research value of the fort is also confirmed by the presence of fortress details preserved in situ (e.g. steel gates, blast proof doors and shutters, and lattices (vertical and horizontal)). This classifies Fort VIIa among the top historic fortifications in Poznań as a highly representative example of this type of development. In terms of the functional and spatial layout, the authenticity of Fort VIIa results from its internal integrity and the preserved internal communication system (underground corridors, ramps, etc.), which, during adaptation to new needs, may be fragmented or completely liquidated.



Fig. 3. The camouflage painting of the counterscarp caponier and the sentry tower (in the background) (author: R. Kalak).

The distinguishing features of Fort VIIa are primarily the modifications from 1913–14 and September 1939 (observation post with an armoured dome, an anti-tank ditch in the bottom of the front glacis, etc.), followed by the camouflage painting and the sentry tower (fig 3,4).



Fig. 4. The firing line along a ditch on the face of the glacis with veteran trees (author: R. Kalak).

The dominant earthworks and intact glacis along with forest and park vegetation play a key role in conveying the character of the historic fort. This area is the fort's exhibition zone. The greenery growing on the glacis is largely an unintended continuation of the composed, historical fortress cultivation, visible in places in the form of linear plantings of black locust trees¹⁶⁸. The vegetation is currently similar to a mixed elm-ash riparian forest and hornbeam-oak forest. It was created largely as a result of secondary succession, but its present character in the fenced-off area of the fort plays to the advantage of the natural values of the fort. It is conducive to its preservation as a bat habitat (Natura 2000), a breeding site for

¹⁶⁸ Wilkaniec, A. 2004. *The green of the outer ring of the Poznań forts*. Doctoral dissertation. Agricultural Academy in Poznań.

birds, migration route and breeding site for amphibians, as opposed to artificially created ‘ecological colonies’ such as an ‘urban biome’ suggested by the developer.

The main threat to the integrity of the fort within its historic fortress plot (originally comprising an area of about 9.5 ha) is its internal division based on the visible course of the moat (“Fort M” and “Fort Z”). It opens the way for the historical parts of this historic complex to be treated separately (fig. 5).

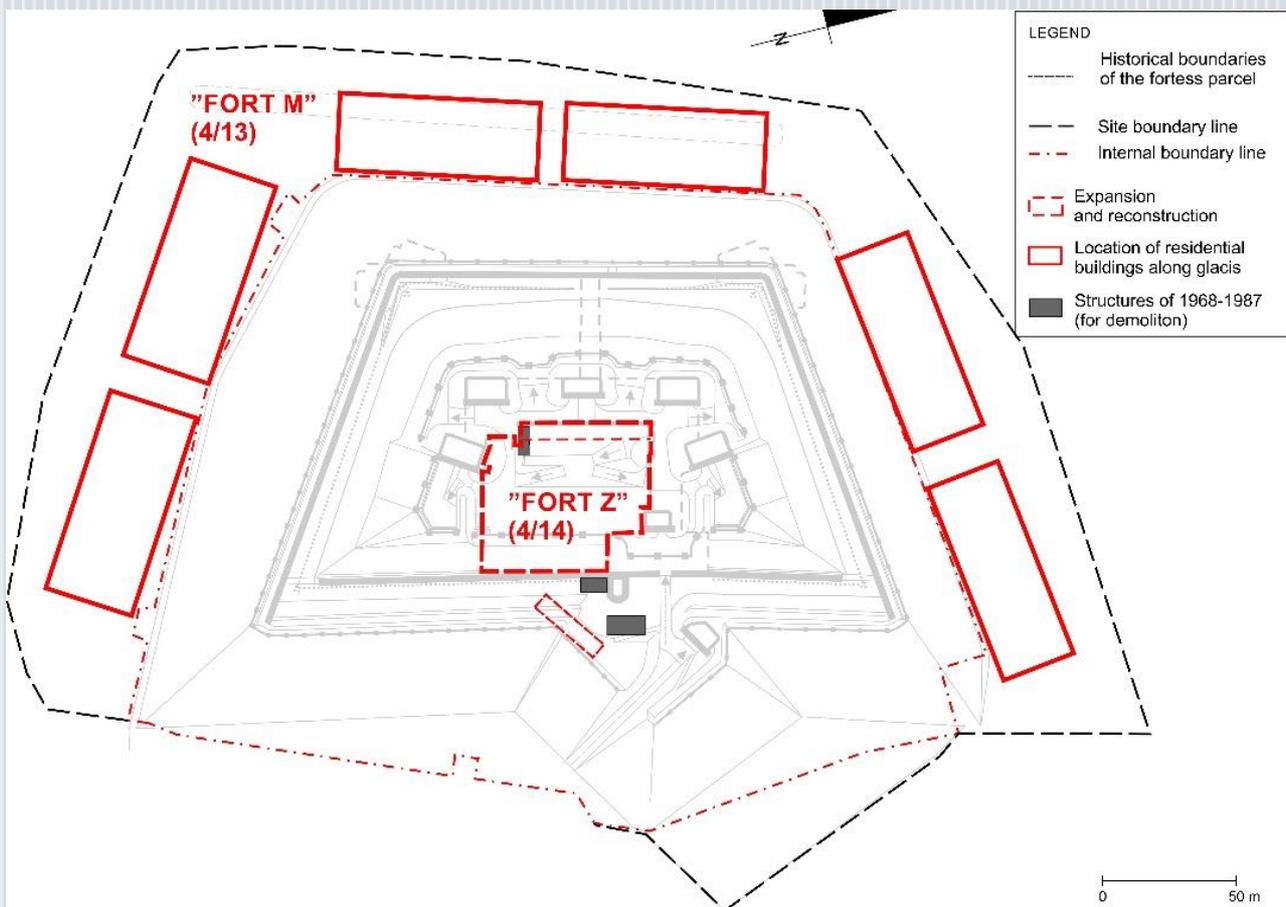


Fig. 5. Planned housing development on the glacis (“Fort M”) with the location of the extension and reconstruction of the central part of Fort VIIa (“Fort Z”). (Source: own elaboration)

Current legal protection

Fort VIIa is entered in the Registry of Cultural Property of the City of Poznań under number A 245, 25 May 1983. It is subject to strict protection within a complex of 18 forts and “all other elements of the ring fortress such as earthworks, shelters, fortress green belt etc. – located in the fortress rayons of individual forts.” The justification of the decision reads that “the preserved examples are a perfect example of the Prussian defence system from the end of the 19th century. They also represent a consistent development and modernisation, as a result of the development of artillery in the Poznań Fortress, erected in the ‘new-Prussian’

system. These fortifications are an example of the peak achievement of fortifications in this period worldwide.”

Unfortunately, as in other cases, the decision to enter it in the registry in the 1980s is largely laconic and does not specify the actual aspects of value in detail. The decision did not specify the value of the historic area and what elements should be protected. This situation hinders the contemporary issuing of permits for adaptations and makes it necessary to re-justify the scope of protection.

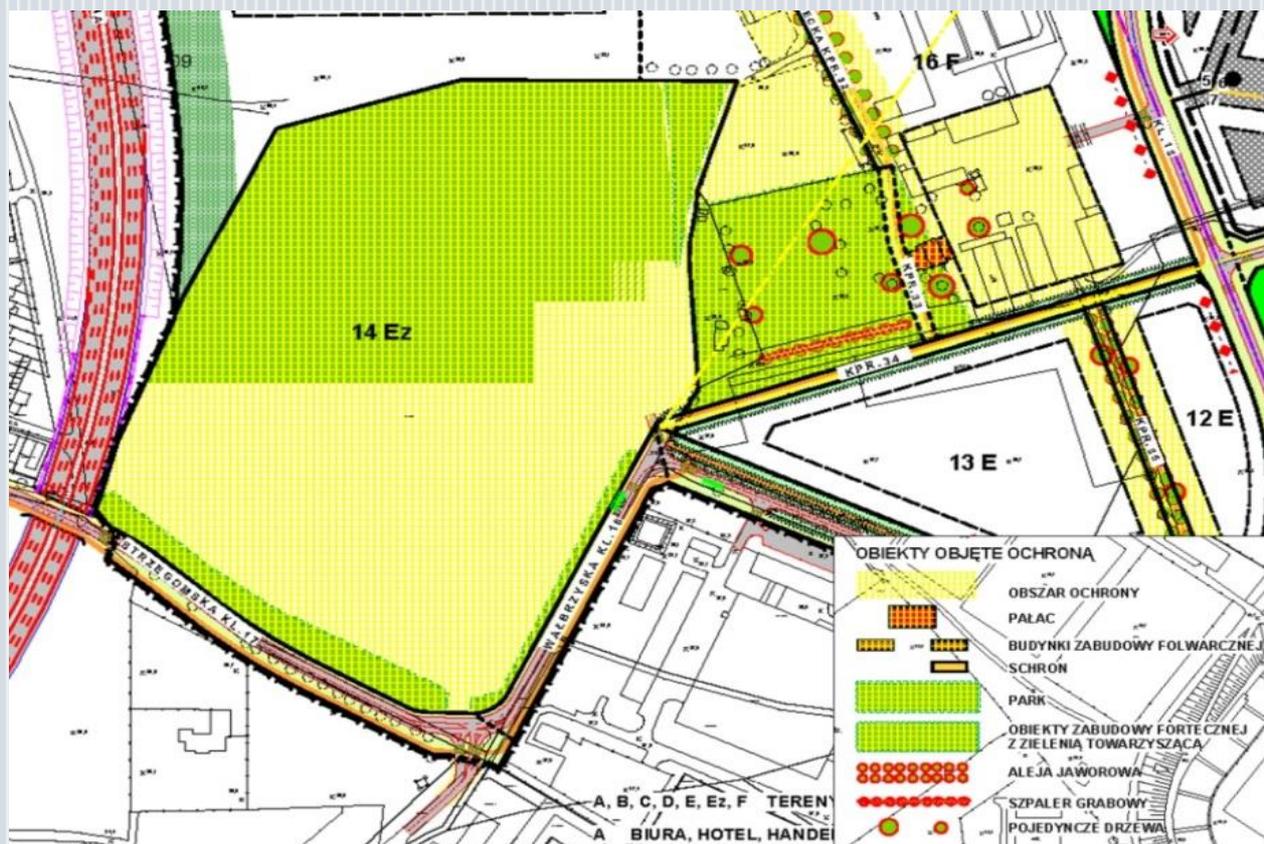


Fig. 6. Section of the spatial management plan for the “MARCELIN” area with Fort VIIa in Poznań (Source: Internet)

The act of local law – the spatial management plan for the “Marcelin” area of Poznań (Fig. 6) – defines the terrain of the historic fortress plot in §3 as “Ez – terrain for general city services” for plots 4/13, 4/14, 5 as well as 4/3 and 4/11. Further on, §10 reads that “In the terrain bearing the symbol 14 Ez, after the cessation of its use for special purposes, the fort will be designated for sports, recreation and gastronomy, while fully taking into account the requirements of the Conservator of Historic Buildings”. In the plan in question (§17) “with regard to the protection of areas and valuable architectural buildings, urban layouts and elements of nature, the following are established: 1) Extension of the park in order to bolster the existing facility and make a connection with the accompanying greenery of Fort VIIa”.

Within the scope of protecting the fort (§17, point 5) points 1-4 establish: “1) Reconstruction and revitalisation of the fort facilities, taking into account other provisions of this resolution; 2) Removal of the passage along the eastern boundary of the fort and buildings that are not elements of the fort within its territory and in the buffer zone (in fact, in the glacis area – author’s note) and supplementing the greenery with appropriate species of trees and shrubs; 3) It is permissible to change the function in accordance with the provisions of § 10 section 12.” It is worth recalling at this point that the “lex developer” housing act allows these provisions to be waived, however.

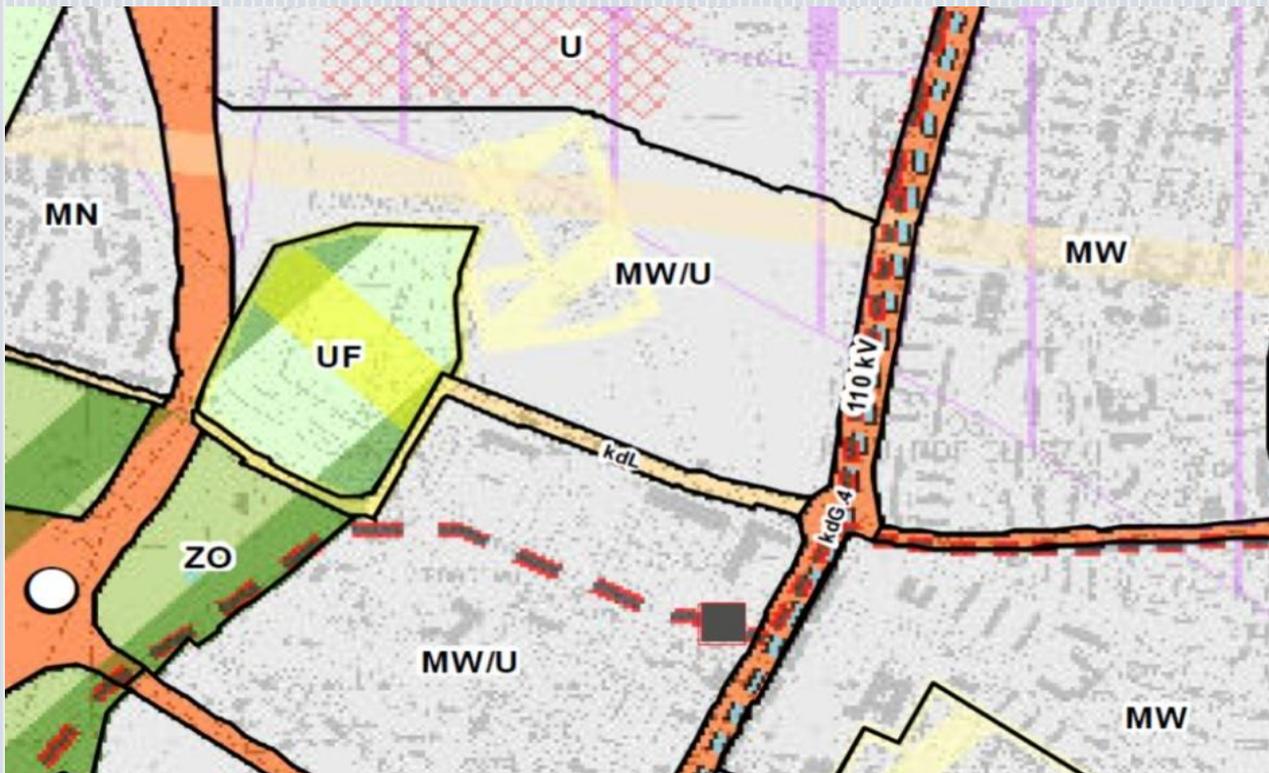


Fig. 7. Section of the spatial development conditions and the directions for land planning for Fort VIIa in Poznań (Source: Internet)

In the current spacial development conditions and the directions for the land planning (henceforth the Study) of the city of Poznań from 2014 (Appendix I to the Study), the area in question is a section of the area entered in the registry of cultural property and a historical monument (marking in Fig. 7: yellow strip). These are “the remains of Prussian fortifications from the end of the 19th century, including a ring of 18 outer forts with all the elements of a fortress, such as earth profiles, shelters, protective green belts, etc., located in the fortress areas” (vol. I, p. 72). The discussed Study (vol. I, p. 64), distinguished as one of the stages of Poznań’s development, discernible in the form of a cultural landscape, distinguishes “a fortress city with a complex of 18 outer ring forts and intermediate works” (original text). At the same time, we read about existing pressure on the development of the areas adjacent

to the forts, where "Proposals for the development and use of forts generally do not comply with their architectural and historical values and lead to the destruction of the historic substance of these facilities."

The terrain of Fort VIIa within the borders of the historic fortress plot belongs to the area of so-called structural green wedges (the third ring of the fortress belt) (p. 29) (in the drawing marked as dark green, stripes), which in Poznań constitute the basis of urban green spaces. It represents a historically shaped and consistent planning system developed in the 1930s¹⁶⁹. There is also a threat to the continuity of the green wedges – for instance, from building work, which is contrary to the ecological role of these areas. The description of the biotic conditions (p. 42) reads that the greenery accompanying the fortifications is one of the dominant biologically active spaces (the city's living environment). "These are the remains of the former greenery found in these facilities (camouflage trees, obstacle plantings, background masks, lines of trees along artillery batteries and alleys accompanying the military roads)". Later on, the post-fort greenery is referred to as "mainly spontaneous vegetation that grows over and destroys the remains of old military facilities (...)." At the same time it is indicated that the "fort greenery" (original writing) "is also a shelter and feeding spot for bats inhabiting the interior of these buildings" (p. 45). Indeed, the terrain of Fort VIIa is located in the Natura 2000 "Fortifications w Poznań" area (PL.ZIPOP.1393.N2K.PLH300005.H) (pp. 16, 64) and is listed in Annex II of the Habitats Directive of the EU. It is a special area of bat habitat protection designated on 5 February 2008 (GDOiS, 2008) within the moat boundaries (4/14) and not directly involving the glacis (Fig. 8). Provisions of the Nature Conservation Act of 16 April 2004 (Journal of Laws 2020.55, as amended) in article 33 point 3 prohibit "deteriorating the integrity of a Natura 2000 site or linking it with other sites".

¹⁶⁹ Raszeja, E., Gałęcka-Drozda, A. 2015. *A contemporary interpretation of the idea of the Poznań urban greenery system in the context of the city's strategy*. Studia Miejskie, Vol. 19, s. 75-87.



Fig. 8. Section of the moat with trees on the main rampart and the glacis (author: R. Kalak).

Opportunities and threats presented by investment plans

The possibilities regarding the adaptation and development of historic fortifications from the 19th century mainly depend on their current state of preservation, especially when it comes to dilapidation in the historic structures, which mostly consist of earth forms, enclosed buildings and fortress details. If dilapidation is minor and the fort's apparatus is legible and technically well-preserved, the adaptation of the existing elements of the fort takes priority. The availability of forms and the scope of adaptation and modernisation work are defined by: the spatial scale of the fort facilities, their cultural content as well as features arising from their original role (functional and spatial structure, building techniques and materials, location and nature of the surroundings). These aspects include interior divisions, load-bearing and non-load-bearing elements (structures) or modernised technical apparatus¹⁷⁰. Moreover, experience also shows that basic restrictions on the adaptation of defensive structures include cramped interiors that do not correspond to modern standards or functional norms as well as limited daylight, a complicated communication system, design features that

¹⁷⁰ Molski, P. 2009. *Adaptations – forms and conditions*. In: *Adaptation of the heritage objects to modern utility needs*. (Ed). Szmygin, B.

significantly limit interior transformations, difficult access for the disabled or restrictions related to the protection of unique natural values¹⁷¹.

In the case of Fort VIIa, the limitations on adapting the barracks to a new role necessitate the expansion of the fort area on the earth rampart with a partial reconstruction of its transverse outline. This expansion requires deep foundations and the removal of the ramp leading to the battle stations. This represents a loss of historical value.

It is worth pointing out that the current status of ownership and the secondary divisions of the fortress plot do not constitute an obstacle to the spatial, functional and visual (landscape) coherence of Fort VIIa in its historical boundary as an open, generally accessible, recreational and leisure area with accompanying functions (natural, historical education) , etc.). The direction taken to make Fort VIIa available within the moats as a centre for social activity should be assessed as appropriate, as opposed to introducing residential buildings, which clashes with the role of a well-preserved fort included in the registry of cultural property.



Fig. 9. The dead wood in the area of the fort's glacis – a reserve of biodiversity (author: R. Kalak).

¹⁷¹ Górski, M.2009. *Conservation rules for the adaptation of defensive works of the newer fortifications in the context of the educational function of the monument*. In: *Adaptation of the heritage objects to modern utility needs*. (Ed). Szmygin, B.

The separated part of “Fort M” should be not regarded as conducive to the legibility and integration of historical structures; moreover, it certainly does not maintain the *genius loci*. It occupies part of the earthen structure – a mounded battle slope with veteran trees that are priceless for the urban landscape. The forest and park area that has developed over decades is planned to be replaced by multi-storey multi-family buildings with underground parking lots with an estimated total excavation area of 1.89 ha (which is almost 54% of the area of plot 4/13 – 3.63 ha), along with extensive external communication and underground networks. In total, the earthworks (excavations from 0.5 to 6.2 m deep) will cover over 2.5 ha, which is over 70% of plot 4/13). This may not only lead to the destruction of existing vegetation (mainly old trees in this case), but also soil degradation (e.g. soil life, the soil seed bank, or the release of carbon dioxide in different soil horizons), as well as disturbing the existing water relations. Changes in all vegetation layers and soil degradation directly affect water relations (e.g. decreasing soil retention in the soil subsurface, increase in soil temperature, surface erosion, etc.).

Moreover, a key role in the development potential is played by the natural value of areas referred to as *natura urbana* (so-called fourth nature, novel ecosystems)¹⁷² (fig. 9), which includes the vegetation of Fort Villa that features norway maple (*Acer platanoides* L., 25.8%) and black locust (*Robinia pseudoacacia* L., 27.4%) as co-existing species in the tree stand (measured trees). Black locust as a established invasive species¹⁷³ can be tolerated in certain locations in urbanised areas¹⁷⁴, because it was intentionally introduced into the fortifications¹⁷⁵. Therefore, it represents a sense of historical continuation and can be gradually replaced by native species using tree-stand management appropriate for a site listed in the registry of cultural property¹⁷⁶. Among trees of foreign origin found in cities, the black locust is mentioned as a species whose presence will ensure the survival of trees in urbanised areas in an era of climate change¹⁷⁷. It should be noted that 20-60% of plants in the flora of 54 European cities are foreign species¹⁷⁸.

¹⁷² Kowarik, I. 2011. *Novel urban ecosystems, biodiversity, and conservation*. Environ. Pollut. 159, 1974–1983.

¹⁷³ Tokarska-Guzik, B., Dajdok, Z., Zajac, M., Zajac, A., Urbisz, A., Danielewicz, W., Hołdyński, Cz. 2012. *Plants of foreign origin in Poland, with particular emphasis on invasive species*. Generalna Dyrekcja Ochrony Środowiska, Warszawa. PDF online.

¹⁷⁴ Sádlo, J., Vítková, M., Pergl, J., Pyšek, P. 2017. *Towards site-specific management of invasive alien trees based on the assessment of their impacts: the case of Robinia pseudoacacia*. NeoBiota 35:1-34.

¹⁷⁵ Pardela, Ł, Kowalczyk, T., Bogacz, A., Kasowska, D., 2020. *Sustainable Green Roof Ecosystems: 100 Years*

of Functioning on Fortifications—A Case Study, Sustainability 12, no. 11: 4721

¹⁷⁶ *Guidelines recommended by the General Conservator of Monuments of 06.03.2019 r.* (DOZ.6521.14.2019.DJ).

<https://www.nid.pl/upload/iblock/7d9/7d9c1522d679670907da2a8778e82c86.pdf>

¹⁷⁷ Martin A. Schlaepfer, Benjamin P., Guinaudeau, P. M., Nicolas, W. 2020. *Quantifying the contributions of native and non-native trees to a city's biodiversity and ecosystem services*. Urban Forestry & Urban Greening, Vol. 56, 126861

¹⁷⁸ Kowarik, I., von der Lippe, Cierjacks, A. 2013. *Prevalence of alien versus native species of woody plants in*

The separated section of “Fort Z” is the central area of Fort VIIa within the moats on the gorge side and with a fragment of the glacis (referred to as a “buffer zone”, while historically only the I rayon should be considered as such). It is assumed that the excavation reaching a depth of 0.5 m underground will be carried out by selecting historic mounds (earth profiles) up to the full height of the fire line of the gorge site (approximately 12.1 m). The volume of earth to be excavated is estimated to be about 2000–2500 m³. The area covered by the planned excavation has already been cleared of trees and bushes. Moreover, the outline of the excavation includes a part of the internal communication in the form of ramps, which will be replaced with a new enclosure to fill the space of the levelled earth forms. Ramps are historical elements that distinguish the facility, which should be preserved as much as possible and used when adapting Fort VIIa to a new role. Communication with the rampart within the front caserne enhances the educational value and can make the facility more attractive. In addition, the introduction of new buildings should be carried out while maintaining the earth profiles, using the existing rooms of the fort, taking into account the restrictions resulting from the presence of bats.

The biggest threat that might destroy the identity of the historic fort is the introduction of residential buildings (“Fort M”). This action would set the historic fort on a par with any post-military wasteland without conservation protection (e.g. abandoned training grounds, military units, warehouses, etc.), and where housing could be built. This is due to the provisions of the special “lex developer” housing act, which allows apartments to be constructed “*regardless of the existence or provisions of the local spatial development plan*”. The same article of law does not allow construction if it contradicts the spacial development conditions and the directions of the land use planning. There are, however, a number of exceptions to this rule. “*The condition of non-contradiction with the study does not apply to areas that in the past were used for railway, military, production or postal services, which currently do not function as such.*” Justifying the revitalisation of the historic fort with the need for aggressive development is an example of how the adaptation of historic buildings to new needs has been pathologised. In this way, the *genius loci* is irretrievably lost, and the historic apparatus of the fort (“Fort Z”) becomes a mere luxurious addition to the rest of the housing project, and not vice versa.

The location of residential buildings on a historic combat slope, despite the use of green walls, will adversely affect the physiognomy of the area, disturbing the perception of the fort and extending far above the main rampart with its historic Hauptkampflinie. Thus, the buildings will become the dominant feature, competing with the historic fort while at the same time posing a threat to birds (window collisions). The housing development will change the outline of the object viewed from the immediate vicinity (the fort’s exposition).

Berlin differs between habitats and at different scales. Preslia 85, pp. 113-132.

There is also a real risk that, due to disturbances in water relations, many of the existing trees will not survive in the years following the completion of the construction. Landscape protection will therefore be most effective without interference, which is in line with the provisions contained in the UNESCO Recommendation on the Historic Urban Landscape on the historic urban landscape of 2011¹⁷⁹.

Conclusion

The investment pressure related to the introduction of residential buildings to the glacis area diverts attention from the essence of protecting the historic fort and reduces public discussion to the trivial preferences of dissatisfied stakeholders. It shifts the burden of the discussion itself towards answering the questions of how to integrate residential buildings, instead of focusing on the answer how to avoid them in the fort's exhibition area. This situation contributes to a growing conflict between the stakeholders in the fort development process, some of which directly indicate the domination of modern housing ("Fort M") over protection ("Fort Z"). The matter is additionally complicated not only by the division of the private land that occurred after its purchase, but also by EU funding (a financial partnership between private concerns and local government) obtained for this purpose. Significantly, EU funds in many countries are largely used to protect bat habitats on fortifications (e.g. the New Dutch Waterline).

The many years of neglect and lack of renovation have also had a bearing on the deterioration of the building. This often provides an excuse to carry out large-scale investment to protect historic structures from further degradation, as their maintenance generally exceeds the financial capacity of private owners. With the current division of forces and the provisions of the so-called "Lex developer" act, a question mark looms over the fate of many forts in Poznań.

There is no doubt that the reconstruction and extension of the fort for new roles ("Fort Z") should aim to maintain the legibility of individual parts of the fort in the least invasive way for the monument. The provisions of the so-called "Lex developer" for post-military areas, regardless of their provenance, can be used as a gateway to introduce housing in places where it should never exist (Natura 2000 area).

¹⁷⁹ UNESCO, 2011. *Recommendation on the Historic Urban Landscape*. <https://www.unesco.pl/>

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