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ARCHAEODIGIT Training Courses Materials - D.2.2.1



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Abstract	This document presents the joint training courses (TCs) delivered within Activity 2.2 of the ARCHAEODIGIT project, covering all four test areas: Macerata (MAC) and Sepino (SEP) in Italy, and Omišalj (OMI) and Kaštela (KAS) in Croatia. The document is structured as follows: a summary report (Chapters 1–3) provides an integrated overview of the activity, its thematic content, its implementation across the four locations, and an account of participant feedback. Full descriptions of the course materials and applied outcomes are contained in two sections: • Section 1: Training Courses in Macerata and Sepino • Section 2: Training Courses in Omišalj and Kaštela These sections document the training materials and contents actually implemented during the courses, including thematic contents, methodological frameworks, case studies, practical exercises and applied outputs developed in the test areas.

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Introduction

Activity 2.2 of the ARCHAEODIGIT project – Joint Training Courses and Transnational Placements – provided for the delivery of four training courses (TCs) across the Italian and Croatian test areas of the project, targeting a total of 60 participants. The courses were held in Macerata (MAC) and Sepino (SEP) in Italy, and in Omišalj (OMI) and Kaštela (KAS) in Croatia. The first course opened in Macerata in October 2025 and the last concluded in Sepino in February 2026, with the Croatian courses taking place between November and December 2025. Across all four locations, a total of 68 participants attended the training courses.

The activity was led by the University of Macerata (UMC), which co-designed the structure and content of the training courses together with the University of Pula (UPU). The organisation and hosting of the courses and the placements were managed by the respective local partners: MAC, SEP, OMI and KAS.

The training courses were open to participants recruited through public calls for applications. Target groups included NEETs (not in education, employment or training, including recently graduated individuals in the field of cultural heritage and tourism), young cultural and tourism operators, and other motivated individuals with a professional or personal interest in archaeological heritage, sustainable tourism and cultural management. The courses were delivered in the local language of each test area (Italian in MAC and SEP, Croatian in OMI and KAS).

Each course was structured around three thematic modules of approximately 20 hours each, delivered in a workshop format that combined structured lessons, the presentation and critical discussion of good practices from Italy and Europe, and applied practical work on real archaeological sites and parks from the respective test areas. Participants who completed all three modules received recognition of the competences acquired.

A transnational placement programme was associated with the training courses: 15 learners from the 4 courses were selected to carry out a three-week work-based experience at a host institution located in the other country (Italian participants going to a Croatian test area and vice versa).

While the four courses shared a common structure and set of objectives, the applied component of the training was deliberately organised in different ways across the test areas, reflecting the distinct institutional contexts and the agreed division of work between the partners. The Italian and Croatian courses adopted different approaches to the applied component, and the two Italian courses also



differed from each other: the Macerata course was based on interdisciplinary working groups developing documented projects across the three modules, whereas Sepino used the Archaeological Park of Sepino as a single shared case study with individual work assessed module by module. The summary chapters of this document set out these methodologies and their outcomes in an integrated form; full and detailed descriptions – including the content of each module, the teaching materials, and the outcomes of the applied work – are provided in the sections, each prepared by the responsible partner: Section 1 covers the courses held in Macerata and Sepino, and Section 2 covers the courses held in Omišalj and Kaštela.

1. Structure and Themes of the Training Courses

1.1. Overview of the Thematic Modules

The thematic content of the training courses was jointly designed by UMC and UPU in close alignment with the broader objectives of the ARCHAEODIGIT project and with the outcomes of the co-creation workshops held within the project. The co-creation process had identified a core set of competences needed by professionals working in the management and valorisation of archaeological heritage: the ability to communicate heritage to diverse audiences through evidence-based narratives; the capacity to plan and manage archaeological sites and parks in an integrated, sustainable and community-oriented way; knowledge of digital tools and their appropriate application to heritage contexts; and familiarity with the funding landscape for cultural and tourism projects at national and European level.

These needs translated into three thematic modules per course. All four courses covered the same first two modules (Storytelling and ICT; Planning and Management). The third module differed by country: in Italy it addressed Geographic Information Systems for archaeological heritage, while in Croatia it covered EU and national funding for projects dealing with archaeology and cultural site management. This difference reflected both the distinct professional landscapes of the two countries and the complementarity of the two skill sets within the broader project framework.

It should be noted that the shared modules were not delivered as a single common syllabus: while the aims and the overall framing were held in common, each location developed the content independently, with its own trainers, emphases, case studies and applied work. This was true not only between Italy and Croatia but also between the two Italian courses, where Macerata and Sepino

were taught by different trainers and followed distinct approaches. The summaries that follow give an integrated overview at the level of aims and themes; the location-specific content, teaching approaches and applied outcomes are documented in full in the respective sections.

1.2. Module 1 – Storytelling and ICT for the Valorisation of Archaeological Heritage

The first module addressed storytelling and digital technologies as tools of critical design and cultural mediation, not as marketing or communication instruments in a conventional sense. Storytelling was positioned as a structural component of heritage planning: a means of making the archaeological record accessible to diverse publics, of mediating between scientific knowledge and community experience, and of grounding heritage interpretation in methodologically sound, evidence-based narratives.

Key themes developed across the module included: the definition and differentiation of target publics (from specialists and institutional stakeholders to families, schools, older visitors and people with specific accessibility needs); the methodological framework for scientific storytelling, including the risks of spectacularisation and anecdotal substitution; the analysis of the site context and its publics as a prerequisite for any storytelling project; the integration of tangible and intangible heritage in narrative design; and the use of digital technologies across a spectrum of immersivity (from illustrated panels and podcasts to augmented and virtual reality), always evaluated in terms of accessibility, sustainability and coherence with the archaeological context.

The module also devoted attention to co-creation as a methodology for involving communities and stakeholders as active producers of meaning, and to the question of which voices and perspectives are represented – or absent – in heritage storytelling, drawing on gender archaeology and intersectional approaches. A range of good practices from Italian and European contexts was presented and critically discussed throughout.

1.3. Module 2 – Planning and Management of Archaeological Parks and Sites

The second module introduced participants to the principles and methodology of urban and territorial planning as applied to archaeological sites and parks. Starting from a reflection on the city and the territory as cumulative products of human intervention, the module developed the analytical



and design tools needed to elaborate an archaeological park plan in compliance with the relevant legal frameworks and planning instruments.

The core of the module was a seven-system analytical framework for the knowledge phase of an archaeological park plan: the archaeological system (maps, predictivity and vulnerability assessments); the environmental-naturalistic system; the settlement system; the historical and cultural context; the visit and fruition system; the economic system; and the legislative system. This framework was synthesised through a SWOT analysis and translated into project actions, each described through a standardised action sheet. The module examined the distinction between an archaeological site and an archaeological park, the different models for park management (public, local/regional, partnership, commercial), and the governance actors at all levels from local to European. Good practices from Croatia and Europe – including Burnum, Ephesus, Carnuntum and Pompeii – were presented and discussed.

1.4. Module 3 – GIS for Archaeological Heritage (Italy) / EU and National Funding for Cultural and Tourism Projects (Croatia)

In Italy, the third module introduced participants to the fundamentals of Geographic Information Systems and their application to the management, protection and valorisation of archaeological heritage. The module progressed from the conceptual foundations of geographic representation to the practical use of GIS software, covering data structures (rasters and vectors), spatial analysis, georeferencing, and the production of cartographic outputs at different scales. The module also addressed the digital chain for an archaeological park (from survey to communication), the ethical management of geospatial and visitor data, and the integration of GIS with other digital tools.

In Croatia, the third module addressed EU and national funding mechanisms for projects in the field of archaeology, cultural site management and tourism promotion. The module provided participants with a structured overview of the EU funding architecture: the Multiannual Financial Framework (MFF), Next Generation EU (NGEU), and the main Cohesion Policy instruments (ERDF, Cohesion Fund, ESF+, JTF). The Croatian national framework was presented in detail, including the Strategic Framework for the use of ESI funds 2021–2027, the Partnership Agreement, Operational Programmes and Integrated Territorial Programmes, and the National Recovery and Resilience Plan (NRRP). Practical guidance on project development, application procedures and fund management was integrated throughout.



2. Development of the Training Courses

2.1. Italy: Macerata and Sepino

The Italian training courses were organised and delivered by the University of Macerata. The course in Macerata was held at the Department of Human Studies of the University of Macerata from 27 October to 17 December 2025, with each module lasting 21 hours (7 lessons of 3 hours each). A bonus field trip to the archaeological sites chosen by each participant group was also organised and counted as a remedial lesson. The course in Sepino was held at the Archaeological Park of Sepino (Altilia) from 12 January to 14 February 2026, structured over three training weeks, with each module lasting 20 hours, for a total of 60 hours.

MACERATA (MAC)	
Dates	27 October – 17 December 2025
Location	Università degli Studi di Macerata – Dipartimento di Studi Umanistici
Total hours	63 hours (3 modules × 21 hours each)
Participants	20
Participant profile	8 Master's students in Archaeology; 2 Master's students in History; 2 recent graduates in Cultural Heritage (NEETs); 2 professionals in Cultural Heritage; 2 PhD students (Ancient History; History of Art and Museology); 1 municipal employee (Cultural Office); 2 students in Philosophy; 1 student of the Academy of Fine Arts (illustrator)
Trainers	Module 1 – Storytelling: Ludovica Xavier de Silva (UMC) Module 2 – Planning: Roberta Angelini (UMC) Module 3 – GIS: Riccardo Carmenati
Placement	5

SEPINO (SEP)	
Dates	12 January – 14 February 2026
Location	Archaeological Park of Sepino (Altilia)
Total hours	60 hours (3 modules × 20 hours each)
Participants	12
Participant profile	6 university students; 2 cultural/tourism operators; 4 other motivated individuals (heritage & sustainable tourism). Educational background: 2 Master's; 4 Bachelor's; 2 secondary diploma; 1 PhD; 3 postgraduate specialisation.
Trainers	Module 1 – Storytelling: Enrico De Luca Module 2 – Planning: Luciano De Bonis Module 3 – GIS: Maria Notardonato
Placement	5

2.2. Croatia: Omišalj and Kaštela

The Croatian training courses were organised and delivered by the University of Pula (UPU) in partnership with the local test area partners. The course in Omišalj was held at the Municipality of Omišalj from 4 to 13 December 2025, structured over 7 days across three modules. The course in Kaštela was held at Vila Nika, Kaštel Stari, from 6 to 21 November 2025, structured over 6 days.

OMIŠALJ (OMI)	
Dates	4–13 December 2025 (7 days)



Location	Municipality of Omišalj, Croatia
Total hours	60 hours (3 modules × 20 hours each)
Participants	14
Participant profile	5 employed; 6 unemployed; 2 self-employed; 1 student. Most hold a university degree; two have a higher vocational qualification; one secondary school only.
Trainers	Module 1 – Storytelling: Anica Dobran Černjul Module 2 – Planning: Aljoša Vitasović, Mauro Dujmović Module 3 – EU Funds: Anica Dobran Černjul
Placement	3
KAŠTELA (KAS)	
Dates	6–21 November 2025 (6 days)
Location	Vila Nika, Kaštel Stari; Vitturi Castle, Kaštel Lukšić (AI session)
Total hours	60 hours (3 modules × 20 hours each)
Participants	22 (14 employed; 4 unemployed; 4 students)
Participant profile	14 employed; 4 unemployed; 4 students
Trainers	Anica Dobran Černjul, Daniel Tomić, Mauro Dujmović; UPU staff incl. Mate Herceg; dr. sc. Ivan Biliškov (AI session)
Placement	2

2.3. Teaching Approaches

Across all four courses, the shared pedagogical commitment was to treat learning as an active, critical and applied process rather than a passive reception of information. Lessons were designed to be interactive, drawing on real cases and concrete problems rather than abstract definitions, and the presentation of good practices was consistently framed as an opportunity for critical analysis rather than simple illustration. Within this shared orientation, however, the applied phase of the training was organised differently from one location to another, reflecting the distinct institutional contexts and the specific opportunities offered by each test area: the Italian and Croatian courses adopted different applied models, and the two Italian courses (Macerata and Sepino) themselves differed in how the applied work was structured. These differences are summarised below and described in full in the sections: see Section 1 (Italy) and Section 2 (Croatia).

In Italy, the two courses shared the same critical, applied orientation but organised the applied phase in two distinct ways (see Section 1, 'Teaching Approach'). In Macerata, participants were divided into interdisciplinary groups of mixed backgrounds – including archaeology students, PhD researchers, professionals, cultural operators, and participants from other fields – each tasked with developing a coherent project on a chosen archaeological site of the test area (the Roman villa of Villamagna, the archaeological area of Helvia Ricina, and the Archaeological Park of Suasa), carried through and progressively enriched across all three modules. In Sepino, by contrast, the applied phase was built around the Archaeological Park of Sepino itself as a single, shared case study, with participants engaged in the direct analysis of the site throughout the course; rather than multi-module group projects, the applied work took the form of individual outputs assessed module by module, the form of which differed according to the subject (a design-project laboratory in Storytelling, a written assessment in Planning, and hands-on data exercises in GIS). The full outcomes of both courses are documented in Section 1.

In Croatia (see Section 2), the workshop-based approach was oriented towards participant engagement with real case studies and local professional experience. The Croatian courses placed particular emphasis on grounding theory in concrete professional contexts, with the trainers' real-world expertise consistently identified by participants as one of the most valued features of the learning experience. The Kaštela course, which was specifically praised for the quality of its trainer-participant interaction, serves as a reference model for this approach within the project.



2.4. Transnational Placements

Each training course envisaged the selection of learners for a three-week transnational placement at a host institution in the partner country. Italian participants were hosted by organisations in the Croatian test areas, while Croatian participants were placed in the Italian test areas, including archaeological sites, tourism boards, and cultural and tourism organisations. The placements provided participants with practical experience related to the training topics and the pilot actions developed within the project. Overall, 15 participants took part in the transnational placements: 5 from Macerata, 5 from Sepino, 3 from Omišalj, and 2 from Kaštela.

3. Participant Feedback

At the end of each training course, participants were invited to complete an evaluation questionnaire covering multiple dimensions of the learning experience: the clarity and relevance of the course content, the quality of the trainers, the adequacy of time and materials, the degree of interaction encouraged, and the perceived usefulness of the course for professional practice. The feedback collected across the Italian and Croatian courses offers a consistent and broadly positive picture of the activity, with a number of shared themes emerging as highlights and a set of recurring suggestions for future improvement.

Because the Italian and Croatian courses followed distinct methodologies – group-based applied work in Macerata and a single, shared case-study model in Sepino on the Italian side, and the Croatian programme delivered by the University of Pula on the other – the feedback is presented here in two separate parts rather than aggregated, so that each set of results is read against the approach that produced it.



3.1. Italy: Macerata and Sepino

Course	Feedbacks	Main strengths identified	Suggestions for improvement
Macerata	Average score of **4.0/5** across the ten rated dimensions. Around three quarters of all individual ratings were at the top two levels of the scale. Highest-rated aspects: trainers' knowledge and achievement of course objectives (**4.5/5**).	Practical and workshop-based approach; clarity and preparation of trainers; Storytelling module; GIS/QGIS module for the concrete technical skills introduced.	More time for the GIS/QGIS component; greater share of hands-on and applied work; improved digital access for participants not affiliated with the host university; availability of a computer-equipped room for software activities.
Sepino	Average score of approx. **4.4/5**. Around **85%** of ratings were at the top two levels of the scale. Strong scores for trainers' preparation and adequacy of time allocated.	Trainers' preparation; choice of topics; clear and accessible explanations; connection between theoretical content and concrete examples; Archaeological Park of Sepino as an effective learning environment.	More worked examples; greater share of practical application.

3.2. Croatia: Omišalj and Kaštela

Course	Feedbacks	Main strengths identified	Suggestions for improvement
Omišalj	Overall feedback was very positive, with participants particularly appreciating the quality of the trainers, the diversity of topics covered, and the interactive nature of the course.	EU-funds module; practical expertise of the trainer; interactive format; diversity of topics and speakers; opportunity to network with heritage professionals; Storytelling content.	Longer course duration; possible standalone course on EU funds; more on-site fieldwork; follow-up collaborative activities; better tailoring to participant profiles where private-sector participants are involved.

Course	Feedbacks	Main strengths identified	Suggestions for improvement
Kaštela	Ratings were almost unanimous: on nine of the ten statements, all participants selected the highest level of the scale; on the remaining statement, all but a small share did so. No negative or neutral ratings were recorded.	Combination of theoretical foundations and real professional experience; trainer-participant interaction; Storytelling content.	Greater share of hands-on exercises compared to definitional content; more applied and on-site activities.

Taken together, and read each against its own methodology, the evaluations from all four courses indicate that Activity 2.2 met its educational objectives and was positively received by its target audiences. Across both countries the recurring request for more time and more applied, hands-on work is itself a measure of the engagement the courses generated, and points clearly towards extending, deepening and repeating training experiences of this kind.



4. Section 1: Training Materials implemented in MAC and SEP

The training courses organised by the University of Macerata (UMC) in Macerata (MAC) and Sepino (SEP) were structured around three thematic modules: Storytelling and ICT for the Valorisation of Archaeological Heritage; Planning and Management of Archaeological Parks and Sites; and Geographic Information Systems for Archaeological Heritage. Each module was designed as a coherent progression from theoretical foundations and methodological tools to applied practice, combining structured lessons with the presentation and critical discussion of good practices from Italy and Europe.

The courses were conceived not as lectures in the traditional sense, but as processes of critical design and problem-solving, where participants were called upon to engage actively with the material, to question established approaches, and to develop their own methodologically grounded proposals. The use of real archaeological sites and parks as working contexts – rather than abstract or hypothetical scenarios – was a defining feature of both courses, ensuring that the competences developed were directly applicable to the professional contexts in which participants operate.

While the two courses shared the same structure, objectives and thematic content, they differed in their workshop approaches and in the specific sites chosen as applied contexts, reflecting the distinct territorial and institutional realities of the two test areas. These differences are addressed in the section on the teaching approach and in the final section on results.

Teaching Approach

The pedagogical model adopted in both courses was designed around a two-phase structure that applied to each of the three modules. In a first phase, participants attended thematic lessons delivered by the module trainer, covering the theoretical and methodological foundations of the subject. These sessions were structured as interactive exchanges rather than one-directional transmissions of information: participants were encouraged to question the material, connect it with their own professional or research experience, and contribute to the collective development of shared analytical and design tools.

A central methodological principle common to both courses was that digital technologies – whether in storytelling, planning or GIS – were consistently treated as instruments in the service of clearly defined cultural and scientific objectives, never as ends in themselves. The selection, use and evaluation of any technological tool was always grounded in questions of accessibility, sustainability,



coherence with the archaeological context, and long-term manageability. This critical stance towards ICT was woven through all three modules and constituted one of the key competences that participants were expected to develop.

In both courses, the lessons were accompanied by the presentation and critical discussion of examples and good practices drawn from Italian and European contexts. These were not offered as models to be replicated, but as case studies to be read analytically – to identify what worked, what did not, why specific choices were made, and what lessons could be drawn for the participants' own projects. The aim was to build a shared methodological vocabulary and a critical awareness of the field before moving into the applied phase.

Group-based Applied Work in Macerata

In Macerata, the second phase of each module took the form of a structured group assignment. Participants were divided into three interdisciplinary groups, each deliberately composed to include a range of backgrounds and competences. The groups brought together Master's students in Archaeology and History, PhD researchers, recently graduated professionals, cultural operators, and participants from other fields including philosophy, fine arts and language studies. This heterogeneous composition was a conscious pedagogical choice: working across disciplinary boundaries, negotiating different forms of expertise, and integrating diverse perspectives are skills that are central to real-world heritage management, and the course aimed to train them explicitly.

Each group selected an archaeological site or park from the broader test area and worked on it across all three modules, developing a coherent, multi-layered project that grew progressively in depth and complexity as new tools and frameworks were introduced. The sites chosen were: the Roman villa of Villamagna (Urbisaglia), the archaeological area of Helvia Ricina (Villa Potenza, Macerata), and the Archaeological Park of Suasa with the Civic Museum 'A. Casagrande' (Castelleone di Suasa). For the GIS module, participants were reorganised into four groups, with a fourth group working on Septempeda (San Severino Marche).

The group projects were not isolated exercises: they were presented and discussed in plenary sessions at the end of each module, with feedback provided by the trainer and by fellow participants. This peer-review dimension reinforced the critical and dialogic culture of the course, and helped participants to refine their proposals in response to constructive challenge. The suitability of the projects was assessed as part of the process for awarding the Open Badge at the end of the course.

A field trip to each group's chosen site was also organised as a bonus activity, allowing participants to engage directly with the physical reality of the sites they were studying.

Workshop Approach in Sepino

In Sepino, the applied dimension of the course took a different form, shaped by the unique opportunity offered by the location: lessons were held at, or in close proximity to, the Archaeological Park of Sepino (Altilia), a well-preserved Roman site whose remains include a forum, basilica, temples, theatre, thermal baths and stretches of the ancient road network. This setting made it possible to ground the teaching in direct, tangible engagement with a real archaeological context throughout the course.

Rather than dividing participants into interdisciplinary groups working on a range of external sites, the Sepino trainers adopted an approach built around the Archaeological Park of Sepino itself as a single, shared applied context. Across the three modules, participants were guided through the direct analysis of Saepinum – observing its current condition, identifying problems and opportunities, and developing methodologically grounded responses to it. The applied phase, however, was not limited to collective discussion: in each module participants produced individual work that was formally assessed. The form of this applied work differed by module, reflecting the distinct nature of the three subjects, and is described in the section on the results of the applied work. This model prioritised the depth of engagement with a single, well-understood context over the breadth of independent project development across multiple sites, and was particularly effective in fostering a shared understanding of the complexity and specificity of real-world archaeological heritage management.

In the GIS module, the applied work took the form of hands-on exercises in which participants worked directly with structured geographic data relating to the context of the Archaeological Park of Sepino, applying the techniques learned to the analysis and management of spatial data in an archaeological setting. The exercises were built on open-source data retrieved online – including administrative boundaries from the ISTAT portal and data from the GNA (Geoportale Nazionale per l'Archeologia). They included the statistical elaboration of the paving of the Forum of Saepinum, using QGIS to analyse and map the spatial and material characteristics of the forum's floor surface (described in the section on the results of the applied work). These exercises exemplified the Sepino course's approach of using the park itself as the primary learning environment.

4.1. Storytelling and ICT for the Valorisation of Archaeological Heritage

The first module addressed storytelling and digital technologies (ICT) not as instruments of communication or marketing, but as tools of critical design and cultural mediation. It was delivered in both Italian test areas, but by different trainers and with distinct emphases and case studies: in Macerata the module was taught by Ludovica Xavier de Silva, and in Sepino by Enrico De Luca. The two courses shared the premise that storytelling is a structural component of heritage interpretation rather than an ornamental addition, but they developed it differently. The content of each is described separately below.

Storytelling at Macerata

The Macerata course approached storytelling from the perspective of public archaeology, framing it as a method of mediation between scientific knowledge and the public and as a means of communicating the history, identity and significance of a site. It opened with the Faro Convention (Council of Europe 2005) and its definition of cultural heritage as a shared resource and of heritage communities as groups who value and wish to transmit specific aspects of that heritage, with particular attention to the Convention's articles on access to heritage and democratic participation, on heritage and knowledge, and on heritage and the information society. This positioned storytelling as a civic and cultural practice rather than a promotional technique.

A substantial part of the module was devoted to defining the public. Participants learned to distinguish between different audiences – experts; institutional and entrepreneurial stakeholders; the general non-specialist public; children, young people, young adults, mid-age and 'silver age' visitors, each typically reached through families and schools; and visitors with specific accessibility needs (people with disabilities, older visitors, foreign visitors) – and to recognise how the choice of a priority public conditions every subsequent decision. The specific difference between telling stories in a museum (objects removed from their context, groupable by theme) and in an archaeological park or site (objects in situ, with remains of different periods coexisting) was examined as a defining methodological problem.

The module then introduced the idea of a proper storytelling chain. Because archaeologists are not necessarily professional storytellers, interdisciplinary collaboration was presented as essential, drawing on the notion of the 'historyteller' (Losapio 2018) and on teams combining different expertise. The course stressed the risks of skipping steps in this chain – spectacularisation, incorrect reconstructions, the substitution of anecdotes for properly constructed tales – and insisted that

storytelling must rest on prior historiography, documentation and archaeological research. Where the record is incomplete, the gaps are to be filled with plausibility: that is, with scientifically grounded reconstruction of the material and immaterial context rather than invention. A practical method for scientific storytelling was presented (after Ripanti 2018): know the object; select the information according to the chosen target; identify the idea, point of view and genre of the narrative (monologue, letter, dialogue and so on); set the dramatic premise and define the possible characters; and develop a script or storyboard.

Particular emphasis was placed on the use of storytelling to represent marginalised groups, identities and communities that traditional displays tend to render invisible, often because of the scarcity of literary sources. The course traced this concern back to the Women in Heritage and Museums (WHAM) initiative of 1984 and the second-wave feminist demand for the representation of women in museums and historical narrative (Porter), noting that the focus of gender archaeology has since shifted from a quest for representation towards a more intersectional approach attentive to the interplay of gender, class, race and age. Digital technologies were treated as facilitators that should follow, not precede, the definition of the story and the management plan, and were discussed in terms of degrees of immersivity (low, medium, high). A structured contextual analysis was also taught, considering political, economic, social, technological, environmental and legal factors (a PESTLE-type framework) together with a SWOT analysis of the site's strengths, weaknesses, opportunities and threats as a basis for designing a storytelling strategy.

Good Practices presented at Macerata

The Macerata course illustrated its principles through a wide range of real case studies, presented as practical examples of storytelling approaches, methods and ICT tools and organised along a spectrum of increasing immersivity – from exposition settings, illustration and graphic novels, environmental and sound reconstruction, podcasts, edutainment and gaming, social media and public-archaeology projects, through to 3D reconstruction, augmented and virtual reality and videomapping. The cases were chosen to show how a single site or collection can be communicated through several complementary registers, and how digital tools are most effective when they serve a story and a management plan rather than standing in for them.

Among the museum-based examples, the Archaeological Museum of Igoumenitsa was presented for its use of dedicated exhibition settings that tell everyday-life stories and contextualise objects thematically; the Lugdunum Museum in Lyon for the way it combines physical exhibition settings



with digital content to connect the collection to the archaeological site and to organise objects by theme; and the Archaeological Museum of Tolentino for its focus on artisanal activities through a dedicated panel, an illustration and an experimental-archaeology reconstruction. These cases were used to discuss how interpretation can move from the object in isolation to the object as evidence of a way of life.

Collaboration projects and cultural networks were illustrated by 'Les rues de Lyon', a monthly comic conceived, produced and sold in Lyon by a local association of illustrators, each issue treating a historical event or figure of the city's history (including an issue on the foundation of Roman Lyon) and sold in bookshops and museum shops; and by the PlayMarche 'DCE' game, an edutainment product for children that weaves documented stories and characters across fifteen municipalities of the Province of Macerata into a single networked narrative. The geolocated video game of the National Archaeological Museum of Naples (MANN) was discussed as an example of gamification in which the player's choices shape the outcome, museum collections are explored and additional content is unlocked on site, and a personal story opens onto a broader, timeless narrative.

Social media, podcasting and digital integration were addressed through the National Roman Museum's practice of using individual inscriptions as the starting point for short stories on social platforms; the Ashmolean Museum's 'Museum Secrets and Fingerprints' podcast, which conveys additional content and sustains a relationship with the public before and after the visit; and the Fondazione Aquileia's 'Aquileia città di frontiera' podcast, which uses a sequence of emblematic dates to narrate two thousand years of the city's history. Finally, the integration of gamification, digital content and reconstruction with augmented and virtual reality was shown through 'Ebutius's Dilemma', a character-driven interactive experience developed for the Hunterian Museum (University of Glasgow) around the Antonine Wall – a UNESCO World Heritage Site – in which visitors follow the story of a Roman centurion and discover objects of emotional relevance to the character.

A detailed case study of the 'Gentiloni Silverj' Archaeological Museum of Tolentino illustrated the full process of developing a new storytelling strategy for a local collection: the institutional collaboration involved, the analysis of the previous exhibition's shortcomings, the design of new thematic narrative paths, and the range of ICT tools deployed. The Urbs Salvia pilot action, developed within the TRANSFER project, was also presented as an extended case study, illustrating the methodology for handling plausibility in reconstructive hypotheses and the architecture of the VR experience developed for the Republican Kilns of Pollentia-Urbs Salvia.



Storytelling at Sepino

The Sepino course, delivered over twenty hours across five four-hour days, was conceived explicitly as a path of critical design rather than as a course in cultural communication or marketing. It treated storytelling as an epistemic device for interrogating, organising and making the archaeological record accessible; as a means of mediation linking research, territory, local communities and visitors; and as a structural component of planning. Digital technologies – including augmented reality, virtual reality, mobile solutions and information systems – were presented as instruments of critical mediation, to be assessed against their real accessibility for differentiated publics, their long-term managerial sustainability, their coherence with the archaeological context, and their maintainability, updatability and transferability.

The course followed a deliberate progression: the theoretical foundations of storytelling applied to archaeological heritage; methods for analysing the context and identity of a site, understood as a complex system bound up with its publics, landscape and territory; the integration of tangible and intangible heritage and the critical use of ICT for inclusive, sustainable and responsible communication; the analysis of case studies and good practices; and a final applied design laboratory. The case studies – among them Pompeii, the Colosseum and Roman Forum, Vindolanda, Ostia Antica, Velia, Paestum and Stonehenge – were presented not as models to imitate but as good and bad practices to be discussed, in order to build a shared design vocabulary before the laboratory on Sepino. The site of Sepino itself was then used as an operational case study rather than a mere illustrative example, allowing participants to confront a stratified archaeological context, the relationship between ancient city, landscape and contemporary community, and the distinction between archaeological data, interpretive hypothesis and narrative reconstruction. The applied laboratory and its assessment are documented in the chapter on the results of the applied work.

The case studies were used as material for critical discussion rather than as templates: by examining well-known sites such as Pompeii, the Colosseum and Roman Forum, Vindolanda, Ostia Antica, Velia, Paestum and Stonehenge, participants were asked to identify recurring methodological patterns, common shortcomings and effective design approaches, and to weigh when and why digital technologies had been deployed. The aim was to build a shared critical vocabulary – distinguishing archaeological data from interpretive hypothesis and from narrative reconstruction – before applying it to the Sepino case in the laboratory.



The objectives of the Sepino course were articulated around four competences: developing methodological skills in narrative planning applied to archaeological heritage; providing tools for the critical analysis of territorial contexts and of publics; promoting a conscious, accessible and sustainable use of ICT; and fostering the design of solutions that are transferable, replicable and manageable over time. Throughout, the course insisted that storytelling for heritage is not the production of 'stories' or promotional products but the design of cultural-mediation projects able to interpret a real context critically, to respond to concrete problems of fruition, and to use digital technologies in a proportionate, sustainable and non-invasive manner.

The applied laboratory was structured in three successive phases. In the analysis phase, participants studied the context of the Archaeological Park of Sepino, surveyed the existing state of interpretive provision (the tools already in place, the publics reached, and the limits of both), and identified real problems of comprehension or fruition to be addressed. In the design phase, they defined a clear and circumscribed intervention perimeter, identified a priority public, constructed a narrative and interpretive device, and made a motivated selection of the ICT to be employed. In the formalisation phase, they drew up a structured written project and completed a guided laboratory worksheet, making explicit the objectives, exclusions, limits and quality criteria of the proposal. This sequence was designed to ensure that every project could be defended on methodological grounds rather than on grounds of creative appeal.

The assessment of the projects followed a standardised protocol applied uniformly to all participants, combining a quantitative rubric with a qualitative scale of methodological maturity and a discursive, reasoned evaluation intended for didactic feedback. The rubric assessed each project against eight criteria: the clarity of the intervention perimeter (the capacity to define where and on what the project intervenes); the coherence between context, objectives and public (the alignment between the problem identified, the intended recipients and the aims); the quality of the narrative objectives (clear, verifiable and non-generic); the structure of the narrative device (the capacity to design the visitor's experience and not only its contents); the conscious use of ICT (technology employed as an interpretive instrument rather than as an end in itself); accessibility and inclusion (attention to physical, cognitive, linguistic and digital barriers); sustainability and management (the managerial, maintenance and economic realism of the project); and critical awareness and the declaration of limits (the capacity to state exclusions, constraints and uncertainties). Each criterion contributed to the final score, against a threshold of adequacy.



In addition, each project was situated along a qualitative scale of methodological maturity, articulated in six levels: the mechanical application of the method; a method understood but applied rigidly; a method applied correctly; a method internalised; a method used in a critical and conscious way; and a method fully mastered and transferable. This scale made it possible to distinguish projects that were correct but still 'scholastic' from those that were mature and self-aware, and from those that attained excellence through their critical capacity and transferability. The evaluation of each project combined a joint reading of the written project and the laboratory worksheet, the attribution of a score according to the rubric, the qualitative judgement according to the maturity scale, and a written return articulated into strengths, structural (rather than stylistic) weaknesses, a final methodological synthesis and a concluding verdict; each participant also received a precise didactic correction clarifying what was not methodologically sound, why, and how it might have been better structured. The guiding principle was not to assess how far a project 'pleased' from a creative point of view, but how far it was methodologically solid, defensible and feasible – a deliberate preparation for dialogue with institutions and professional contexts.

4.2. Planning and Management of Archaeological Parks and Sites

The second module addressed the planning and management of archaeological parks and sites. As with the first, it was taught by different trainers in the two test areas and with markedly different content: in Macerata by Roberta Angelini (University of Macerata, 13-14 November 2025), with a focus on urban and territorial planning and a concrete methodology for drafting an archaeological-park plan; in Sepino by Luciano De Bonis (University of Molise), with Giovanni Ottaviano contributing the case-study session, with a focus on heritage and landscape law and on the integrated tourism valorisation of cultural landscapes. The two courses are described separately below.

Planning at Macerata

The Macerata course set archaeological heritage within the broader discipline of urban and territorial planning. It began from the idea of the territory as the outcome of successive human transformations – a 'text' that records the processes of anthropic stratification over the centuries – and of the city as the pre-eminent expression of this historical action. The origins of cities were distinguished between growth by accretion (from village to progressively more complex forms, as at Paris or Rome) and cities of foundation (capital, military and colonial cities, from the Greek and Hellenistic colonies and Roman military colonies to planned modern capitals such as Washington or Sabaudia), with the



Roman castrum offered as an example of how urban form follows rules that the study of urban morphology seeks to understand in order to inform development policy.

The course traced the post-war evolution of Italian planning through four generations of urban plans: the first-generation plans of post-war reconstruction, concerned mainly with the road network and with densification (exemplified by Piacentini's 1931 plan for Rome and the 1942 planning law); the second-generation 'plans of urban expansion', which sought to rationalise growth and to understand the mechanisms of land rent; the third generation, marking the shift from a culture of expansion to one of transformation, with attention to the recovery and requalification of historic centres and disused industrial and railway areas and to the quality of the urban environment; and the fourth generation, which links spatial and socio-economic planning, separates strategic-structural from operational planning, and introduces instruments of land-rent equalisation and of consultation and evaluation. Two fundamental concepts – programming (the coordinated set of forecasts to be realised through pre-established plans) and planning (the technical organisation of a given territory for its ordered and rational use) – were distinguished, together with the three phases of planning (the cognitive phase of territorial analysis; the programmatic phase translating knowledge into needs and intervention programmes; and the design phase defining development choices). The actors and levels of territorial government were reviewed (elective institutions from the municipality to the European Union, and functional bodies such as river-basin authorities, mountain communities and park authorities), as was the Italian hierarchy of urban plans – territorial coordination plans, inter-municipal plans, general regulatory plans (PRG) and detailed plans (piani particolareggiati).

On this basis the course presented a concrete methodology for drafting the plan of an archaeological park, defined as a territorial area of predominantly archaeological value integrated with historical, cultural and environmental values, subject to a project of integrated and sustainable development pursued in close collaboration with the local community, with the creation of a tourism ecosystem as one objective of effective management. The methodology articulated the research into the knowledge of the territory and its history; the analysis of current planning instruments (the regional landscape plan – the PPAR/PPR Marche or its equivalent – and the municipal PRG); the interpretation of this information through a SWOT analysis; and a proposal for the park plan setting out objectives, actions and recipients. The analytical framework was organised into a set of systems – archaeological (site and territorial archaeological maps, predictivity and vulnerability maps), environmental-naturalistic, settlement, historical-cultural, fruition and visit, economic, and legislative – illustrated with reference to sites including Antigonea, the Archaeological Park of Urbs Salvia and Dodona. The

course also provided operational tools: a project 'action sheet' (recording objectives, description, type, activities, stakeholders, financial resources, timing, expected results and result indicators) and a model for integrating proposed actions into the existing municipal PRG, addressing both the plan drawing and the technical implementation norms.

In presenting the seven analytical systems, the course specified the kind of knowledge each is meant to assemble. The archaeological system gathers the site and territorial archaeological maps together with maps of archaeological predictivity and of vulnerability; the environmental-naturalistic system records protected areas, hydrography, vegetation and the ecological network within which the park sits; the settlement system describes the historical and contemporary forms of inhabitation around the site; the historical-cultural system documents the intangible heritage, the historical events and the cultural institutions of the territory; the fruition-and-visit system maps accessibility, services, routes and the existing visitor experience; the economic system considers the productive activities, the tourism economy and the potential for sustainable development; and the legislative system collects the constraints and the planning instruments in force. Read together, these systems support the SWOT analysis and the definition of objectives, actions and recipients that constitute the park plan.

The course illustrated this methodology with reference to concrete cases – among them Antigonea, the Archaeological Park of Urbs Salvia and Dodona – and equipped participants with two operational tools that they would use in the applied work. The first is the project 'action sheet', which records, for each proposed action, its objective, a description, the type of action, the activities involved, the stakeholders, the financial resources, the timing, the expected results and the indicators by which results will be measured. The second is a model for integrating the proposed actions into the existing municipal general regulatory plan (PRG), addressing both the plan drawing and the technical implementation norms, so that the park plan is not an abstract exercise but a proposal capable of entering the instruments that actually govern the territory.

Planning at Sepino

The Sepino course approached planning and management from the standpoint of heritage and landscape law and of the integrated tourism valorisation of cultural landscapes. Its first part examined cultural heritage in Italian legislation – in particular the Code of the Cultural and Landscape Heritage (Legislative Decree 42/2004), with its distinction between cultural property (beni culturali) and landscape assets (beni paesaggistici) – alongside the international and European frameworks.

These included the UNESCO World Heritage Convention together with a critical reading of the World Heritage notion and of the idea of the cultural landscape [UNESCO 1972; on the critique of the universalising World Heritage model see e.g. Smith 2006], and the European Landscape Convention [Council of Europe 2000], which defines landscape as an area as perceived by people and shifts the emphasis from exceptional sites to everyday and degraded landscapes alike. Particular weight was given to the Faro Convention [Council of Europe 2005] and its concepts of the heritage community and of territorial heritage, which reframe valorisation as a participatory process oriented towards the people who attribute value to heritage. The course also drew attention to the different semantic traditions condensed in the terms paesaggio, paysage, landscape and Landschaft.

Each of these frameworks was presented in terms of the shift it represents in the understanding of heritage. The Code of the Cultural and Landscape Heritage organises the Italian system around the twin notions of protection (tutela) and valorisation, and its distinction between cultural property and landscape assets provides the legal vocabulary within which any intervention on an archaeological park must be situated. The UNESCO World Heritage Convention [UNESCO 1972] introduced the idea of a heritage of outstanding universal value to be safeguarded for humanity as a whole, and later extended this to cultural landscapes; the course set this achievement against the critique that the resulting model tends to privilege monumental, expert-defined sites and a universalising narrative, at the expense of more ordinary and locally valued places [for this critique see Smith 2006]. The European Landscape Convention [Council of Europe 2000] marks a complementary move, defining landscape as an area as perceived by people and extending concern from exceptional sites to everyday and even degraded landscapes, with a corresponding emphasis on public participation and on landscape quality objectives.

The Faro Convention [Council of Europe 2005] was treated as the pivot of the course's approach. By defining cultural heritage as a group of resources inherited from the past which people identify as a reflection of their values, and by introducing the notion of the heritage community as those who attach value to specific aspects of heritage and wish to sustain and transmit them, it reframes valorisation as a participatory process centred on people rather than on objects. This connects directly to the idea of territorial heritage (patrimonio territoriale), in which the value of a site is inseparable from the wider territorial system of which it is part [on the territorialist reading of patrimonio territoriale see Magnaghi, Il progetto locale, 2000]. The semantic comparison between paesaggio, paysage, landscape and Landschaft was used to show how different European traditions

have understood the relationship between people, land and perception, and therefore how differently they frame the task of valorisation.

On these foundations the second part of the course developed the notion of integrated tourism valorisation. The Apulia Landscape Plan (PPTR) was examined as a worked example of treating heritage as territorial systems rather than as isolated points: its 'Atlante del patrimonio' reads the long-term structure of the processes by which a territory has been inhabited and transformed, and its territorial project on 'systems for the fruition of heritage assets' proposes coordinated, multifunctional ways of making that heritage accessible. The course connected this to the model of the ecomuseum – a community-based, territorial form of heritage institution, a concept introduced by Rivière and de Varine in 1971 – as a way of thinking about the Archaeological Park of Sepino not in isolation but as part of the cultural landscape and the living community of its context. The benchmark analysis of the MuSST2 programme and the 'AP Sepino Cultural Identity' good practice documented in the ARCHAEODIGIT Good Practices Report provided concrete reference points for the applied written assessment.

The second part turned to the 'touristic' valorisation of cultural landscapes and to good practices of integrated valorisation. It used the Apulia Landscape Plan (PPTR) as a worked example – in particular its 'Atlante del patrimonio' and its reading of the long-term structure of the processes of territorialisation, together with the territorial project on 'systems for the fruition of heritage assets' – as a model for treating heritage not as a set of isolated points but as territorial systems [on this territorialist approach to the patrimonio territoriale see Magnaghi, Il progetto locale, 2000]. The notion of integrated, multifunctional or 'ecomuseum-style' valorisation was central, connecting the archaeological park to the wider territorial heritage of its context [on the ecomuseum as a community-based, territorial form of heritage institution, a concept introduced by Rivière and de Varine in 1971]. The session of case studies, presented with Giovanni Ottaviano, set these ideas against concrete examples of integrated territorial valorisation. The applied phase of the module took the form of an individual written assessment, documented in the chapter on the results of the applied work.

4.3. Geographic Information Systems for Archaeological Heritage

The third module introduced participants to Geographic Information Systems (GIS) and their application to the documentation, management, protection and valorisation of archaeological and cultural heritage. It was delivered in both test areas using the open-source software QGIS: in

Macerata by Riccardo Carmenati (first lesson 28 November 2025) and in Sepino by Maria Notardonato. The two courses covered the same conceptual foundations of cartography and geographic information, but were taught as independent laboratories, each anchored in the relevant test-area context. They are described separately below.

GIS at Macerata

The Macerata laboratory, taught with QGIS 3.40, was organised as a progression from the historical and conceptual foundations of cartography to the practical use of GIS software. It situated modern cartography within a long history of spatial representation – from prehistoric drawing and pre-cartographic forms, through the development of geographic, topographic and thematic maps, to contemporary digital cartography and online mapping services – and introduced the fundamental rules and conventions of geographic representation. The course addressed the distinction between different types of maps (geographic, chorographic, topographic) and the rules of representation, scale and symbolisation, before turning to the geodetic foundations of cartography: the form of the Earth (sphere, ellipsoid, geoid), latitude and longitude, and the importance of always identifying the spatial reference system (SRS) associated with any dataset. On these foundations the laboratory developed the practical use of QGIS for handling and representing archaeological and territorial data.

Building on these foundations, the laboratory introduced the core components of a GIS – the distinction between vector and raster data, the relationship between geometry and attributes, the organisation of information in layers, and the role of the database and of queries in interrogating spatial data – and contrasted GIS with CAD in order to clarify what is specific to geographic information. Particular attention was paid to spatial reference systems and to the principal Italian cartographic systems, so that participants would be able to identify and, where necessary, transform the coordinate system of a dataset. The practical work then applied these tools in QGIS to archaeological and territorial data, in direct preparation for the group GIS projects developed in the Macerata course (documented in the chapter on the results of the applied work).

The laboratory also addressed numerical cartography and the practical handling of spatial data. It compared the vector and raster models and their typical uses, reviewed the data formats most commonly encountered in archaeological practice, and considered how data are acquired, whether by digitisation, scanning or derivation from existing cartography and orthophotos. As in any GIS work, the georeferencing of raster sources – the association of a scanned map, plan or aerial image with real-world coordinates through known control points and an explicitly chosen spatial reference

system – was treated as a foundational operation, since it is what allows historical and modern sources to be overlaid and analysed together. These techniques were then exercised in QGIS on archaeological and territorial data, preparing participants for the group GIS projects in which the Macerata teams produced multi-layer territorial maps, georeferenced site plans and thematic outputs connected to their storytelling and planning work.

The cartographic foundations were developed in some depth, since a correct understanding of maps underpins any use of GIS. The map was defined as a representation that is at once reduced (governed by scale), approximate (because a curved surface cannot be represented on a plane without distortion) and symbolic (mediated by conventional signs). The course reviewed the principal families of map projection and their properties – whether they preserve areas, angles or distances – and the classification of maps by scale (from large-scale topographic maps to small-scale geographic maps), by content (general or thematic) and by method of construction. It then turned to the geodetic foundations: the successive approximations of the Earth's form as sphere, ellipsoid and geoid; the definition of a datum; latitude and longitude and the graticule; and the representation of relief. The history of cartography, from pre-cartographic and early forms through to contemporary online services, was used to show how representation has always been bound up with the knowledge and the purposes of its makers.

GIS at Sepino

The Sepino laboratory followed a practical and interactive approach, designed to let participants work hands-on with already-structured data and to learn through concrete exercises. After establishing the conceptual foundations of GIS – the definition of a GIS and of geographic information; the distinction between geometry (point, line and polygon) and attributes; the layer model; vector and raster data structures; scale and data quality; the role of the database, with tables, fields, records and queries; the difference between GIS and CAD; and the range of application domains, including the protection and valorisation of cultural and natural assets and tourism – the course moved through cartography and numerical cartography (map projections and classification; reference surfaces and datum; the principal Italian systems, from Gauss-Boaga to UTM-ED50 and UTM-WGS84; official and regional technical cartography; vector and raster models; and the georeferencing of raster data through ground control points). Throughout, participants worked on a real case relating to the context of the Archaeological Park of Sepino, applying the techniques learned to the analysis and management of spatial data in an archaeological setting. The data were entirely open-source and

retrieved online, including administrative boundaries from the ISTAT portal and data from the GNA (Geoportale Nazionale per l'Archeologia).

The Sepino laboratory gave particular attention to numerical cartography and to the practical question of bringing heterogeneous data into a common spatial framework. It distinguished the vector and raster models and their respective uses, reviewed the principal data formats encountered in practice (such as the shapefile and the geodatabase for vector data, and the various raster formats), and addressed the acquisition of data by digitisation and scanning. The Italian cartographic systems were presented in the sequence in which a practitioner is likely to meet them – from the historical Gauss-Boaga system on the Roma40 datum, through UTM on the ED50 datum, to UTM on the WGS84 datum used by satellite positioning – together with the official and regional cartographic products (the national topographic series and the regional technical cartography) and the statistical base layers distributed by ISTAT. The georeferencing of raster data was treated as a key operational skill: the identification of ground control points of known coordinates, the choice of an appropriate spatial reference system, and the association of a raster image with its real-world position, so that historical maps, plans and orthophotos can be overlaid and analysed alongside vector data.

This conceptual and technical grounding was then applied directly to material from the Archaeological Park of Sepino. Because the data used were open-source and retrieved online – administrative boundaries from the ISTAT portal, archaeological data from the GNA (Geoportale Nazionale per l'Archeologia), and comparable sources – participants gained experience not only in processing data but in locating, evaluating and structuring it, which is itself a substantial part of real GIS work in archaeology. The applied exercises, including the statistical elaboration of the paving of the Forum of Saepinum described in the chapter on the results of the applied work, allowed participants to see how the techniques of the module translate into a concrete characterisation of an archaeological feature.

4.4. Results of the Applied Work

As described in the section on the teaching approach, the two courses adopted markedly different models for the applied phase of the training, and both produced documented outcomes. In Macerata, participants were organised into interdisciplinary working groups, each of which developed a project on a chosen archaeological site of the test area, carried through and progressively enriched across the three modules. In Sepino, the applied phase was instead built around the Archaeological Park of Sepino as a single, shared case study, and took the form of



individual work assessed module by module rather than of multi-module group projects. The two sets of outcomes are therefore not directly comparable in form, and are presented separately below within each module: first the Macerata group projects, then the Sepino applied work.

In Macerata, by contrast, the applied phase produced a set of documented group projects developed across all three modules. These projects are presented below, organised by module. Each was developed by an interdisciplinary group working on a specific archaeological site or park in the Macerata test area and presented in plenary at the end of the relevant module. They should be understood as methodologically grounded proposals developed within the time and resource constraints of a training course, rather than as finished plans or strategies. Their value lies in the quality of the analytical and design process they demonstrate and in the transferable competences they represent.

Module 1 – Storytelling: Applied Work

Working Groups' outputs in Macerata

Group 1 – Villamagna (Roman villa rustica, Urbisaglia)

Group 1 worked on the Roman villa of Villamagna, in the territory of Urbisaglia, a rural complex with a long occupational sequence (from the first half of the 1st century BC to the 8th/9th century AD) whose monumentalisation is attributed, on the evidence of brick stamps naming freedmen of the gens Herennia, to that family. A SWOT analysis identified the villa's historical-archaeological uniqueness, its monumental scale (around 7,800 m² divided into a pars rustica and a pars urbana) and its multidisciplinary research record as strengths, set against the fragmentary state of the remains, limited accessibility and the absence of visitor services.

Because the site cannot currently be visited in situ, the group designed a project – "Villamagna: narrazioni in corso" – intended to let the community experience the villa without entering it, and addressed in the first instance to the local community as a way of building an identity for a site long overshadowed by neighbouring Pollentia-Urbs Salvia. The project articulated several interconnected strands. The first was a temporary exhibition hosted within the Museo della Civiltà Contadina at the Abbadia di Fiastra, built on a comparison of three timelines – agricultural production at Villamagna in the classical and late-antique periods (with illustrations produced together with the Accademia di Belle Arti and the University of Macerata), the rural world of the late nineteenth and early twentieth centuries (the museum's existing display), and a participatory public-history strand gathering photographs and tools of the recent past from the community. A second strand proposed artistic

residencies, in collaboration with the Fondazione Giustiniani Bandini and the InRuins association, inviting contemporary artists to reimagine the site, with moments of public sharing.

A third strand developed a graphic novel concept (**Fig. 1**) built around two enslaved characters, Pollex and Tullia, whose daily routine – reconstructed from R. Carmenati's PhD thesis where an archaeobotanical study of the villa was carried on – explains the workings of the pars rustica and, in particular, the production of millet beer; conceived in adult and children's editions (the latter with a colouring book) and developed with the Illustration and Comics section of the Accademia di Belle Arti under archaeological supervision. The final strand proposed a craft beer (**Fig. 2**), "Herennia", produced with a local brewery in two lines (Urbana and Rustica, after the two parts of the villa) and carrying a QR-code traceability and narrative platform, drawing on the recent attention attracted by the discovery at Villamagna of the only documented European evidence of millet-beer production.

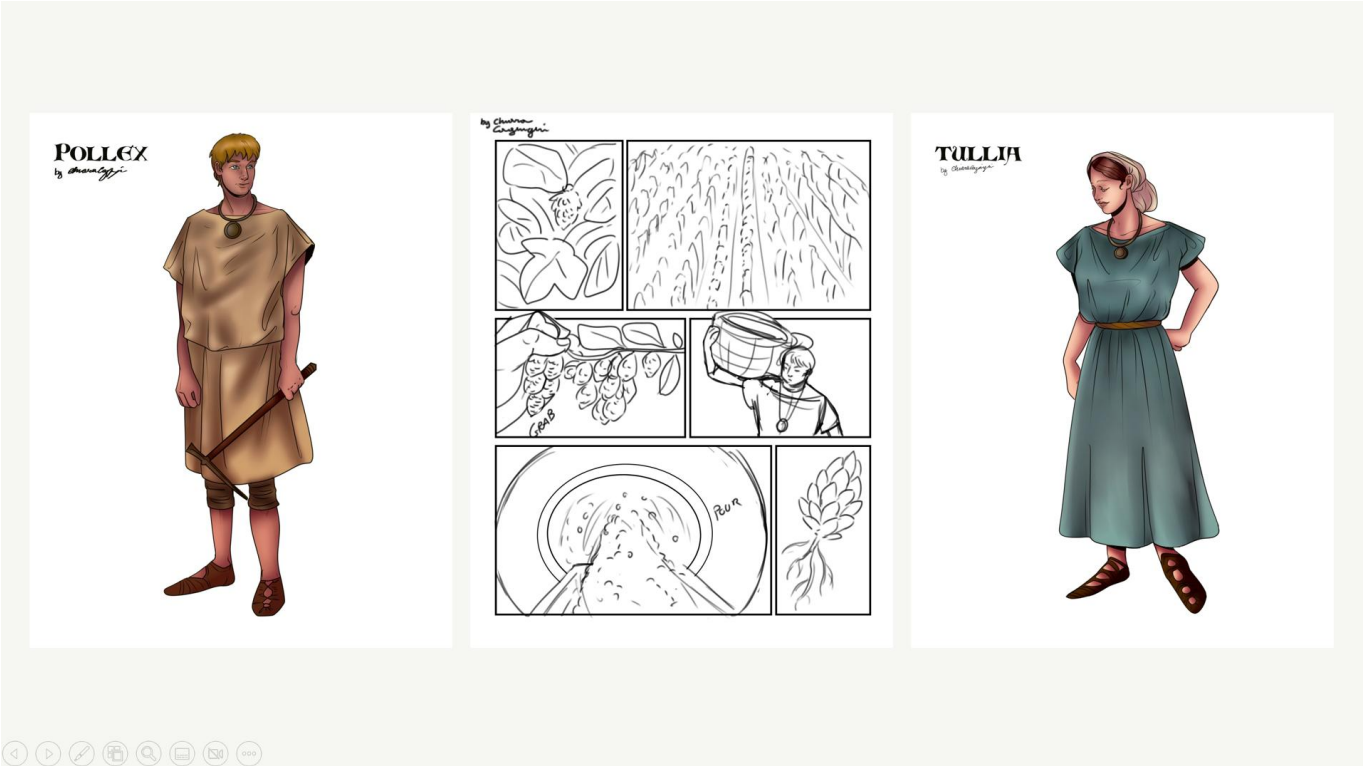

Figure 1 The presentation of the first draft of the proposed Graphic novel for Villamagna



Figure 2 The proposed label for a craft beer with information about the site

Group 2 – Helvia Ricina (Roman archaeological area, Villa Potenza, Macerata)

Group 2 worked on Helvia Ricina, the Roman colony at Villa Potenza (Macerata) whose principal surviving monument is the theatre, built in the early 1st century AD with a cavea for some two thousand spectators. The group's site assessment recorded a context whose identity is expressed almost entirely through the theatre – which, however, only acquires meaning when set back into an urban fabric that is no longer visible – and a public presentation (signage, web presence) that is sparse, academic and unattractive, with conservation, access and management problems. From this the group built a storytelling concept around the theatre as the place of the community's self-representation, and around the cultural continuity linking the Roman theatre to the modern performing-arts venues of Macerata, under the title "Da duemila anni, questa terra applaude" ("For two thousand years this land has applauded"). The central proposal, "Back to the Past", was a journey backwards in time articulated in three acts, beginning at the Arena Sferisterio (in the Gran Sala Cesanelli, connecting the venue's history to the traditional game of pallone col bracciale), continuing through the Teatro Lauro Rossi, and ending at the ancient theatre of Helvia Ricina (**Fig. 3**). The

narrative was to be carried by character-driven episodes and by digital media – among them a vertical LED screen activated by a presence sensor and a costumed protagonist who addresses the visitor – addressed to both adults and children, with the explicit aim of showing residents and visitors that the ancient theatre of a rural colony and the modern theatres of Macerata are part of a single living thread of community, voice and belonging. The group also developed a detailed website concept (**Fig. 4**) structured around a hero's journey narrative framework with QR-based interactive routes and slow tourism content.



Figure 3 One of the three storytelling phases connecting the theatrical buildings in Macerata (Sferisterio, Lauro Rossi and Helvia Ricina)



Figure 4 The website plan

Group 3 – Archaeological Park of Suasa and Civic Museum 'A. Casagrande'

Group 3 worked on the Archaeological Park of Suasa and the Civic Museum "A. Casagrande", with the aim of binding park and museum into a single integrated narrative ecosystem connecting spaces, publics and registers, and of linking the site's management plan to new storytelling oriented towards accessibility and participation, in synergy with the cooperative that manages the site (Abaco) and the University of Bologna, which directs the excavations. The project's unifying device was the voice of Livia Coiedia, a child living in the Domus dei Coiedii in the 2nd century AD, and it comprised four complementary outputs. The first was a didactic-narrative trail conceived as a "diffuse illustrated book" (**Fig. 5**) through the park, in which each of eight panels is a living page narrated in Livia's intimate, evocative voice (rather than explained), and at each stop children receive a tile that together complete a comic-style image of the Medusa. The second was a children's museum trail, "Livia e la città ritrovata", at the Casagrande museum, with short texts, illustrations, mini-games tied to the finds and a tactile mosaic table. The third was an escape room for adults in the Domus, "Il Segreto della Domus dei Coiedii", in which visitors move along the existing walkways (without altering the

original spaces) and meet four "spirits" representing successive phases in the life of the house – a founder-priest of the imperial cult, a matron, an enslaved woman, and a craftsman of the site's final phase – each guarding a fragment of the story to be reassembled, through period-appropriate enigmas, into a final solution. A fourth output, a puzzle brochure ("Enigmi di Suasa"), extended the same playful, participatory approach for adults (**Fig. 6**).



Figure 5 First proposed panel of the "diffuse illustrated book" for children



Figure 6 The puzzle brochure

Sepino – Applied Design Work on the Saepinum Case Study

In Sepino, the Storytelling applied work took the form of an individual project laboratory built on the Archaeological Park of Sepino as the operative case study. The laboratory was framed explicitly as an exercise in applied cultural-mediation design rather than creative or literary writing: each participant was asked to produce a storytelling project capable of interpreting a real context critically, responding to concrete problems of access and understanding, and using digital technologies in a proportionate, sustainable and non-invasive way. The work was structured in three phases – an analysis phase (study of the park's context, existing interpretive tools, publics and limits, and the identification of real comprehension or fruition problems); a design phase (definition of a clearly bounded intervention perimeter, a priority public, a narrative and interpretive device, and a motivated selection of ICT); and a formalisation phase (a structured written project and a guided laboratory worksheet making objectives, exclusions, limits and quality criteria explicit).

The projects were assessed through a standardised protocol applied uniformly to all participants, combining a quantitative rubric of eight criteria – clarity of the intervention perimeter; coherence between context, objectives and public; quality of the narrative objectives; structure of the narrative device; conscious use of ICT; accessibility and inclusion; sustainability and management; and critical awareness and the declaration of limits – with a qualitative scale of methodological maturity ranging from the merely mechanical application of the method to its critical, fully transferable mastery. Each participant received an articulated written assessment (strengths, structural rather than stylistic weaknesses, a methodological synthesis and a concluding judgement) together with individual didactic feedback. Consistent with the broader teaching approach, the assessment privileged the methodological soundness, defensibility and feasibility of each project over its creative appeal.

Module 2 – Planning: Applied Work

Working Groups' outputs in Macerata

Group 1 – Villamagna: 'Lavori in corso'

The Villamagna group's planning project (**Fig. 8**), "Villamagna: lavori in corso", addressed a critical finding of its analysis of the planning instruments: the site is absent from the regional landscape plan (PPAR), from the municipal PRG and, as an archaeological area, from the Regional Technical Map, where it appears only as arable land within a fence. Formal recognition as an archaeological park was therefore taken as the primary strategic objective. The group distinguished a short-term strategy from a longer-term plan. In the short term – exploiting the existing visitor base of the Abbadia di Fiastra and promoting slow, sustainable tourism (trekking, cycling and equestrian routes) with appropriate signage – it proposed the temporary exhibition at the Museo della Civiltà Contadina and associated products (the comic, the beer) as a way of beginning to build the site's identity and to test community interest, a strategy realisable immediately and capable of accelerating the creation of the park. The longer-term plan, framed within the principles of the European Green Deal (COM(2019) 640 final) and coordinated with the management plan of the Abbadia, comprised five spatially located actions: recognition of the park's perimeter; the construction of walkways, lighting and panels to make the site accessible; the creation of a space housing an info point, a ticket office and toilets; the maintenance and upgrading of the access route, with signage and a pedestrian path; and the restoration of the excavated structures together with the continuation of the archaeological excavation.





Figure 7 Proposed planned interventions on the site

Group 2 – Helvia Ricina: '2mila anni di applausi'

The Helvia Ricina group developed a planning project (**Fig. 7**), "Da duemila anni questa terra applaude. La comunità è il suo eco", built on a full territorial analysis (knowledge of the territory and its history, the regional landscape plan PPAR and the municipal PRG of 2024, the provincial archaeological map) and on a SWOT reading that weighed the site's proximity to Macerata, its place in the "Macerata Musei" network and its identity value against limited accessibility, absent services, inadequate maintenance and weak digital communication. Organised under the headings of what to strengthen, foresee and do, the project set out six concrete actions, each accompanied by objectives, activities, stakeholders, financial resources, timing and result indicators: managing site access with specialised staff (envisaging recruitment through the "L'Orologio" cooperative and training in guided visits and ICT); an integrated, low-impact green-maintenance plan to protect the remains and the landscape setting; new inclusive interpretive panels (in Italian, English and Braille) developed with the University and the Accademia di Belle Arti; the installation of a mobile stage and seating for about a

hundred people to make the Roman theatre a space "to be lived", funded through the Regione Marche ITI2 instrument; an annual calendar of cultural events (festivals, performances, historical re-enactments) in partnership with local and regional bodies such as the ProLoco, the Sferisterio association, Musicultura and AMAT; and an external storytelling action linking the Arena Sferisterio, the Teatro Lauro Rossi and the ancient theatre. The actions were conceived so as to valorise the area through communication, maintenance and technical-structural interventions without requiring any change to the municipal PRG in force.

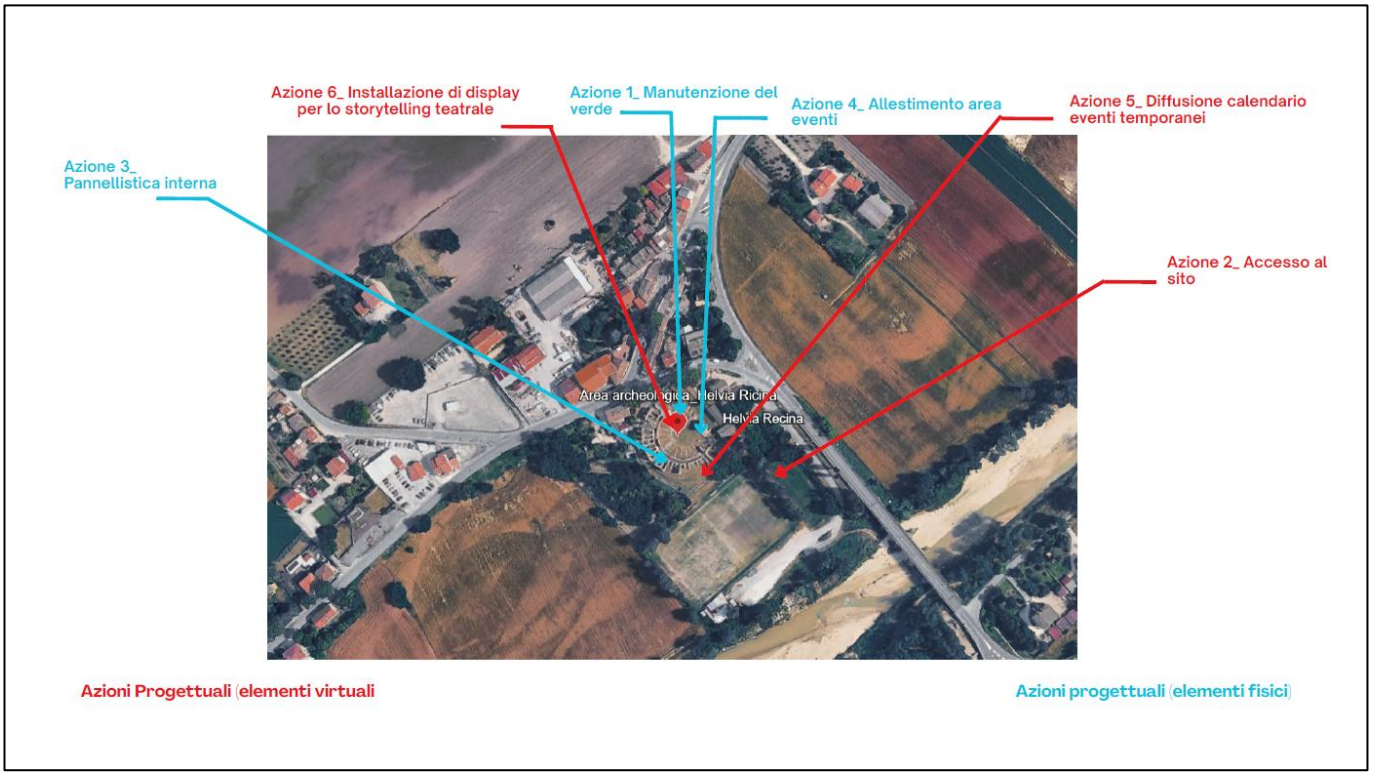

Figure 8 Proposed planned interventions on the site

Group 3 – Suasa: 'Suasa Vive'

The Suasa group's project (**Fig. 9**), "Suasa Vive: una comunità, un patrimonio, un futuro condiviso", followed an analysis of the park's relationship with its territory (the river Cesano, the historic centre of Castelleone di Suasa and the Casagrande museum) and a SWOT reading that set the monumental heritage, the strong museum-education programme, the combined museum-and-park ticket (free for residents) and the ongoing, publicly accessible University of Bologna excavation against the site's poor public-transport access, its non-recognition as an archaeological area, its seasonal or by-appointment opening, its Italian-only and non-tactile signage, the lack of wheelchair and pushchair access, and the risk of flooding. The project translated these findings into a set of actions combining interpretation, access and governance: a storytelling action; an immersive "from escape room to dinner" experience in the Domus dei Coiedii, in which four "spirits" representing successive phases of the house lead participants through mosaic- and fresco-based enigmas towards a final solution, completed by a meal in a local restaurant so as to join culture and territory and to encourage return visits; a cycle-and-pedestrian connection and a shuttle service between the historic centre and the park to overcome its peripheral position; new modes of access and fidelity-building for residents; the integration of the site into a tourist network with the nearby centres of Corinaldo, Senigallia and Mondavio and with local food-and-wine tourism; and an updating of the municipal PRG, including making it readily available to citizens, to reflect the area's archaeological status.



Figure 9 Proposed planned interventiones on the site

Sepino – Applied Work on the Saepinum Case Study

In Sepino, the Planning applied work took the form of an individual written assessment rather than a group planning project. Following the taught sessions – which addressed cultural heritage in Italian legislation and in the international and European frameworks (the UNESCO Convention and a critical reading of the World Heritage notion, the UNESCO cultural-landscape category, the European Landscape Convention, and the Faro Convention with its concept of territorial heritage and heritage communities), and then the integrated tourism valorisation of cultural landscapes through worked examples such as the Apulia Landscape Plan (PPTR) – participants sat a written test focused on the Sepino context.

The exercise asked participants to outline some general objectives – and, where relevant, the related lines of intervention or actions – for the integrated, multifunctional or 'ecomuseum-style' tourism valorisation of the territorial heritage surrounding the Archaeological Park of Sepino. Participants were expected to draw on the methods and practices presented during the course, including the long-term structure of the territorialisation processes set out in the 'Atlante del patrimonio e dei progetti territoriali' of the Apulia PPTR (in particular the territorial project on systems for the fruition of heritage assets) and the MuSST2 benchmark analysis, as well as on the 'AP Sepino Cultural Identity' good practice documented in the ARCHAEODIGIT Good Practices Report. The applied output of the module therefore consisted of individually assessed written responses grounded in the Sepino case rather than of a documented group plan.

Module 3 – GIS: Applied Work

Working Groups' outputs in Macerata

Group 1 – Villamagna

Group 1 produced two QGIS maps: a territorial overview integrating multiple data layers (nature reserve boundary, road network, archaeological areas, accommodation, river, archaeobotanical raster data) and a satellite-base map plotting Villamagna and Urbs Salvia with three tourist itinerary routes and the locations of local breweries, directly connecting the GIS output to the 'Herennia' storytelling project.

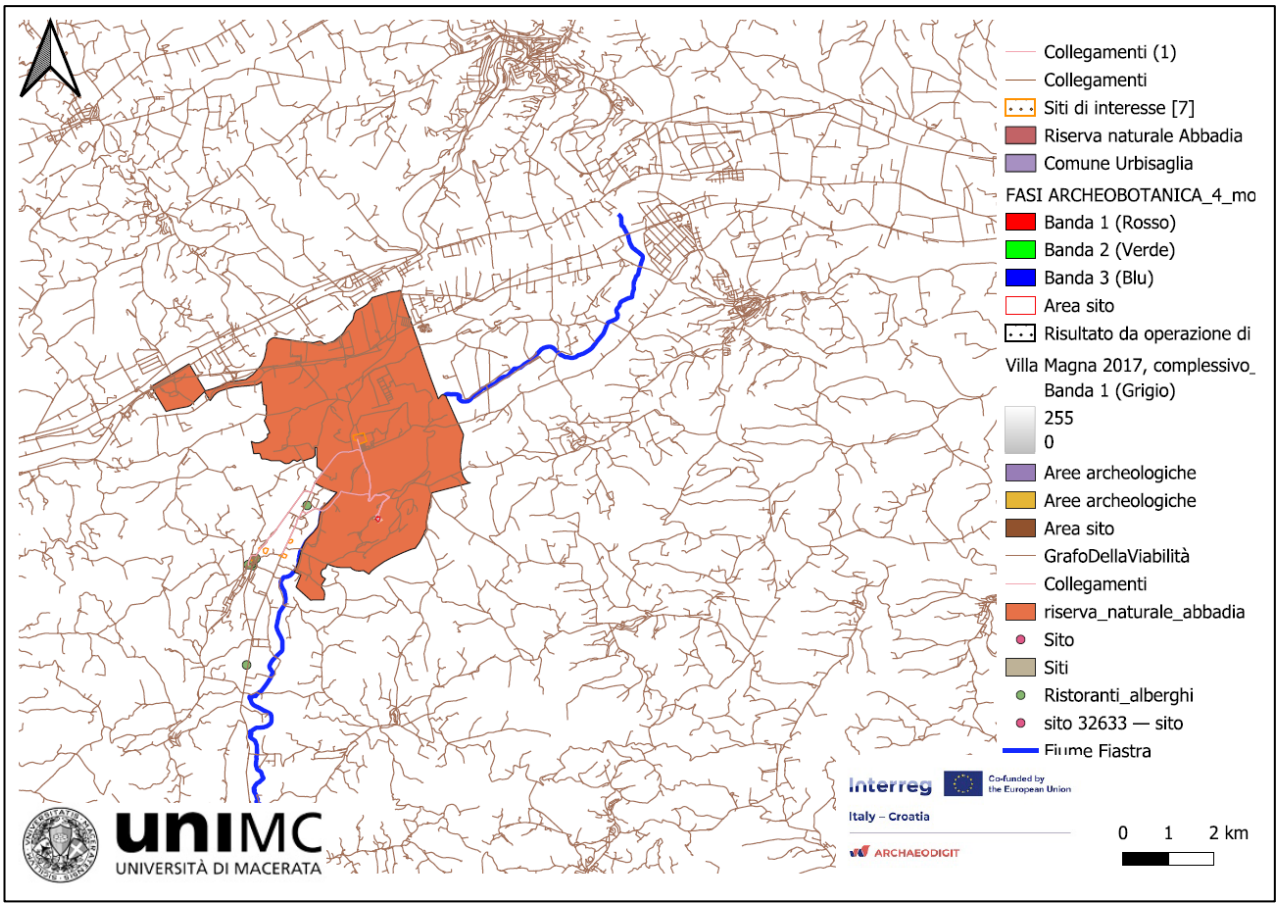

Figure 10 GIS project of Group 1

Group 2 – Helvia Ricina

Group 2 produced five maps at different scales: two site-level maps superimposing the georeferenced Roman planimetry onto satellite imagery; a regional map locating Helvia Ricina within the Valle del Potenza archaeological network; a map representing the 'Back to the Past' cultural itinerary across Macerata's institutions; and a road network accessibility map.

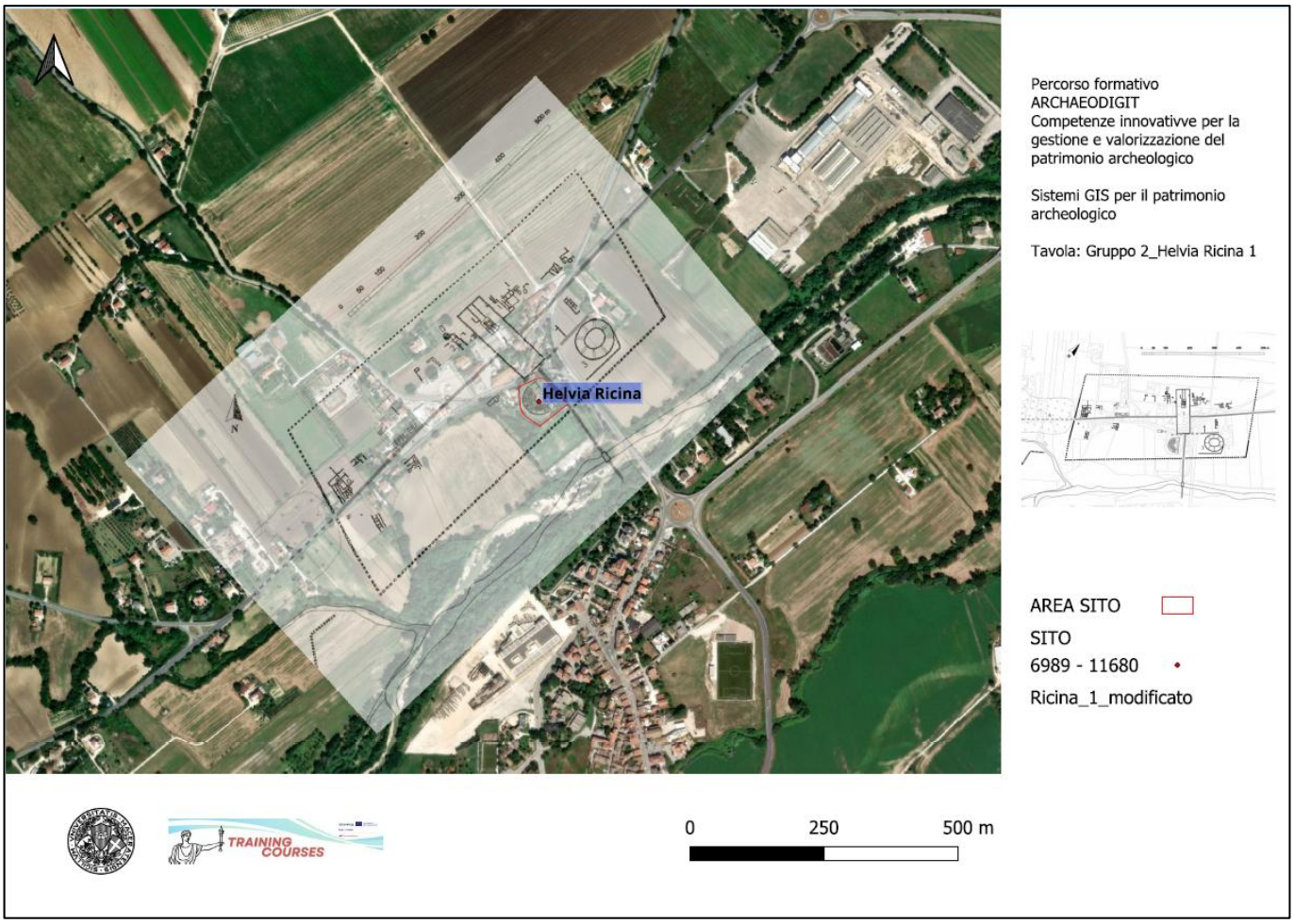

Figure 11 GIS project of Group 2

Group 3 – Suasa

Group 3 produced a four-sheet QGIS project at regional and site scales, including a map of the chronological phases of the Domus dei Coiedii overlaid on the current archaeological plan – a directly applicable management and communication tool for the site.

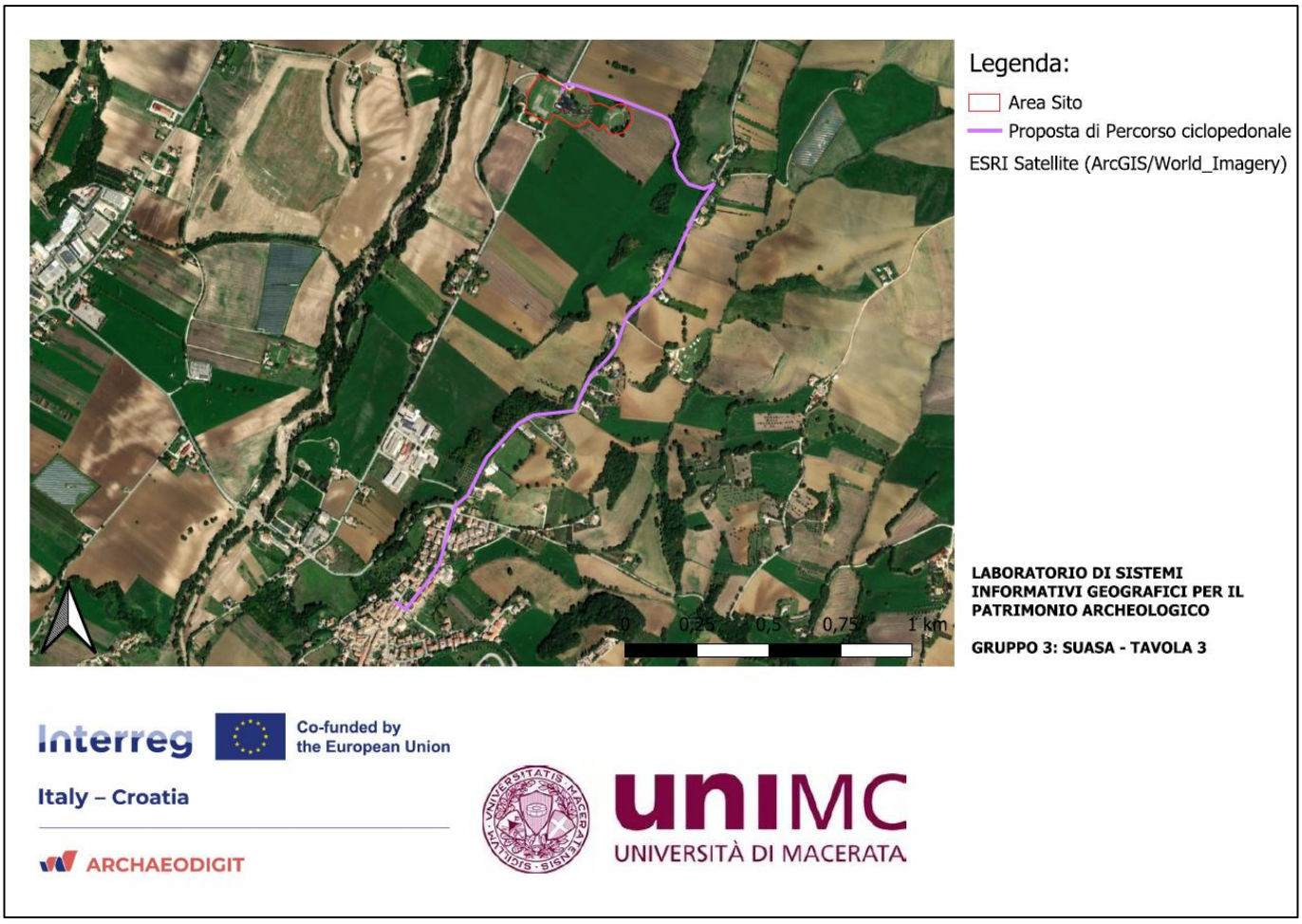

Figure 12 GIS project of Group 3

Group 4 – Septempeda (San Severino Marche)

Group 4 worked on Septempeda, the Roman city underlying San Severino Marche, producing a QGIS map showing the site, the surrounding frazioni, three archaeological site size categories, and the result of a buffer analysis – demonstrating the application of spatial analysis tools for defining archaeological protection and management zones.

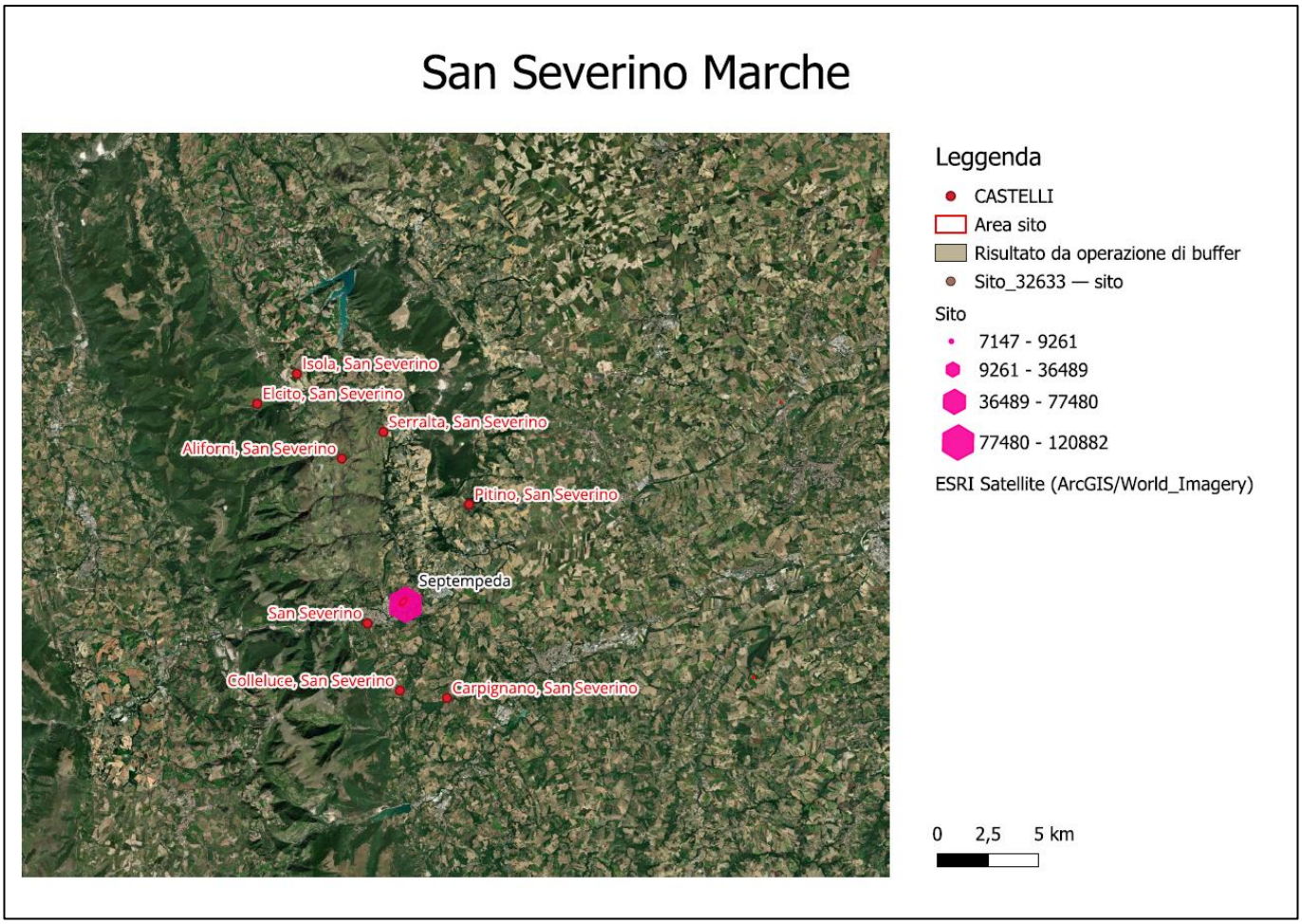

Figure 13 GIS project of Group 4

Sepino – Applied Work on the Saepinum Case Study

In Sepino, the GIS applied work was organised as a practical, hands-on activity in which participants worked directly with already-structured geographic data relating to the context of the Archaeological Park of Sepino, applying the techniques learned during the module to the analysis and management of spatial data in an archaeological setting. The data were entirely open-source and retrieved online, including administrative boundaries from the ISTAT portal and data from the GNA (Geoportale Nazionale per l'Archeologia), giving participants direct experience in sourcing, importing and processing real geospatial datasets. A specific exercise concerned the statistical elaboration of the paving of the Forum of Saepinum (**Fig. 14**): working in QGIS, a participant treated each paving slab as

a feature and produced an area-based choropleth map distinguishing the paving from the channel, kerb and outer kerb, accompanied by a full statistical summary of the 1,668 mapped elements (with a mean slab area of about 0.69 and a median of 0.66). As with the other Sepino modules, the applied work concentrated the analysis on a single, well-understood context rather than distributing it across several external sites.

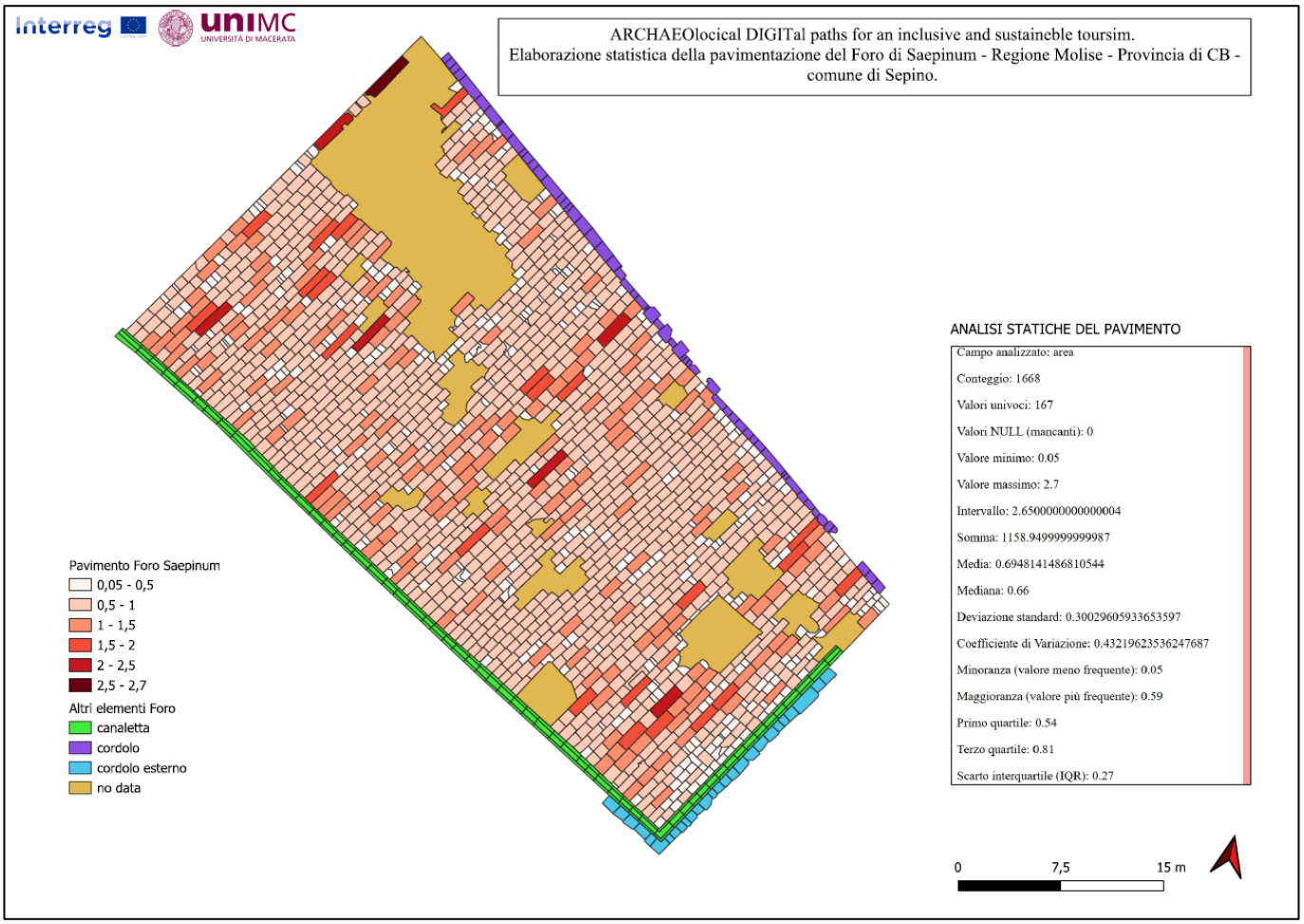

Figure 14 Example of a student's excercise

References

The following works and normative texts are those referred to in the course materials summarised above. They are listed here for ease of reference; the list is not exhaustive of the wider bibliography used by the individual trainers.

Council of Europe (2000), European Landscape Convention, European Treaty Series No. 176, Florence.

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Italian Republic (2004), Codice dei beni culturali e del paesaggio (Legislative Decree no. 42 of 22 January 2004).

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Rivière, G. H. and de Varine, H. (1971), origin of the concept of the ecomuseum (écomusée), as developed within ICOM.

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5. Section 2: Training Materials implemented in OMI and KAS

Archaeological heritage represents not only the traces of past civilizations, but also a fundamental resource for understanding the identity, culture, and continuity of human communities over time. Each site, from well-preserved urban settlements to isolated burial complexes, carries stories of human lives, social structures, and cultural practices that inform both research and contemporary society. The valorisation of these sites requires a careful balance between scientific rigour, social relevance, and the preservation of material remains, while ensuring public accessibility and engagement.

The sustainable management of archaeological and cultural heritage is closely intertwined with socio-economic development, education, and tourism. Sites are transformed into living spaces for learning and cultural experiences, where research, conservation, interpretation, and public participation converge. Interdisciplinary collaboration among archaeologists, conservators, museologists, designers, educators, managers, and local communities is essential in shaping how heritage communicates with contemporary society.

The development and implementation of EU and national funding frameworks further reinforce this process. Strategic instruments, including the Multiannual Financial Framework (MFF), Next Generation EU (NGEU), European Structural and Investment Funds (ESIF) such as the European Regional Development Fund (ERDF), Cohesion Fund, European Social Fund Plus (ESF+), and the Just Transition Fund (JTF), provide essential resources to preserve, manage, and promote archaeological sites and cultural heritage. Operational Programmes, Integrated Territorial Programmes, and Interreg cross-border initiatives ensure coordinated planning and implementation, enabling regions to benefit from both national priorities and European objectives.

Through this combination of heritage management principles, interdisciplinary approaches, and structured funding, archaeological sites and cultural heritage are preserved and integrated into contemporary social, educational, and economic contexts. They become catalysts for sustainable tourism, regional development, and the strengthening of cultural identity, allowing the past to actively contribute to the present and future of communities.



5.1. Storytelling and Digital Technologies in Valorisation of Archaeological Heritage

The goal is to provide an overview of the key concepts, methods, and challenges in applying storytelling and digital technologies in the valorisation and presentation of archaeological heritage. Emphasis is placed on the importance of using innovative digital tools to create accessible, interactive, and educational content that brings archaeological themes closer to a wider audience. Additionally, examples of good practice from Croatia and Europe will be presented.

Archaeological heritage is not just a collection of artefacts and sites, but also the stories they tell about the life, customs, and history of people from the past. By integrating storytelling with digital technologies such as virtual reality, 3D modelling, multimedia presentations, and mobile applications, a more engaging and understandable presentation of heritage is enabled.

This approach contributes to greater public involvement, education, as well as the promotion and preservation of cultural heritage, and also to the development of sustainable cultural tourism.

5.1.1. What is the valorisation of archaeological heritage?

The process of valorising archaeological heritage involves recognising, evaluating, and actively increasing its value for society. It is not just passive preservation or protection of archaeological sites and artefacts, but a conscious creation of added value that enables better understanding and connection of the public with the past. Valorisation implies the transfer of meanings and stories that heritage carries, making it relevant and interesting for contemporary people.

The goal is that the "old stone" or seemingly "pile of ruins" becomes a place or object that people do not perceive only as a historical record, but as something they understand, appreciate, and emotionally connect with. Such valorisation encourages interest in visiting, studying, and, above all, preserving sites and artefacts for future generations. In this way, archaeological heritage contributes to cultural identity, education, and social development, and it plays an important role in the sustainable development of tourism and local communities.

What does valorisation include?

Valorisation of archaeological heritage begins with the recognition and documentation of archaeological sites and determining their historical, artistic, and scientific significance. This fundamental step allows for understanding the value that needs to be protected and preserved.



Protection and conservation mean the physical preservation of sites and artefacts from further deterioration, which is a basic prerequisite for their long-term availability.

After that, interpretation and presentation become key steps in valorisation as they enable communicating the meaning of heritage to a wider public. This is achieved through various forms such as museum exhibitions, information centres, educational programs, and workshops. Modern approaches, like AR (augmented reality) and VR (virtual reality) technologies, make archaeological heritage interactive and attractive to diverse visitor groups. It is also important to ensure good signage and accessibility to the sites so that all interested people can visit them.

Involving the local community through volunteer workshops and education helps raise awareness about the importance of heritage and strengthens the sense of belonging. Finally, integrating archaeological heritage into social and economic life, through tourism, education, and cultural events, further supports its sustainability and valorisation.

Protection vs. Valorisation

Protection of an archaeological site typically involves excavation and fencing as basic protective measures. However, this approach often results in the site becoming inaccessible and unintelligible to visitors, frequently perceived as just a “pile of stones” without clear meaning. This misses the opportunity to make the heritage attractive and relevant to a wider audience.

Valorisation goes beyond mere protection by applying active measures such as installing protective roofs to shield the site from weather damage, placing informative boards, and arranging pathways for easier access and viewing. Additionally, virtual reconstructions allow visualisation of the site’s original appearance, while organising events like “Roman Day” brings the past to life through educational and entertaining programs.

This approach transforms archaeological sites into tourist attractions, sources of local pride, and important educational tools that encourage greater involvement from the community and visitors.

Importance of valorisation

Investments in the valorisation of archaeological heritage are justified through the multiple benefits emerging from social, cultural, and economic aspects. Quality management and presentation of heritage generate a return on investment through increased tourism, educational activities, and strengthening social cohesion.

By understanding and raising awareness of the value of archaeological heritage, the public becomes its active protector and advocate. Such support is crucial for the long-term preservation of cultural legacy and the development of programs that involve local communities.

Valorisation also stimulates sustainable development, where tourism acts as an important driver of the local economy, especially in rural areas. Through the development of cultural tourism, local capacities are strengthened, new jobs are created, and sustainable use of natural and cultural resources is encouraged.

5.1.2. Storytelling in archaeology

Storytelling is a powerful method that allows "stones and bones" from archaeological excavations to be transformed into lively and engaging stories that captivate the audience. Stories put people at the centre of the narrative, bringing the past closer in a way that is easy to understand and emotionally appealing.

Storytelling is not inventing history, nor is it a simple list of artefacts or dry museum descriptions. On the contrary, it is the art of turning scientific data and archaeological findings into a narrative that brings the past to life and enables people to connect with it.

An example of this approach is, instead of saying "This is the foundation of a Roman villa," encouraging the imagination of the listener with a story like: "Imagine the family of Lucius, a Roman merchant, waking up here and starting their day..." Such a narrative helps in understanding the historical context and makes archaeological heritage more accessible and interesting.

Key components of storytelling

Valorisation of archaeological heritage through storytelling aims to create emotions and connection with the audience. The goal is to evoke feelings of wonder, curiosity, and empathy, thus encouraging deeper interest and engagement. Stories focus on ordinary people and their lives, because through their perspective the past becomes more real and accessible.

The archaeological site space is contextualised as a stage where the story unfolds, and artefacts become props that help bring the narrative to life. Different media are used to convey the story: guides-narrators, reconstructions, 3D models, interactive content, as well as digital stories including augmented reality (AR) and virtual reality (VR).



In storytelling, a narrative arc is built with clearly defined parts: beginning (setting the scene), middle (development or plot), and end (resolution). This approach enables a coherent and dynamic presentation of archaeological heritage that guides the audience through the experience of history.

Importance of storytelling in valorisation

The use of storytelling in the valorisation of archaeological heritage significantly increases the understanding of the average visitor. Stories are more engaging and maintain greater audience concentration because people remember narratives better than mere facts. In this way, visitors do not perceive archaeological sites as cold and abstract remains, but as places rich in stories and meanings.

The emotional connection that stories create turns visitors into true ambassadors of cultural heritage. When people understand and love the heritage, they become its active protectors. A better and higher-quality story increases the attractiveness of the site, making it a more competitive destination for visitors. This approach also raises awareness about the importance of protecting and preserving cultural assets, people are more likely to care for what they understand and love, which contributes to the sustainable preservation of archaeological heritage

5.1.3. Examples of good storytelling practices

Examples of good practices for valorising archaeological heritage through storytelling and digital technologies stand out across Europe, including Croatia.

Pompeii in Italy is one of the best-known examples where emotionally powerful stories about people and their final moments after the eruption of Vesuvius create a deep experience for visitors. This approach enables direct contact with the past, where the archaeological site is not just a pile of stones but a place that tells powerful human stories. Thus, Pompeii becomes a living museum that fosters empathy, understanding, and respect for heritage.

In Croatia, the Archaeological Museum of Narona is an example of a museum that successfully brings history closer to the public through modern technologies and interactive content. Through multimedia exhibitions, 3D reconstructions, and educational programs, the museum allows the audience to explore historical contexts and the significance of the site in an innovative way, thereby increasing interest and contributing to the preservation and promotion of cultural heritage.



Istra Inspirit represents a contemporary and unique concept of valorisation through interpretive centres and theatrical performances held at the archaeological sites themselves. The combination of narrative performance and historical scenes brings the place to life and offers visitors an unforgettable experience. This approach not only educates but actively involves the community and visitors, increasing their awareness and engagement in heritage protection.

These examples illustrate how the creative application of storytelling and digital technologies can transform archaeological sites into dynamic centres of culture, education, and tourism.

5.1.4. Application of ICT in valorisation (protection and research)

Digitisation and 3D scanning represent key technologies in the preservation of archaeological heritage. Their value lies in the ability to permanently store and thoroughly research artefacts and sites, while simultaneously making them accessible to a wider audience without physical impact on the original finds.

Digital archives and databases create comprehensive digital repositories that consolidate information about archaeological sites, findings, and research. Such systems facilitate access to data for experts as well as non-specialists, thereby broadening knowledge and promoting transparency in heritage.

Geographic Information Systems (GIS) are used for spatial analysis and management of cultural heritage. Interactive maps enable precise visualisation and monitoring of sites, which is highly valuable for planning protection and promotion.

Artificial intelligence and machine learning provide new possibilities for automating processes such as the analysis of findings, digital reconstruction, and personalisation of content for different audiences, thereby increasing the efficiency and quality of presentation.

Digital promotion through social networks plays an important role in community building and audience attraction. Through interactive campaigns and online content, cultural heritage becomes accessible to a larger number of people, encouraging their interest and engagement.

5.1.5. Application of ICT in interpretation (visitor experience)

Augmented reality (AR) allows overlaying digital information and virtual elements onto the real world. For example, at archaeological sites, visitors can see reconstructions of temples or buildings exactly on the location of their ruins, giving insight into the former appearance and function of the space.

Virtual reality (VR) provides a fully immersive experience where users can "walk" through ancient cities or interactively explore archaeological sites from within, significantly enhancing the experience and understanding of the historical context.

Interactive displays and "touchless" technologies offer the possibility to closely study 3D models of artefacts or sites through zooming, rotating, and other gesture controls without physical contact, which is especially important for preserving sensitive objects.

Personalisation of visits becomes available through technologies like Beacons and mobile applications, enabling tours tailored to the individual interests of visitors, thereby increasing engagement and motivation to explore.

Gamification introduces game elements into museum and archaeological programs, such as "treasure hunts" or escape room games, encouraging visitors to actively participate and explore heritage in a fun and educational way.

5.1.6. Advantages and challenges of ICT

The application of digital technologies in valorising archaeological heritage brings many advantages. It increases the accessibility of heritage to a wider audience, allowing visitors to experience sites and artefacts in new and interactive ways. These technologies deepen interaction and engagement, creating a stronger connection with the past. Additionally, innovative digital tools contribute to heritage preservation through precise documentation and reconstructions. Introducing digital solutions can attract new, younger, and more technologically aware audiences. All of this also contributes to economic sustainability, as digital content can increase visitation and promote cultural tourism.

On the other hand, there are challenges in using digital technologies. High implementation costs and the need for specialised technical knowledge often limit their application. Also, the digital divide, the gap in access and use of technology among different groups, can exclude certain visitors. Rapid technological obsolescence requires continuous investment and adaptation. There is also a risk that digitised experiences may lose the authenticity and depth of real encounters with heritage. Finally, the issue of long-term digital preservation of data is an important challenge for the future accessibility and integrity of digital archives.

5.1.7. How to involve the local community?

Early and sincere involvement of the local community is a key element of successful management of archaeological heritage. Joint planning workshops enable the integration of residents' opinions and needs into all phases of the project, strengthening the sense of belonging and community.

Collecting oral traditions from local residents makes the community a "living archive" that preserves traditions, customs, and stories connected to the heritage. Such information complements archaeological findings and enriches site interpretation.

Co-creation allows for collaborative writing of stories and design of informational panels, contributing to the authenticity and acceptance of presented materials.

Education and active citizen participation through organising "Open Weekend" events or traditional craft workshops further enliven local heritage and encourage active involvement.

Cultural and artistic interventions such as theater performances or festivals on archaeological sites bring a new dimension to the heritage experience, attracting a wider audience and strengthening the cultural life of the community.

5.1.8. Valorisation and tourism - Development of a tourist product

Valorisation of archaeological heritage in tourism can be viewed through three levels of development:

1. The first level represents classic tourism, which includes quality guides, information centres, and clearly marked paths at the sites. This approach allows visitors to get basic acquaintance with heritage in a traditional and accessible way.
2. The second level refers to immersive and digital tourism, where modern technologies such as augmented reality (AR), virtual reality (VR), mobile applications, and gamification are used. These innovations enrich the visitor experience, making heritage exploration interactive, dynamic, and more attractive to a wider and younger audience.
3. The third level includes specialised and experiential tourism through organising special events such as "Archaeological Days," night tours, and traditional craft workshops. These programs allow a deeper and more intense heritage experience, encouraging active participation and creating unique memories for visitors.

5.1.9. Integration and sustainability

Connecting archaeological sites with broader tourist offerings through travel packages and collaboration with agencies and hotels can significantly increase the attractiveness of a destination. An example of such an approach is the "Journey through Time" packages, which combine visits to various sites and cultural attractions, providing a comprehensive experience of history and culture. Involving the local community in tourism activities is important for project sustainability. Employing local residents and supporting traditional crafts strengthen the economic benefits for the community, creating additional income sources and improving service quality. Sustainable management includes controlling the number of visitors to prevent overloading the sites and damage to heritage. At the same time, continuous efforts to preserve the sites ensure the long-term accessibility of archaeological locations.

5.1.10. Examples of good practice

Successful archaeological heritage valorisation projects in Europe offer valuable guidelines and inspiration.

Conjunto Arqueológico de Carmona in Spain organises events like "Roman Nights" that combine history and entertainment, as well as scientific workshops involving local communities and visitors. Local guides further enrich the experience with quality interpretation and connection to the cultural context.

Museo de Prehistoria de Valencia stands out with innovative approaches such as the "Archaeology in the Neighborhood" project that links museum content with comics, making it more accessible to younger audiences. Additionally, digital collections enable the broad dissemination of knowledge and accessibility of materials to a wider public through the internet.

Parco Archeologico di Pompei in Italy is known for collaboration with artists who bring the site to life through their works, as well as for the application of advanced conservation technologies. Their programs are inclusive and target diverse visitor groups, contributing to greater social inclusion and strengthening cultural identity.

These examples show how different approaches, from traditional to modern, can successfully valorise archaeological heritage, promoting its preservation and appreciation.

5.1.11. Challenges

Valorisation of archaeological heritage must find a balance between attractiveness and authenticity, avoiding excessive commercialisation known as “Disneyfication,” which can diminish the historical value and integrity of sites. Managing visitor numbers is crucial for sustainable tourism to prevent overburdening and damage to heritage.

Financial sustainability is often burdened by short-term pressures for results, which can hinder long-term planning and preservation. In addition, rapid technological obsolescence poses a challenge in the continuous application of digital technologies for presentation and protection.

One of the main tasks of experts is to translate “dry science” and archaeological data into a “living story” that is understandable and interesting to a wider audience. Also, it is necessary to ensure accessibility and inclusivity of content for all visitor groups, including people with disabilities and diverse demographic groups, promoting equality in access to cultural heritage.

Chapter summary

The greatest challenge in valorising archaeological heritage is not technical in nature, but finding a sustainable balance among several key elements. First, between preservation and use, that is, protecting heritage while making it accessible to the public. It is necessary to find a way for heritage to remain protected, yet at the same time accessible and understandable to visitors. Second, between truth and attraction, scientific approach and storytelling. It is important that heritage presentation is credible but also attractive enough to capture and hold the attention of a wider audience. Third, between global and local, aligning tourism interests with the preservation of the identity and values of the local community. Fourth, between tradition and innovation, balancing classical archaeological and museological methods with new digital technologies and interactive approaches.

The solution to these challenges lies in a flexible, participatory, and multidisciplinary approach where archaeologists, local communities, storytelling experts, managers, and designers jointly create an experience that is at once credible, appealing, and sustainable.

5.2. Planning and management of archaeological parks and sites

The aim is to provide an overview of the key concepts, methods, and challenges in planning and managing archaeological sites and parks. The emphasis is placed on the importance of an interdisciplinary approach and the development of a sustainable model for managing cultural heritage. The presentation also seeks to showcase examples of good practice from Croatia and Europe. Archaeological heritage shows the continuity of human presence, as well as to the identity and development of communities. It enables the study of the social, economic, and religious aspects of past civilizations. The preservation of heritage contributes to the cultural, educational, and touristic development of society. Archaeology represents a connection between science, education, and sustainable tourism. It fosters public awareness and cultural education, supports the preservation of identity and collective memory, and promotes the touristic and economic development of local communities.

5.2.1. What is an Archaeological Park?

According to the Law on the Protection and Preservation of Cultural Heritage of the Republic of Croatia, an archaeological park is a researched, protected, and presented archaeological site or its part, which includes informative and educational elements of presentation and interpretation, with the goal of raising public awareness about the importance of archaeological heritage. According to Brajčić M. (Archaeological Parks in Croatia: Condition and Perspectives), an archaeological park is a preserved archaeological site open to the public, which ensures the permanent protection and presentation of the site. Meanwhile, Kwas M. L. (Archaeological Parks) defines an archaeological park as a territorial area recognized mainly for its archaeological value, integrated with historical, cultural, and natural features of the landscape.

5.2.2. What is an Archaeological Site?

According to Renfrew, C. & Bahn, P. (Archaeology: Theories, Methods and Practice), an archaeological site is a place where the material remains of past human activities are preserved, allowing the study of cultural, social, and economic aspects of former communities through archaeological methods and analysis.

According to Marijanović, B. (Introduction to Archaeology), an archaeological site is a spatially defined location where material remains of past human activity are preserved, arranged in layers and contexts that make possible the scientific study, interpretation, and reconstruction of the cultural, social, and economic life of past communities.

5.2.3. Differences Between an Archaeological Site and an Archaeological Park

An archaeological site is a place dedicated to the research and documentation of the material remains of past human activities. It is an area where archaeological excavations, analysis of finds, and studies of historical layers are carried out with the aim of achieving a scientific understanding of cultural and historical processes. The main goal of a site is the protection, study, and preservation of archaeological evidence, and access is often restricted in order to maintain the authenticity and integrity of the location. On the other hand, an archaeological park is a developed and interpreted archaeological area – one or several sites – that has been adapted for public presentation, education, and tourism. In an archaeological park, archaeological remains become part of a broader cultural and educational setting that connects scientific research with public interest. An archaeological park usually includes: visitor infrastructure (paths, signs, information panels), interpretation centres with museum and multimedia content and, protection and conservation systems that safeguard the site. In this way, a park combines the scientific role of archaeology with the social need for access, understanding, and experience of cultural heritage.

Examples of archaeological sites and parks in Croatia and Europe show different approaches to protection, management, and presentation of archaeological heritage.

In Croatia, the most notable examples are Salona, Burnum, Narona, and Andautonija. Salona, one of the largest ancient sites on the eastern Adriatic coast, represents an archaeological area that is only partially interpreted through a park system. In a broader European context, the most famous examples include Pompeii (Italy), Ephesus (Turkey), and Carnuntum (Austria).

Each of these examples illustrates different types of archaeological sites, management models, and ways of presenting heritage to the public, ranging from scientific research areas to modern cultural and educational parks that actively involve local communities and visitors in interpreting the past.

5.2.4. Legal and Institutional Framework

The protection of archaeological heritage in the Republic of Croatia is based on a clearly defined legal and institutional framework, encompassing national regulations, competent authorities, as well as international standards and guidelines. At the national level, the key instrument is the Cultural Heritage Protection Act, which regulates the processes of identification, registration, preservation, and management of archaeological sites, while oversight and enforcement are ensured by the Ministry of Culture and Media through its conservation departments. The institutional system includes state, regional, and local institutions, museums, and specialised organisations, whose

coordination enables effective and sustainable management of archaeological heritage. Furthermore, the protection of cultural assets is aligned with international standards, primarily through UNESCO conventions, guidelines of professional organisations such as ICOMOS and ICOM, and European programmes and funds that support research, conservation, and interpretation of cultural heritage.

National Regulations

This law defines the procedures for identifying, registering, preserving, and managing cultural assets, including archaeological sites. Articles 11–13 are particularly important, as they define the concept of archaeological areas and sites, set out the procedure for their registration in the Register of Cultural Assets of the Republic of Croatia, and establish the system of protection and supervision over these locations. The law obliges all individuals and legal entities to protect archaeological heritage, while the Ministry of Culture and Media of the Republic of Croatia, through its Conservation Departments, is responsible for implementing protection measures. In this way, a clear institutional framework is provided for the preservation of authenticity, documentation, and responsible management of archaeological sites.

Institutions

The system for the protection of archaeological heritage in the Republic of Croatia is based on the cooperation of several institutions that jointly implement legal regulations and professional conservation measures. The Ministry of Culture and Media of the Republic of Croatia is the central state institution responsible for enforcing the Law on the Protection and Preservation of Cultural Heritage, developing strategies, allocating financial resources, and supervising the management of cultural assets. Within the Ministry, regional Conservation Departments operate, which are directly responsible for professional supervision, issuing permits, monitoring the condition of sites, and implementing protective measures on archaeological locations. In addition to state bodies, archaeological museums and local institutions for the protection of cultural heritage play an important role. They take part in research, documentation, presentation, and interpretation of archaeological sites. Cooperation between the national, regional, and local levels is essential for effective and sustainable management of archaeological heritage.

International framework

The protection of archaeological heritage takes place not only at the national but also at the international level. A number of documents, organizations, and programs establish standards, guidelines, and funding mechanisms for the preservation and sustainable management of cultural heritage. The most important international document is the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (1972), which defines the criteria for including sites on the World Heritage List and outlines the responsibilities of states in their protection and presentation. Particularly important roles are played by professional organizations such as ICOMOS (International Council on Monuments and Sites) and ICOM (International Council of Museums). These institutions publish guidelines and recommendations for the conservation, documentation, and management of cultural heritage. Their documents form the basis of modern conservation and management practices in archaeology. In the European context, significant support comes from European Union programs and funds such as Creative Europe, Horizon Europe, and Interreg, which provide financing for research, digitalization, interpretation, and sustainable use of cultural heritage through international projects and collaborations.

5.2.5. Planning of Archaeological Sites and Parks

Planning archaeological parks and sites is a clear process of making decisions about protecting, showing, using, and managing archaeological spaces. The goal of planning is to find a balance between saving heritage and its public, educational, and tourist uses. Planning includes finding and valuing cultural resources, setting boundaries and protection zones, making conservation and development plans, adding archaeological heritage into spatial plans, and including the local community and people involved. Planning is the base for lasting management and use of archaeological heritage. The goals of planning archaeological sites and parks are to protect the real features and wholeness of the site, meaning to keep the original material and spatial-historical values. Also, planning aims for care that lasts, which means balancing protection with educational and tourist uses of the site without harming its heritage value. Another key goal is to fit archaeological sites into the space and social life, adding heritage to the larger landscape, city structure, and daily life of the community. This way, archaeological places become active parts of the cultural and social identity of the area. Long-term care needs many experts to work together, like archaeologists, conservators, architects, museum experts, city planners, and local people involved. Also, raising public knowledge and inviting the community to join are very important for good planning.

Planning of Archaeological Sites

The first step is the identification and documentation phase: research, mapping, archaeological prospection, and GIS analysis, creating digital databases and spatial models. Next is analysis and evaluation: assessing the cultural, scientific, aesthetic, and social value of the site, setting priorities for protection and use. Then follows the conservation-planning framework, making a conservation basis and protection zone proposals, defining possible interventions, presentation, and infrastructure. After that, spatial planning and integration: aligning with laws, spatial plans, and environmental conditions, planning access, visual corridors, and landscapes. The last phase is operational planning and management: defining management models (public institution, partnership, private model), financial plan, staff training, and visitor programs.

Principles of Planning Archaeological Sites

The process of planning archaeological sites is based on a set of professional and ethical principles that ensure keeping authenticity, sustainability, and inclusion of cultural heritage. These principles are the foundation for responsible decisions about all interventions, interpretations, and ways of using archaeological spaces. The first principle is minimal intervention, meaning that every action on the site must be reversible and must not harm the site's authenticity. This means all changes, reconstructions, or presentations should be done with as little impact as possible on the original material and context. The principle of integrity means that the archaeological site is seen as a whole, spatially, historically, and socially. The site is not just a group of physical remains but also part of a wider landscape, cultural identity, and historical continuity of the area. Third, the principle of interdisciplinarity highlights the need for cooperation among experts from different fields, archaeologists, conservators, architects, urban planners, landscape architects, museum experts, and IT specialists, to achieve a full interpretation and protection of the site. The principle of sustainability requires that all plans and actions consider environmental factors, site capacity, and long-term maintenance costs. Sustainable planning ensures that archaeological sites stay preserved and usable for future generations. Finally, the principle of participation stresses the importance of including the local community in the planning and decision-making process. The involvement of citizens, associations, and local institutions helps increase understanding and acceptance of heritage as a shared good and raises social responsibility for its preservation.

Planning within Legal and Institutional Systems

Planning archaeological sites always happens within national laws and international guidelines that set the standards for protecting, preserving, and managing cultural heritage. In Croatia, the main document is the Law on the Protection and Preservation of Cultural Goods, which sets the rules for protecting and using archaeological areas. Additionally, spatial plans created by local and regional governments play an important role in making sure archaeological sites fit into the wider development and landscape context. At the international level, planning relies on UNESCO and ICOMOS guidelines, especially the ICOMOS Charter for the Protection and Management of Archaeological Heritage (1990) and the UNESCO Recommendation on the Historic Urban Landscape (2011).

Spatial Planning and Landscape

Planning archaeological parks must consider how the site fits into the surrounding landscape to make sure that the archaeological remains match the natural and cultural environment. This process requires recognizing both visible and hidden boundaries of the site, including underground structures that are part of the archaeological context. It is important to carefully plan access points, traffic, and infrastructure, as well as visitor paths and interpretation zones, so visitors can move without harming the archaeological remains. The landscape design should be subtle and fit well with the surroundings, without damaging the authenticity of the place. The goal of this approach is to protect the archaeological context while allowing visitors to experience the space where history can be "read through the landscape".

Participants in the Planning Process and Planning Challenges

Planning archaeological sites and parks needs cooperation among experts from different fields. The process involves archaeologists and conservators who make sure the sites are protected and documented, urban planners and architects who design spatial concepts, and museum experts and educators who create interpretive content. Landscape architects, local authorities and communities, as well as the tourism sector and non-governmental organizations, also play important roles. Their cooperation helps ensure that plans are socially relevant and sustainable. However, planning faces many challenges, including conflicts between protection and development, limited funding, mismatches between laws and local practices, lack of skilled workers, and effects of climate change and material decay. Solutions include international cooperation, ongoing training for experts, digital documentation, development of sustainable tourism, and new funding models that support long-term protection and active use of archaeological heritage.

5.2.6. Examples of Good Practice

Examples of archaeological sites such as Burnum, Ephesus, Carnuntum, and Pompeii demonstrate how systematic research, conservation, and presentation can be effectively integrated into sustainable heritage management models. Each of these sites stands out for its unique historical, cultural, and urban significance, as well as a high degree of preservation, which allows for both scholarly study and educational interpretation. The management of these sites is based on interdisciplinary collaboration between archaeologists, conservators, museum professionals, and administrative bodies, often incorporating modern technologies such as digital documentation and 3D reconstructions. Examples from Croatia and abroad illustrate how the combination of protection, research, education, and sustainable tourism enables archaeological heritage to be accessible to the public while remaining preserved for future generations.

Burnum

Burnum was a Roman legion camp (castrum) located in a strategically important spot above the canyon of the Krka River, in what is today northern Dalmatia. It was founded by Legio XI Claudia and Legio IV Flavia Felix in the 1st century AD. After the legions left, the camp grew into a civil town (municipium) with a forum, temples, and an amphitheatre, making Burnum one of the main urban centres of the Roman period in inland Dalmatia. The Roman amphitheatre at Burnum is one of the rare monuments of its kind in Croatia and today is the main visible and interpreted part of the archaeological park. Its preservation and location in the natural canyon environment make it a particularly attractive example of the blend of cultural and natural heritage. Today, Burnum forms the Archaeological Park Burnum, jointly managed by the Krka National Park, the Archaeological Museum in Zadar, and the University of Zadar. This cooperation model connects scientific research, conservation protection, and educational-tourist presentation. The site has been systematically researched since the 20th century, with intensive research and conservation work ongoing since the early 2000s. Burnum is a protected cultural property of the Republic of Croatia and an exceptional example of Roman military and urban architecture in Croatia. It also serves as a model of sustainable archaeological park management, as research, conservation, and presentation are conducted in constant collaboration among scientists, conservators, and the Krka National Park administration.

Ephesus



Ephesus was one of the most important cities of ancient Greece and the Roman Empire, located on the western coast of Asia Minor, in today's Turkey. The city was founded in the 10th century BC and flourished in the Hellenistic and Roman periods when it became the capital of the Roman province of Asia and one of the largest urban centres in the eastern Mediterranean. Ephesus was famous for the Temple of Artemis, one of the seven wonders of the ancient world, and the Great Theatre which could hold more than 25,000 spectators. It was a city with a very complex urban structure and a high level of cultural and architectural development.

Today, Ephesus is an exceptionally well-preserved ancient city, with a complex of streets, temples, public buildings, baths, libraries, and private houses. Among the most famous sites are the Celsus Library, the Great Theatre, Curetes Street, the Temple of Hadrian, and the Terrace Houses, which contain rich mosaics and frescoes providing insight into the daily life of Roman inhabitants. Archaeological research in Ephesus began at the end of the 19th century under the Austrian Archaeological Mission and has continued without interruption to the present day. This long-term research has allowed systematic discovery, documentation, and conservation of the large urban area. Ephesus today represents a successful model of archaeological heritage valorisation, based on the integration of scientific research, protection, presentation, and tourism. It particularly stands out for its high level of site interpretation, ongoing maintenance, and the use of digital technologies and 3D documentation in research and site management. With over two million visitors annually, Ephesus is one of the most visited archaeological parks in the world, and also an example of how heritage can be protected, studied, and used sustainably as an educational and tourist resource.

Carnutum

Carnuntum was a Roman town and military camp (castrum) located in today's Austria along the Danube River. The city was founded in the 1st century AD as a camp for Roman legions and later developed into a civil town (municipium and colonia) with a forum, temples, basilicas, and richly decorated Roman villas. During the Roman Empire, Carnuntum had great strategic and commercial importance because it was situated on the Empire's border–the Danube limes, a key defensive line against northern tribes. Carnuntum is a rare example of a complete Roman urban settlement where various parts of the city have been preserved and researched, including the military camp, civil buildings, thermal baths, forum, temples, and houses decorated with mosaics and frescoes. It is especially known for life-size reconstructions of Roman houses and villas based on archaeological finds, allowing visitors a realistic experience of life in the ancient city. Today, Carnuntum serves as a successful model of an archaeological park combining scientific research, conservation,

reconstruction, and education. The park operates as a living museum where history is interpreted through interactive displays, experimental archaeology, and cultural events. Visitors can experience restored Roman interiors, workshops, thermal baths, and streets, creating a unique link between scientific results and public interpretation. Carnuntum is often cited as an exemplary model of sustainable archaeological heritage management because it successfully connects conservation and presentation with tourism and education.

Pompeii

Pompeii is one of the most famous archaeological sites in the world, located in southern Italy near Naples. The city was added to the UNESCO World Heritage List in 1997 due to its exceptional universal value and unique state of preservation. Historically, Pompeii was destroyed by the eruption of Mount Vesuvius in AD 79, when the city was completely covered by layers of ash and volcanic material. Thanks to this tragic event, homes, streets, temples, workshops, frescoes, and everyday objects were preserved, providing an unmatched insight into the life of Romans in the 1st century.

Today, Pompeii is a model of integrated archaeological heritage valorisation, successfully combining four key components: scientific research, conservation and restoration, education and digital interpretation, and tourism valorisation. The main goal of site management is to preserve the authenticity of the space while allowing the general public access, understanding, and experience of Roman culture. Major aspects of valorisation in Pompeii include conservation and protection through systematic restoration, stabilization, and monitoring of archaeological structures; digital reconstruction using 3D models of houses, frescoes, and urban spaces that enable virtual tours and educational content; education and interpretation through museum exhibitions, interactive guides, and online platforms that connect scientific results with the public; and sustainable tourism aimed at balancing visitor access and heritage protection. Pompeii today is considered a benchmark example of managing and valorising large archaeological parks. Their planning system, digital documentation, and interdisciplinary cooperation serve as a model for many similar sites worldwide, from Ephesus to Narona.

5.2.7. Managing Archaeological Parks

Managing archaeological parks involves organized activities of protection, preservation, presentation, and use of archaeological heritage. It is a continuous and interdisciplinary process connecting archaeology, conservation, museology, spatial planning, tourism, and education. The aim



is to ensure long-term conservation of the site, improve its social, educational, and cultural function, and enable its sustainable use in the modern context.

The main goals of managing archaeological parks include:

1. Protecting and preserving the authenticity of archaeological remains and their surrounding landscape.
2. Interpretation and education, making scientific knowledge accessible and interesting to the public.
3. Sustainable use and tourism, balancing visitor access with heritage protection.
4. Community involvement, including local stakeholders in decision-making to strengthen a sense of belonging and responsibility toward cultural goods.
5. Socio-economic valorisation, contributing to cultural identity, local development, and creating new educational and tourist values.

Ultimately, management is not just administrative care of the site but active action defining how, for whom, and for what purpose archaeological heritage "lives" today. Successful management means balancing scientific responsibility, social usefulness, and long-term sustainability.

Management Models for Archaeological Parks

Management models for archaeological parks vary depending on the legal framework, size and significance of the site, and available resources. Each model has its strengths and limitations, and hybrid forms combining public, scientific, and private sectors are often applied in practice. The State (public institution) model involves management by a public body or a special department of the Ministry of Culture. This ensures expert control, stable financing, and clear responsibilities. An example is the Parco Archeologico di Pompei (Italy), an autonomous state institution managing the site, conducting research, and coordinating conservation projects. Its advantage is high expertise and financial stability, but it can suffer from administrative slowness and less operational flexibility.

The Local or Regional model places management responsibility on local authorities, museums, or conservation departments. This model is often used for smaller sites with strong community ties. An example is the Archaeological Park Andautonia (Croatia), a joint project of the Archaeological Museum in Zagreb and the local community. It offers greater local involvement and engagement but has limited financial and expert resources. The Partnership (hybrid) model involves cooperation among the public sector, scientific institutions, NGOs, and private partners. Its flexibility allows combining expertise, financial resources, and innovative approaches. Carnuntum (Austria) is a

successful example, combining scientific research, reconstruction of the Roman town, and educational-tourism activities. Its strength is flexibility and innovation, but it requires high coordination levels among partners. The Commercial/Tourism model is applied in large, internationally known archaeological parks where part of the income comes from tickets, souvenir shops, events, and digital products. The goal is achieving self-sustainability while preserving cultural authenticity. Ephesus (Turkey) and Pompeii (Italy) are examples. This model offers financial independence and tourism development but risks over-commercialization, which may lead to loss of authenticity and heritage degradation.

In practice, the most successful management models combine elements from several systems, expert public sector oversight, collaboration with scientific institutions, and active participation of community and private partners. Such an integrated approach enables sustainable preservation, valorisation, and interpretation of archaeological heritage.

Management Organisational Structure

An effective management of an archaeological park requires a clear organizational hierarchy and division of responsibilities among different professional and administrative levels. A well-structured management system enables coordination of activities, transparency in decision-making, and efficient use of resources. At the head of the institution is a director or park manager responsible for coordinating all activities, financial planning, strategy development, and representing the institution to public bodies and partners.

Within the park operate various professional departments, including:

1. Conservation Department, responsible for protection, restoration, and renewal of the site, as well as monitoring the physical condition of archaeological structures.

2. Educational Department, developing interpretive programs, workshops, and museum exhibits, linking scientific research with public education.
3. Tourism and Communication Department, managing visitor services, marketing, promotion, and the park's digital presence, including virtual content and online platforms.

4. Technical Service, taking care of infrastructure maintenance, access roads, signage, and technical systems.

Additional expert support is provided by an advisory board composed of archaeologists, conservators, art historians, economists, and spatial planning experts, which provides opinions on important projects, strategies, and development guidelines.

Funding

Managing archaeological parks requires diverse and stable sources of funding to ensure long-term protection, research, and presentation of cultural heritage. Sustainable financial planning is key to the successful operation of parks, as it balances public interest, scientific needs, and economic realities. Main funding sources include state and local budgets, forming the basis for regular maintenance, research, and expert staff salaries. European funds such as Interreg, Creative Europe, Horizon Europe, and the European Regional Development Fund (ERDF) support projects for cooperation, digitization, education, and cultural heritage valorisation. Income from visitation, including ticket sales, guided tours, educational workshops, and digital applications, increases the park's financial self-sustainability.

Donations, sponsorships, and cultural funds provide additional resources for specific projects like restoration, interpretation, or international exhibitions. Self-financing projects, such as souvenir shops, archaeological festivals, publishing, and themed events, link cultural offerings with the local economy.

The combination of these sources creates a balanced financial model enabling continuous development and conservation of archaeological parks, reducing dependence on single sources and encouraging innovative forms of cultural management.

Conservation

Conservation is a fundamental component of managing archaeological parks, as it ensures the long-term preservation of the physical structure and authenticity of cultural heritage. Its goal is not only the physical preservation of archaeological remains but also the understanding of decay processes, systematic documentation, and education of professionals and the public on the importance of protection. The main activities of conservation include regular monitoring of the condition of archaeological structures and materials to promptly recognize risks and damage. Preventive protection and control of environmental conditions, including moisture, temperature, vegetation, and human impact.

Emergency repairs and conservation interventions in case of damage, erosion or structural instability. Research and application of new materials and technologies such as nanomaterials, 3D documentation, and digital analytics, which enable more precise and less invasive protection methods. An effective archaeological park management system also includes a conservation and maintenance plan that is updated every 5 to 10 years.

Visitor Management and Sustainable Tourism

Managing visitors is one of the key aspects of sustainable management of archaeological parks, as a large number of visitors can threaten the physical integrity of the site and damage its authenticity. The goal is to find a balance between accessibility to heritage and its protection, while preserving a quality experience for all visitors. To achieve this, archaeological parks implement visitor control and guidance strategies, which include defining a maximum carrying capacity, meaning the number of visitors the site can handle without negative consequences. They plan and regulate routes to direct visitors to safer and less sensitive parts of the site. Digital reservations and virtual tours are introduced to reduce pressure on the physical space while expanding public access. Guides and visitors are educated about behavioral rules to promote awareness of the importance of protecting and respecting cultural heritage. The ultimate goal of these measures is to preserve the site and the quality of the visitor experience, while promoting a sustainable tourism model that supports local development without endangering the long-term preservation of the cultural landscape and archaeological remains.

Monitoring, Evaluation, and Reporting

Managing archaeological parks must be dynamic, transparent, and adaptable to changes in social, economic, and environmental contexts. This approach enables long-term heritage preservation along with efficient resource use and continuous improvement of methods. Key elements of transparent management

include the preparation of annual reports on the site's condition, activities carried out, visitor numbers, and financial operations, ensuring public insight and institutional accountability.

Management effectiveness evaluation includes indicators such as visitor numbers, the condition of structures, educational reach, and economic impact on the local community. Management strategy is periodically reviewed, usually every 5 to 7 years, to adapt to new knowledge, technologies, and societal needs. Cooperation with international bodies like ICOMOS, UNESCO, and Europa Nostra

provides expert support, guidelines, and conservation standards evaluation. A good management system is recognized by continuous monitoring, assessment, and adjustment to new conditions.

5.2.8. Valorisation of Archaeological Heritage

Valuing archaeological heritage is the process of recognizing, assessing, and affirming the cultural, scientific, aesthetic, and social value of a site. It is a key step in managing cultural heritage because valorisation enables understanding of why a particular site is important, who it belongs to, and how its value can be preserved and passed on. The goals of valorisation are multiple, it is important to recognize the historical, cultural, scientific, and social value of the site, establishing its importance nationally and internationally. It aims to ensure the preservation and transmission of those values to future generations through systematic protection and education. Valorisation seeks to make heritage accessible and understandable to the wider public through interpretation, musealization, and digital technologies. It stimulates local and regional development through cultural and archaeological tourism, creating economic and social benefits while respecting sustainability principles. Archaeological heritage should be integrated into modern community life, becoming an active part of cultural identity, education, and public space. Valorisation does not only mean assessing historical value but actively involving heritage in the contemporary social context to ensure its relevance, comprehensibility, and longevity.

Types of valorisation

Valorisation of archaeological heritage can be viewed through several interconnected dimensions, cultural, scientific, economic, and socio-educational. Each contributes to a fuller understanding of the site's value and defines how it is integrated into contemporary community life.

Cultural valorisation is based on the historical significance and cultural identity of the site. It connects the community with its heritage, strengthens the sense of continuity and belonging, and contributes to preserving the collective memory of the place.

Scientific valorisation is based on the research and educational potential of archaeological finds. It highlights the importance of documenting, analysing, and interpreting material remains from the past and their role in developing scientific knowledge about history and culture.

Economic valorisation relates to the tourism and economic exploitation of heritage, consistently respecting sustainability principles. Archaeological parks and museums can generate revenue

through visits, workshops, educational programs, and cultural events, thus contributing to local development and employment.

Social and educational valorisation emphasizes the educational, identity-forming, and integrative role of cultural heritage. It promotes awareness of the importance of preservation, creates a sense of responsibility and pride towards local history, and contributes to strengthening social cohesion and the cultural identity of the community.

Valorisation Process

Valorisation of archaeological heritage involves several interconnected phases through which a site is recognized, protected, interpreted, and integrated into contemporary social life. It is a systematic approach that links scientific analysis, conservation measures, and social application of cultural goods. The first phase is research, which includes scientific documentation, analysis, and contextualization of the site, forming the basis for understanding the historical and cultural value of archaeological finds. The following phase is value assessment, where the historical, cultural, aesthetic, and scientific significance of the site is determined, enabling the definition of protection priorities and modes of presentation. The third phase covers protection and conservation, aiming to preserve material remains and prevent their deterioration while respecting principles of authenticity and integrity. The fourth phase relates to interpretation and presentation, where scientific knowledge is translated into understandable, educational, and engaging content for visitors through museum exhibits, archaeological parks, digital applications, and interactive exhibitions. The final phase is integration into the social context, involving the local community, educational institutions, and the tourism sector so that archaeological heritage becomes an active element of cultural identity and social development.

Valorisation in the Context of Management

In the context of archaeological heritage management, valorisation plays a key role as it involves planned and strategic decisions on how the heritage will be used, presented, and preserved. It is not only about assessing value but also about determining how that value can be effectively transmitted and utilized within cultural, educational, and economic contexts. Well-executed valorisation allows the site to be actively included in the management system rather than merely passively protected. This transformation turns heritage into a resource that contributes to social and economic development while remaining protected and preserved. Good valorisation increases the visibility and recognition of the site, strengthening its cultural identity and public significance. It attracts funding



and investment by clearly defining the values and potential of the site. It raises protection levels through better planning and systematic monitoring of heritage conditions. It enables the development of cultural tourism, which supports the local economy and visitor education. Therefore, management and valorisation are two interconnected processes, management provides the framework and direction, while valorisation defines the value and purpose of preserving cultural heritage in contemporary society.

Examples of Valorisation Projects

The Archaeological Museum Narona is a unique example of a museum built directly on an archaeological site. The museum serves as an interpretive centre connecting archaeological finds, scientific research, and public presentation. Its main function is the presentation of archaeological finds and the context of the Roman city of Narona, which was one of the most important ancient centres in southern Dalmatia. The architectural design of the museum is shaped to oversee the site itself, providing visitors direct visual contact with the archaeological layers while protecting them from physical damage. The permanent exhibition includes original artefacts found at the site, mosaics, ceramics, sculptures, architectural parts, and inscriptions, that enable visitors to gain insight into daily life, urban structure, and religious practices of the Romans. The museum also uses reconstructions and models of temples, houses, and tombs, as well as stratigraphic displays of site layers, giving visitors context of space and time. Multimedia presentations hold special value: interactive screens, projectors, and 3D virtual reconstructions of Roman Narona, allowing visitors to experience the ancient city in its original form.

The museum also offers educational programs, workshops for schools and families, guided tours, and interactive guides, combining scientific work, education, and cultural tourism. The interpretive centre thus becomes a link between research, protection, and public presentation of the site. Visitors first gain contextual understanding within the museum, then visit the site in situ, allowing safe exploration and deep understanding of Roman Narona. This model represents an example of a modern archaeological museum that balances science, education, and tourism in the service of the preservation and valorisation of cultural heritage.

E-Archeo (Italy) is a multimedia Italian project dedicated to the digital valorisation of archaeological heritage through innovative virtual and augmented reality technologies. The project covers eight archaeological sites in Italy and exemplifies how architecture, archaeology, and tourism can successfully connect with digital innovations to improve interpretation and access to heritage, both

onsite and online. The project's aim is to enable a new, interactive way of accessing archaeological sites through 3D visualizations, tactile installations, and narrative applications, making heritage accessible and understandable to a wider audience, including people with disabilities. The project consists of several key components: E-Archeo 3D, an interactive web platform allowing 360° viewing of archaeological sites with multimedia content and 3D models of monuments, buildings, and artefacts; Archeo Voci, a podcast series narrating site histories and making archaeological themes accessible to the public through narration and sound; E-Archeo Tattile, a tactile multimedia installation enabling interaction with reproductions of archaeological objects and specially designed for inclusive access for people with disabilities; E-Archeo HI® (Human Interface), an interactive application with narrative characters guiding users through the site, creating a "living history" experience through story and play. E-Archeo demonstrates how digital technology can become a tool for valorisation, not only through preserving material remains but also via vocal, visual, and tactile communication of cultural heritage. The project serves as an example of an innovative approach to interpretation and management, expanding.

5.2.9. Innovative Skills and Digital Technologies

Digital technologies and innovative skills today play a key role in the research, protection, interpretation, and presentation of archaeological sites. Their application allows for more precise documentation, interactive communication with the public, and a new way of accessing cultural heritage, making it available to a wider community, including those who cannot physically visit the site.

Digital Methods

Basic digital methods applied in archaeology include 3D scanning, photogrammetry, and GIS (Geographic Information System). 3D scanning enables detailed and accurate documentation of archaeological structures, artefacts, and landscapes, creating a permanent digital archive of the site. Photogrammetry uses digital photographs to create three-dimensional models, facilitating the analysis and virtual reconstruction of finds. GIS systems connect spatial and historical data and enable the analysis of relationships between archaeological elements and the landscape. Through these methods, digital reconstruction and archiving of finds are developed, ensuring their long-term preservation and the possibility of reinterpretation in the future.

Virtual and Augmented Reality (VR/AR)



Virtual reality (VR) and augmented reality (AR) have become important tools for interpretation and education in archaeological parks and museums. They provide an interactive experience where visitors can "immerse" themselves in the past and explore reconstructed spaces of ancient cities, temples, and settlements. The use of VR/AR technologies creates a real-time experience of historical spaces, increasing the educational value, accessibility, and emotional connection of visitors to heritage. These technologies do not replace the physical visit to the site but complement it, offering a new layer of interpretation and understanding of historical contexts.

Digital Interpretation

Digital interpretation enables the connection of physical and virtual cultural heritage spaces through QR codes, mobile applications, interactive maps, and virtual tours. These tools provide visitors with additional information, multimedia content, and 3D displays that enrich the visit experience.

Examples of successful digital interpretation include:

a) Virtual Salona – a digital project reconstructing ancient Salona through 3D models and virtual walks, allowing the public to explore the ancient city interactively.

b) Europeana – a European digital cultural heritage platform providing access to millions of digitized artefacts, photos, and documents from museums and archives across Europe.

c) Google Arts & Culture – a global digital platform using VR and 360° technologies to present cultural institutions and archaeological sites worldwide, thereby increasing their visibility and accessibility.

Digital Storytelling

Digital storytelling represents a contemporary method of interpreting and communicating archaeological heritage, linking scientific valorisation, research results, documentation, and analysis with the emotional and cultural significance that heritage holds for visitors and the local community. Unlike traditional museum presentations, digital storytelling does not merely convey facts but constructs a story that connects the visitor with the site through experience, empathy, and participation. This method enables active learning and experiential engagement, transforming archaeological data into a narrative that creates meaning, context, and a personal experience of the past. Thus, archaeological heritage becomes more accessible, understandable, and emotionally relevant. The main elements of digital storytelling are the narrative structure–a story about the life of people, events, or discoveries at the site; based on real historical facts. The visual component, such

as the use of photographs, 3D models, animations, and films to reconstruct the appearance and atmosphere of the space. The sound component, using music, sound effects, and a narrator's voice that guides the user through the story. Interactivity, involving users through mobile applications, VR/AR environments, and digital exhibits that allow individual exploration. Authenticity, with all stories based on real archaeological finds and historical sources, ensuring scientific credibility.

5.2.10. Main Challenges

Management and valorisation of archaeological heritage face a range of structural and organizational challenges that hinder the long-term preservation and sustainable development of cultural sites. These challenges stem from insufficient financial resources, limited expert personnel, and uneven valorisation among sites of varying significance. One of the biggest issues is the lack of financial means necessary for systematic protection, research, and presentation of sites. Many smaller archaeological parks depend on limited budgetary funds and occasional projects, complicating long-term planning. Uneven valorisation results in some sites being highly developed and touristic recognized, while others remain under-researched, under-protected, or publicly inaccessible. Such imbalance limits the comprehensive development of the archaeological network at national and regional levels. An additional challenge is the lack of expert staff, archaeologists, conservators, museologists, educators, and cultural management specialists, hindering the implementation of interdisciplinary and innovative projects.

To overcome these problems, efforts must focus on strengthening education and interdisciplinary approaches through professional training programs and cooperation among scientific, cultural, and tourism institutions. Developing sustainable tourism models that balance heritage protection with economic benefits and the long-term development of local communities is essential. Involving local communities in planning and management strengthens a sense of responsibility, identity, and active citizen participation in cultural space preservation.

Addressing these challenges requires a strategic, coordinated, and interdisciplinary approach where science, management, and community align in a shared goal of preserving and sustainably developing archaeological heritage.

Chapter summary

Archaeological parks and sites serve to preserve cultural heritage, study past civilizations, and connect scientific knowledge with education and tourism. Their planning and management require an interdisciplinary approach, integrating archaeology, conservation, spatial planning, museology,

and digital technologies, alongside the active involvement of local communities. National and international legal frameworks ensure protection, while contemporary methods, such as 3D reconstructions and virtual interpretations, enhance visitor accessibility and engagement. Examples from Croatia and Europe demonstrate how it is possible to balance the preservation of authenticity, educational functions, and sustainable tourism. The valorisation and management of archaeological heritage allow the past to function as an active resource for contemporary society, contributing to cultural identity, education, and local development.

5.3. EU and national funding for projects dealing with archaeology and cultural site management and promotion

European Union and national funding mechanisms provide a comprehensive framework for the development, preservation, and promotion of archaeological and cultural heritage, as well as the sustainable growth of tourism. Effective management of these resources requires coordination across multiple levels of governance, strategic alignment with national development priorities, and adherence to EU policy objectives. Funding instruments support a wide spectrum of activities, ranging from site restoration and infrastructure development to education, skills development, and research initiatives that enhance the visibility and accessibility of cultural assets.

These financial and strategic frameworks are designed not only to conserve and protect heritage but also to integrate cultural and archaeological resources into broader regional development strategies. Through operational programmes, multiannual planning, and cross-border cooperation, projects can achieve long-term social, economic, and environmental impact while fostering regional cohesion, innovation, and sustainable tourism. Understanding the connections between funding instruments, strategic objectives, and project implementation is essential for practitioners, policymakers, and stakeholders involved in heritage and tourism development.

5.3.1. The basics of EU funds

EU funds are structured to support both long-term strategic investments and targeted recovery initiatives. The combination of multiannual financial frameworks and dedicated programmes such as Next Generation EU provides Member States with mechanisms to strengthen their economies, foster social cohesion, and invest in sustainable and digital transitions. For Croatia, access to these instruments enables the continuation and expansion of projects related to cultural site management, preservation of archaeological heritage, and development of tourism infrastructure.



The EU funding framework is divided into strategic packages, including long-term allocations defined by the Multiannual Financial Framework (MFF) and short-term recovery and resilience instruments, such as the National Recovery and Resilience Plan (NRRP). Together, these instruments allow for investments across infrastructure, education, social development, environmental protection, and cultural preservation. The availability of these structured funds ensures that projects are aligned with EU priorities while responding to national needs and regional development goals.

5.3.2. European Union and Croatia

Croatia's participation in EU funding programmes began even before full membership. Upon gaining candidate status in 2004, Croatia had access to pre-accession instruments such as CARDS, PHARE, SAPARD, and IPA. These programmes were essential in preparing state institutions for the effective management of EU funds, enhancing administrative capacities, and building the skills necessary for successful project implementation at the European level.

Since joining the EU in 2013, Croatia has actively engaged with EU structural and investment funds (ESIF), implementing initiatives in areas ranging from regional development and social infrastructure to cultural preservation and tourism promotion. The integration into the EU funding system has allowed Croatia to harmonise its development policies with European priorities, ensuring effective use of resources for the protection of archaeological sites, restoration of cultural heritage, and the creation of sustainable tourist destinations.

5.3.3. The European Semester and policy coordination

The European Semester is an annual process of coordination between the European Commission and Member States designed to align national economic and fiscal policies with EU-wide objectives. Through this framework, countries evaluate their progress, implement structural reforms, and receive guidance to achieve long-term economic stability and sustainable development. For projects in archaeology, culture, and tourism, the European Semester indirectly shapes priorities by ensuring that national budgets and reform programmes consider investment in cultural heritage, regional development, and societal resilience.

During the semester, Member States prepare National Reform Programmes outlining economic and structural initiatives. These are assessed by the European Commission, which provides recommendations to improve policy alignment, resource allocation, and investment effectiveness. The adoption of these recommendations by the European Council ensures that Member States

integrate EU objectives into their national strategies, creating a framework for coordinated investments across sectors, including cultural and archaeological projects.

5.3.4. EU member contributions and fund absorption

The European Union budget is financed primarily through member state contributions, customs duties, and value-added tax (VAT) revenues. While contributions are calculated according to the economic capacity of each Member State, the effectiveness of EU funding is measured not only by the availability of resources but also by the ability of countries to absorb and implement these funds efficiently.

Croatia has demonstrated significant progress in fund absorption since EU membership, successfully executing projects that support cultural heritage preservation, archaeological research, and the development of tourism infrastructure. Effective fund management ensures fiscal stability and maximises the impact of EU investments on local and regional development.

5.3.5. National Recovery and Resilience Plan and Multiannual Financial Framework

The NRRP and MFF form the strategic financial architecture for EU spending in Member States. The MFF sets out the long-term multiannual budget, ensuring predictable and coordinated funding for infrastructure, social, environmental, and cultural projects. The NRRP complements this framework by addressing urgent recovery and resilience needs, including digitalisation, green transition, and social inclusion.

Together, these frameworks support projects aimed at preserving cultural and archaeological heritage, modernising cultural infrastructure, promoting tourism, and integrating innovation into local development. Through coordinated planning, they provide instruments for achieving both national objectives and EU policy goals.

5.3.6. Cohesion Policy and its objectives

Cohesion Policy is the cornerstone of EU regional development, aiming to strengthen economic, social, and territorial cohesion across Europe. The policy supports projects that reduce disparities between regions, enhance connectivity, and promote sustainable economic growth. For cultural and archaeological initiatives, Cohesion Policy provides opportunities to integrate heritage management with regional tourism strategies, infrastructure improvement, and social inclusion.



Objectives 2021–2027

Cohesion Policy objectives include promoting smart economic transformation, green and sustainable development, stronger connectivity, enhanced social inclusion, and engagement with citizens at the local level. These objectives underpin investments in cultural sites, archaeological conservation, tourism infrastructure, and regional development projects.

European Regional Development Fund (ERDF)

The ERDF finances projects that promote regional competitiveness, innovation, and economic growth. Relevant activities for archaeology and cultural heritage include infrastructure improvements, research and innovation, support for SMEs, and development of heritage tourism. ERDF also fosters networking and knowledge exchange, facilitating collaboration between research institutions, businesses, and public authorities to maximise cultural and economic impact.

Cohesion Fund (CF)

The Cohesion Fund primarily supports environmental protection and major transport infrastructure. For cultural projects, it enables sustainable tourism infrastructure, integration of heritage preservation with urban and regional planning, and improved access to cultural sites, while ensuring alignment with environmental and energy efficiency standards.

European Social Fund Plus (ESF+)

ESF+ focuses on employment, social inclusion, and workforce development. In the context of cultural heritage, it supports training programmes, capacity building, educational initiatives in museums and heritage institutions, and the social integration of marginalised communities. This ensures that local populations can participate in and benefit from tourism and cultural projects.

Just Transition Fund (JTF)

The JTF supports regions undergoing transition to climate neutrality. Projects relevant to cultural and archaeological sites include investments in sustainable energy, renovation of historical infrastructure, development of green mobility solutions for tourists, and social measures to support local communities impacted by transitions in economic structures or environmental regulations.

5.3.7. Strategic Framework for the use of ESI funds 2021–2027

The European Structural and Investment Funds (ESI) form the operational base for implementing EU priorities at the national and regional level. Strategic documents, including the Partnership



Agreement and Operational Programmes, define development goals, funding priorities, eligible activities, and monitoring indicators. These instruments ensure coordinated use of ERDF, CF, ESF+, and JTF for projects in culture, heritage, and tourism.

Partnership Agreement

The Partnership Agreement establishes the mechanisms for managing EU funds at the national level. It outlines priority areas, fund allocations, and operational programmes, ensuring alignment with national development strategies, including initiatives in cultural preservation and tourism development.

Operational Programmes and Integrated Territorial Programme

Operational Programmes detail the specific objectives and planned activities for each funding source. Key programmes include Competitiveness and Cohesion (ERDF and CF), Efficient Human Resources (ESF+), and the Integrated Territorial Programme (ERDF, CF, and JTF). The ITP promotes territorial cohesion by connecting urban and rural areas, enhancing regional competitiveness, supporting industrial transition, and fostering sustainable development of cultural and natural heritage.

Development Directions of NDS 2030

The National Development Strategy 2030 provides the overarching vision for sustainable, resilient, green, and digitally advanced development, while reducing regional disparities. Projects in archaeology, cultural heritage, and tourism align with these directions by promoting preservation, innovation, and inclusive local development.

5.3.8. Priorities and examples of interventions

Operational Programmes and ITP focus on key areas such as strengthening regional economies, promoting green and digital transitions, enhancing social inclusion, improving urban and rural infrastructure, and revitalising cultural and tourism assets. Specific initiatives include the development of heritage tourism products, restoration of cultural sites, capacity building for cultural institutions, and the creation of integrated regional tourism networks.

Operational Programme Efficient Human Resources (OPULJP)

This programme targets employment, education, social inclusion, and health. For cultural and archaeological projects, it supports training, workforce development, equal access to cultural

employment, and the integration of marginalised groups into heritage and tourism sectors. It also addresses regional disparities in education and employment opportunities.

Interreg and European Territorial Cooperation

Interreg and cross-border cooperation programmes facilitate joint projects in border regions, promoting cultural exchange, heritage conservation, sustainable tourism, and innovation. They strengthen regional connectivity, support knowledge transfer, and enable collaborative management of archaeological and cultural sites across Member States.

Chapter summary

EU funding provides a comprehensive and coherent framework for supporting cultural heritage, archaeological research, and tourism development in Croatia and across the European Union. Through a combination of long-term planning (MFF), recovery and resilience measures (NRRP/NGEU), strategic Cohesion Policy instruments, and operational programmes, Member States can implement projects that protect heritage, enhance tourism, and promote sustainable regional development. The coordination across EU, national, regional, and local levels ensures that investments are aligned with strategic priorities, maximize social and economic impact, and contribute to the long-term preservation and promotion of Europe's cultural assets.

The valorisation of archaeological heritage and cultural sites is a complex process that goes beyond technical conservation. Its greatest challenge lies in finding a sustainable balance between protection and accessibility, scientific authenticity and engaging interpretation, global tourism interests and local identity, as well as tradition and innovation. Successful management requires a multidisciplinary and participatory approach, where archaeologists, heritage managers, museologists, designers, educators, and local communities collectively shape authentic, educational, and engaging experiences.

EU and national funding frameworks play a central role in this process. Instruments such as the Multiannual Financial Framework (MFF), Next Generation EU (NGEU), Cohesion Policy funds–including ERDF, Cohesion Fund, ESF+, and JTF–along with Operational Programmes, Integrated Territorial Programmes, and cross-border Interreg initiatives, provide structured, strategic, and coordinated support for heritage projects. These mechanisms enable the restoration and conservation of sites, the development of infrastructure for visitors, the training of skilled professionals, and the creation of sustainable tourism experiences that contribute to regional development and social inclusion.

Examples from Croatia and Europe demonstrate that it is possible to harmonise scientific research, educational objectives, and tourism valorisation while preserving authenticity and integrity. Legal and institutional frameworks, together with innovative approaches such as digitalisation, 3D reconstructions, and interactive interpretations, underpin the sustainable use of heritage. The combined effect of strategic planning, multi-level governance, and targeted funding ensures that archaeological and cultural heritage not only survives but thrives, becoming a living part of contemporary society, enhancing cultural identity, supporting education, and fostering economic development.

Conclusions

The four ARCHAEODIGIT training courses were implemented across the Italian and Croatian test areas between October 2025 and February 2026, involving a total of 68 participants. While adapted to the specific territorial, institutional and professional characteristics of each test area, the courses followed a common thematic and pedagogical framework, ensuring overall consistency while allowing the training activities to respond to local needs and contexts.

The materials presented in this deliverable document the contents effectively delivered during the courses, including the thematic modules, teaching approaches, case studies, practical exercises and outcomes of the applied work. Together, they provide a comprehensive overview of the learning activities developed within Activity 2.2 and reflect the joint contribution of the University of Macerata and the University of Pula to the design of the common training framework, as well as the role of the local partners in organising and implementing the courses in the four test areas.

Overall, the training activities contributed to strengthening participants' knowledge and practical competences in the fields of archaeological heritage management, interpretation, digital technologies, project funding and sustainable tourism. The common training framework adopted across the four test areas ensured a shared methodological approach while allowing the courses to respond to the specific characteristics and needs of each local context. Together with the related transnational placements, the training activities contributed to the overall capacity-building objectives of the ARCHAEODIGIT project and established a common knowledge base supporting the subsequent development of the MOOCs and the implementation of the project's pilot actions.