

Institute for the protection of Cultural Heritage of Slovenia (IPCHS),
Restoration centre Ljubljana and Nova Gorica Regional Office

University of Applied Sciences and Arts of Southern Switzerland (SUPSI),
Master program in Conservation Restoration

University of Ljubljana, Academy of Fine Arts and Design (ALUO),
Department for Restoration

University of Zagreb, Academy of Fine Arts (ALU),
Department for Conservation and Restoration of Works of Art

ORGANISE

Summer school

**Gradisce pri Divači (Slovenia), Church of St. Helen
Conservation-restoration of wall paintings**

2-27 August 2021

1 week on-line (2-6. 8.) + 2 weeks on site (9-20. 8.) + 1 week on-line (23-27. 8.)



General information

Introduction

The aim of the Summer school is to design and implement a conservation plan for the preservation of the internal wall paintings, after the conservation intervention realized on the exterior of the building.

The church of St Helen

At its core, the church of St Helen (Sveta Helena) in Gradišče is an example of early gothic architecture, probably built in the late 14th century. In the middle of the 16th century, a significantly larger presbytery was added, and thus, accordingly, the nave's walls had been risen. As the inscription "1653" on the front portal documents and witnesses, a last major renewal and upgrade occurred in the middle of the 17th century; it was in fact during that time that the current rectangular windows in the presbytery and nave, as well as the bell-cote, were added.

The nave is richly decorated with wall paintings. The iconographic composition is conventional for a smaller medieval church. On the triumphal arch one could once admire the *Annunciation*, which it is not preserved; on the nave's south wall there are scenes from the *Passion of Christ*, while on the nave's north wall the *Adoration of the Magi* is depicted, supplemented by scenes of people's daily lives of the period as well as some animal anecdotal motives. Although the author of the wall paintings is unknown, similarities in style and iconography of other wall paintings found in the nearby church in Hrastovlje, dated to 1490, allow us to make an undoubtable connection with the painter Johannes from Kastav (Janez iz Kastva). Most probably the church in Gradišče was painted by one of Janez's assistants or associates with whom he might have already worked in Hrastovlje. A feature of significant interest of the church in Gradišče is the graffiti found on the frescoes, which can be placed into the first half of the 16th century.

Decay phenomena

The wall paintings, at first visual inspection, show major signs of decay phenomena like:

- Pulverization of the pictorial surface.
- Abrasion of the pictorial surface.
- Some areas have detached parts between painted plaster and support, particularly in the lower north wall area, near the entrance.

The big losses of the cycle, particularly in the upper part of the north wall, in the parts near the windows and in the south and west wall, have already been filled and plastered in previous restoration interventions. There are no documents regarding applications of protective or consolidating agents in the past restorations.

Renovations

The renovation of the roof's stone tiles was concluded in 2005. Since 2017 the static load of the church has been constantly and systemically monitored. In August 2018, the roof was reconditioned through the installation of a steel reinforcing mesh and bars, while in 2019, windows with a UV protection foil were installed. The local community of Gradišče and the municipality of Divača strive to and aspire for a complete restoration of the church's exterior in autumn of 2021.

Partners and roles

The project will be developed through collaboration between the:

- Institute for the Protection of Cultural Heritage of Slovenia (IPCHS / ZVKDS),
- University of Ljubljana, Academy of Fine Arts and Design (UL ALUO), Department for Restoration
- University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Master program in Conservation Restoration
- University of the Arts, Bern (HKB), Master of Arts in Conservation-Restoration
- University of Zagreb, Academy of Fine Arts (ALU), Department for Conservation and Restoration of Works of Art

The conservation-restoration intervention will be developed in 3 phases from August 2021 to August 2023.

Activities and general program

The Summer school will offer on-site activities and on-line lessons:

- lectures on the methodological and interdisciplinary approach for the conservation of wall paintings and on intervention techniques (around 20% of the schedule); lectures in phases 2 and 3 will include lecture on mortars and grouts, etc.;
- direct experience and work on site (80% of the schedule);
- visits on nearby sites to see other wall paintings of the area that are of comparable age and character to the wall paintings of St. Helen church and other conservation-restoration projects;
- presentation of the work carried out during summer school to the local population in order to share the significance of the site and the steps to be taken to guarantee its preservation.

Phase 1 (2-27 August 2021 / 1 week on-line + 2 weeks on site + 1 week on-line)

Aim

Understand the conservation condition of the wall paintings, develop a conservation concept and define intervention needs and urgencies to be addressed.

Preparatory week on-line 2-6 August 2021

- General presentation of the partners, participants and organization;
- Presentation and introduction about the site and history of the church / Slovenian wall paintings / Wall painting monuments of the Karst region;
- Techniques and materials of Slovene wall paintings;
- Prepare a base line graphic documentation on the base of the professional rectified photos to be used for future mapping;
- Lectures on the methodological and interdisciplinary approach for the conservation of wall paintings;
- Data collection and data management;
- Visual glossary;
- Scientific investigation for the study of wall paintings;
- Environmental monitoring and conditions of the church.

Work on site 9-20 August 2021

- Presentations held by the professors;
- Observation, description and mapping of the technical executions and materials, former interventions and decay phenomena of the wall paintings (drawings and visual glossary);
- Assessing the need for scientific analyses and carry out analyses to get information on the following aspects: Environmental information, Composition of the painting layers, mortars and pictorial layers (binders, aggregates, pigments)... ;
- Execution of emergency interventions if needed;
- Writing the draft of a final assessment report for the conservation-restoration of the wall paintings. The final report will be concluded the week after the end of the work on site;
- Presentation of the work carried out during the Summer school.

Follow-up week on-line 23-27 August 2021

- Discussion of analytical results and further steps to be taken.
- Writing up the final report “Condition assessment of the wall paintings” and complete documentation of the activities carried out.

Phase 2 & 3 (July / August 2022 & 2023)

Aim

- Plan and implement the conservation-restoration interventions in order to write a final intervention proposal for the long term conservation of the wall paintings.
- Implement the conservation-restoration interventions defined in the project.

Daily plan

2-6 August WEEK 1 / on-line	
DAY 1 Monday, 2. 8.	<ul style="list-style-type: none"> - Introduction of the partners and participants - Presentation of the summer school (short PPT of each institution): Ajda Mladenovič (IPCHS); Giacinta Jean (SUPSI); Blaž Šeme (ALUO); Jonas Roters (HKB); Suzana Damiani (ALU) - Presentation and introduction about the site and history of the church (Marta Bensa IPCHS, Minka Osojnik IPCHS) - Available documentation (Marta Bensa IPCHS, Minka Osojnik IPCHS) - Group forming - Lecture: <i>Examples of mapping: Materials and techniques, previous interventions, decay phenomena</i> (Alberto Felici, Giulia Russo, Stefania Luppichini SUPSI) - Group work: Prepare a base line graphic documentation on the base of the professional rectify photos to be used for future mapping (AutoCad) - Feedback – groups exchange information
DAY 2 Tuesday, 3. 8.	<ul style="list-style-type: none"> - Lecture: <i>The methodological and interdisciplinary approach for the conservation of wall paintings</i> (Alberto Felici, SUPSI) - Group work: Prepare a base line graphic documentation - Lecture: <i>Data collection and data management</i> (Giulia Russo, Stefania Luppichini, SUPSI) - Group work: Prepare a base line graphic documentation - Feedback – groups exchange information
DAY 3 Wednesday, 4. 8.	<ul style="list-style-type: none"> - Lecture: <i>Techniques and materials of Slovene wall paintings</i> (Martina L. Kikelj, IPCHS) - Group work: Prepare a base line graphic documentation - Lecture: <i>Wall painting monuments of the Karst region</i> (Minka Osojnik, Andrej Jazbec, IPCHS) - Group work: Prepare a base line graphic documentation - Feedback – groups exchange information
DAY 4 Thursday, 5. 8.	<ul style="list-style-type: none"> - Lecture: <i>Regular condition monitoring and risk assessment as a basis for preventive and planned conservation: the case of medieval wall paintings in Slovenia</i> (Blaž Šeme, ALUO) - Group work: Prepare a base line graphic documentation - Lecture: <i>Scientific investigation for the study of wall paintings</i> (Francesca Piquè, Patrizia Moretti, SUPSI) - Group work: Prepare a base line graphic documentation - Feedback – groups exchange information
DAY 5 Friday, 6. 8.	<ul style="list-style-type: none"> - Lecture: <i>Environmental monitoring and conditions of the Gradisce church</i> (Katja Kavkler, IPCHS) - Group work: Prepare a base line graphic documentation - Lecture and discussion: <i>Preserving the authentic - basic principle or empty phrase?</i> (Jonas Roters, HKB) - Group work: Prepare a base line graphic documentation - Feedback – groups exchange information (finished mapping and fist ideas about visual glossary)

9-15 August WEEK 2 / on-site	
DAY 1 Monday, 9. 8.	<p>On site:</p> <p>LECTURE 1: <i>Short presentation of all partners – introduction of participants</i></p> <p>Practical work on site:</p> <ul style="list-style-type: none"> • Individual observation of the church exterior and of the wall painting inside. • Feedback on individual observations, Group forming • Observation, description and mapping of the technical executions and materials and decay phenomena of the wall paintings • Visual glossary: definition and organization • Feedback – groups exchange information
DAY 2 Tuesday, 10. 8.	<p>Conference room:</p> <p>LECTURE 2: <i>Non-invasive and invasive analyses of paint layers, mortars and degradation products of originals and former interventions in the Church of St. Helen</i> (Katja Kavkler, IPCHS)</p> <p>LECTURE 3: <i>Presentation of restoration works at church of Virgin Mary in Dolenja vas</i> (Minka Osojnik, Andrej Jazbec, IPCHS)</p> <p>Practical work on site:</p> <ul style="list-style-type: none"> • Discussion on the results of the diagnostic investigations • UV light observation • Observation, description and mapping of the technical executions and materials and decay phenomena of the wall paintings • Feedback – groups exchange information on the on the daily activities carried out
DAY 3 Wednesday, 11.8.	<p>Practical work on site:</p> <ul style="list-style-type: none"> • Thermography (Katja Kavkler IPCHS) • Observation, description and mapping of the technical executions and materials and decay phenomena of the wall paintings • Feedback – groups exchange information on the on the daily activities carried out <p>Conference room:</p> <p>LECTURE 4: <i>Case Study: Medieval Wall Paintings in the Church of St. Mary of Pond in Glogorica; Researches and treatments</i> (Neva Pološki, ALU)</p> <p>LECTURE 5: <i>Microorganisms: mechanisms of biodeterioration, but not only!</i> (Cristina Corti, SUPSI) + practical exercises</p>
DAY 4 Thursday, 12. 8.	<p>Practical work on site:</p> <ul style="list-style-type: none"> • Observation, description and mapping of the technical executions and materials and decay phenomena of the wall paintings • Discussion: the conservation needs, concept of the intervention and criteria for the choice of materials and techniques <p><i>Afternoon excursion (2 hrs): church of Virgin Mary in Dolenja vas</i> (Andrej Jazbec, IPCHS)</p>
DAY 5 Friday, 13. 8.	<p>Practical work on site:</p> <ul style="list-style-type: none"> • First trials: cleaning, fixing, first intervention treatments • Assessment and documenting the trials carried out • Feedback – groups exchange information on the on the weekly activities carried out

<p>WEEKEND 14. 8. and 15. 8.</p>	<p><i>All day excursions:</i> SATURDAY Holy Trinity Church, Hrastovlje (Marta Bensa, Anita Kavčič Klančar, IPCHS) The church is painted with Gothic frescoes by Johannes de Castua from 1490. The most famous is the Dance of Death or "Danse Macabre" Lipica Stud Farm Lipica is the oldest European stud farm continuously breeding one of the oldest cultural horse breeds. As such it has a remarkable significance as a cultural, historical and natural heritage for Slovenia and Europe SUNDAY Piran (Minka Osojnik, IPCHS) Visit of the medieval town, its town walls, church of Saint George, the bell tower...</p>
<p>16-21 August WEEK 3 / on-site</p>	
<p>DAY 1 Monday, 16. 8.</p>	<p>Practical work on site:</p> <ul style="list-style-type: none"> • Assessment of the trials carried out (Katja Kavkler, IPCHS) • First trials: cleaning, fixing, first intervention treatments • Planning diagnostic insights
<p>DAY 2 Tuesday, 17. 8.</p>	<p>Practical work on site:</p> <ul style="list-style-type: none"> • Non-invasive: multispectral images, XRF, Portable FT-IR, portable Raman; • Invasive: samples for observations with optical and electronic microscope, cross sections and thin sections, FTIR and Raman microscopes, dissolving tests First trials: cleaning, fixing, first intervention treatments (Katja Kavkler, IPCHS) • First trials: cleaning, fixing, first intervention treatments <p><i>Afternoon excursion (3 hrs): Visit to the Škocjan caves – the UNESCO world heritage site (optional)</i></p>
<p>DAY 3 Wednesday, 18. 8.</p>	<p>Practical work on site:</p> <ul style="list-style-type: none"> • First trials: cleaning, fixing, first intervention treatments
<p>DAY 4 Thursday, 19. 8.</p>	<p>Practical work on site:</p> <ul style="list-style-type: none"> • First trials: cleaning, fixing, first intervention treatments • Feedback on the non-invasive diagnostic insights • Feedback on the finalization of the documentation collected <p><i>Afternoon excursion (2 hrs): church of Holy Lady of Assumption, Vremški Britof (Andrej Jazbec, Minka Osojnik, IPCHS)</i></p>
<p>DAY 5 Friday, 20. 8.</p>	<p>Presentation of the results by the students to the local community, representatives of the Ministry of Culture of Slovenia and interested professional and laic public Conference room: 10.00-10.15 Welcome speeches (representative of the Ministry of Culture of Slovenia, representative of IPCHS, mayor of Municipality of Divača) 10.15-11.00 Presentation of the Summer school and its results Church of St. Helen: 11.30-13.00 Presentation on site – discussion, questions... Refreshment</p>

23-27 August WEEK 4 / on-line	
DAY 1 Monday, 23. 8.	Follow-up week <ul style="list-style-type: none">- Discussion of analytical results and further steps to be taken.- Writing up the final report “Condition assessment of the wall paintings and proposal for a conservation treatment” and complete documentation of the activities carried out.
DAY 2 Tuesday, 24. 8.	Follow-up Feedback – groups exchange information
DAY 3 Wednesday, 25. 8.	Follow-up Feedback – groups exchange information
DAY 4 Thursday, 26. 8.	Follow-up Feedback – groups exchange information
DAY 5 Friday, 27. 8.	Follow-up Feedback – groups exchange information