MEDNARODNI SIMPOZIJ OB 120-LETNICI ALPSKIH ŽELEZNIC
INTERNATIONAL SYMPOSIUM MARKING THE 120TH ANNIVERSARY OF THE ALPINE RAILWAYS
26. in 27. november 2026, Ljubljana / 26–27 November 2026, Ljubljana

PROGRAM IN POVZETKI MEDNARODNEGA SIMPOZIJA OB 120-LETNICI ALPSKIH ŽELEZNIC

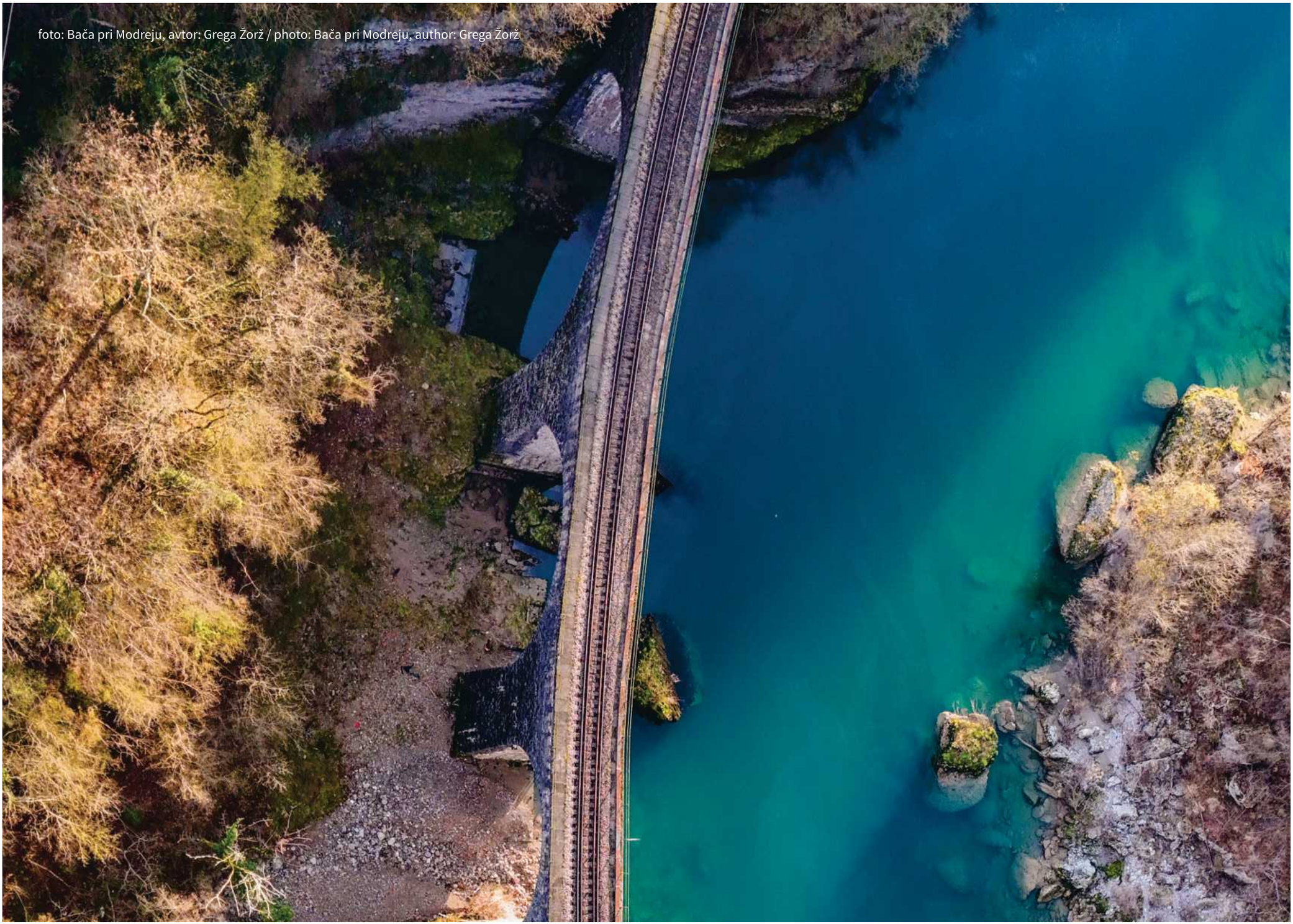
PROGRAMME AND ABSTRACTS OF THE INTERNATIONAL SYMPOSIUM MARKING THE 120TH ANNIVERSARY OF THE ALPINE RAILWAY



Zavod za varstvo kulturne dediščine Slovenije
Služba za kulturno dediščino

SLOVENSKO KONSERVATORSKO DRUŠTVO
Association of Conservators of Cultural Heritage of Slovenia
Association des conservateurs du patrimoine culturel de Slovénie

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA KULTURO



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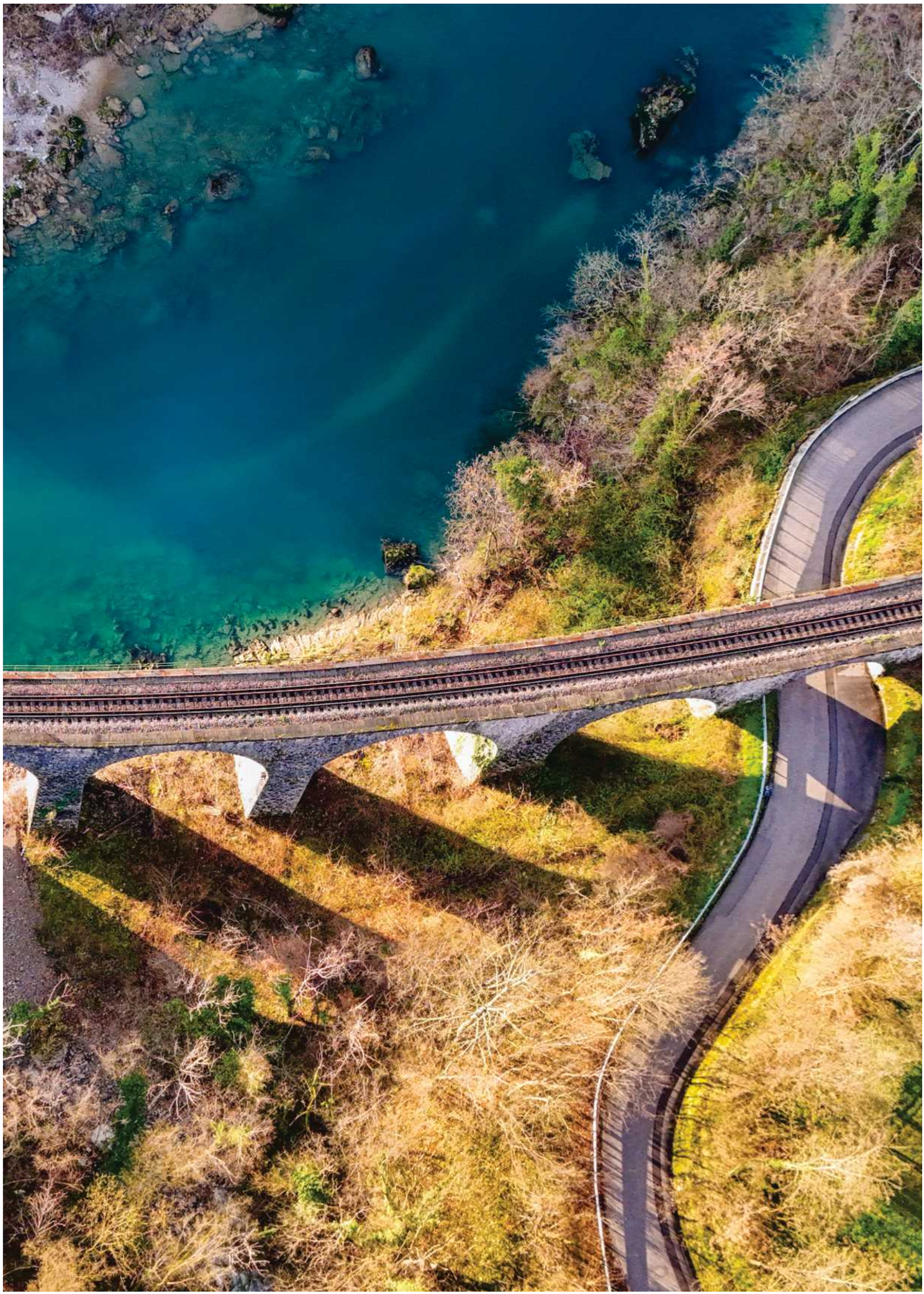

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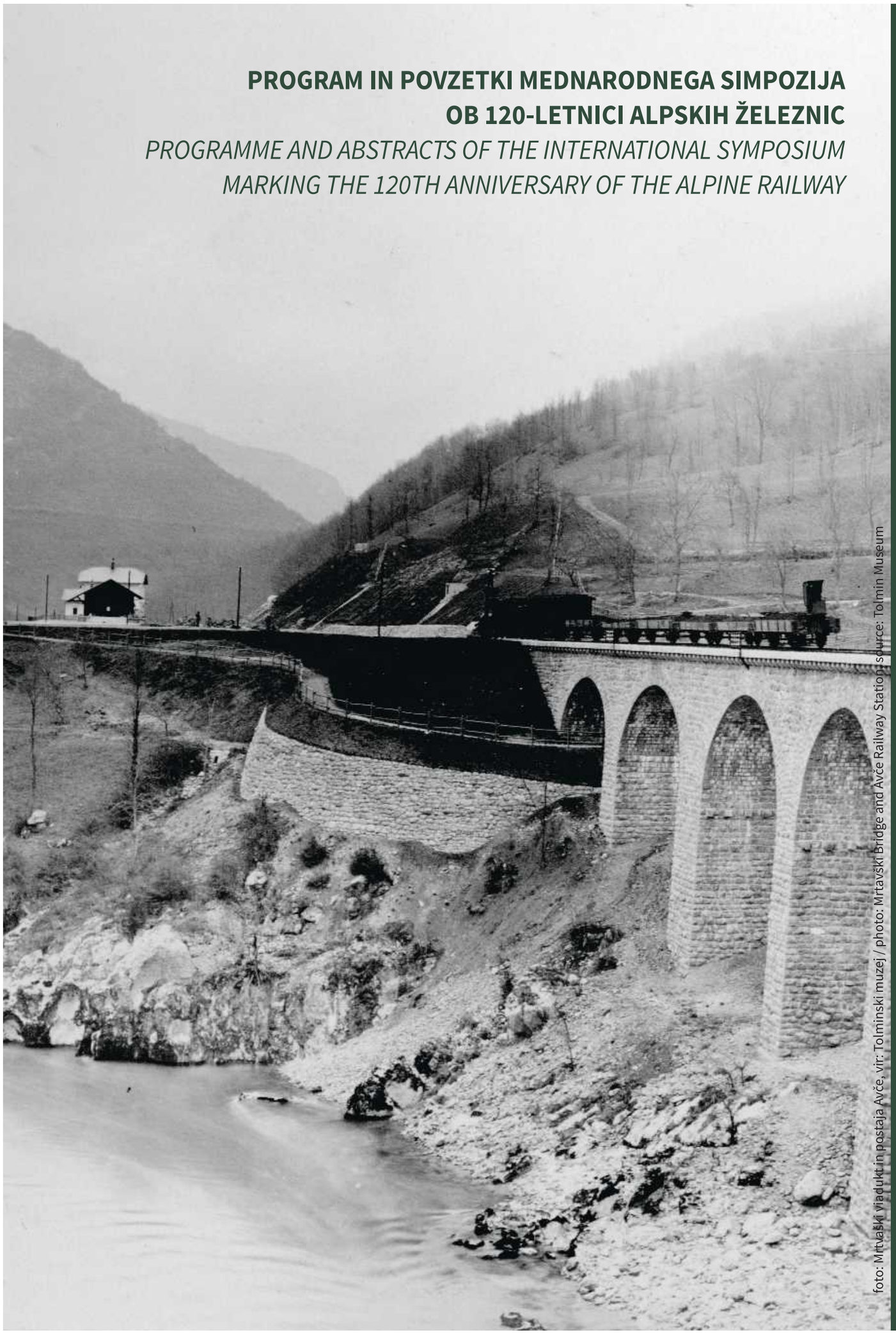

foto: Mrtvaški viadukt in postaja Avče, vir: Tolminski muzej / photo: Mrtavški Bridge and Avče Railway Station, source: Tolmin Museum

PROGRAM SIMPOZIJA

Četrtek, 26. november 2026

Registracija in kava **8.30 – 9.00**

Uvodni del **9.00 – 9.30**

Pozdravni nagovori

Prostor, dediščina in varstvo **9.30 – 10.30**

Dr. Maja Bricelj (Zavod za varstvo kulturne dediščine Slovenije, OE Ljubljana):
Obravnava železniške dediščine kot celovitega sistema

Helena Štih (Ministrstvo za kulturo Republike Slovenije):
Državni prostorski načrti za železnice

Mag. Ksenija Kovačec Naglič, Magda Miklavčič Pintarič (Ministrstvo za kulturo Republike Slovenije):
Železniška dediščina v Registru nepremične kulturne dediščine

Arhitektura in podoba železniške krajine, I. del **10.30 – 11.50**

Nataša Ülen (Zavod za varstvo kulturne dediščine Slovenije, OE Kranj; Univerza v Ljubljani, Filozofska fakulteta):
Bohinjska proga v gorenjskim delu s postajo Jesenice ter stik s Karavanško progo

Katja Kosič (Zavod za varstvo kulturne dediščine Slovenije, OE Nova Gorica):
Bohinjska proga v primorskem delu s postajo Nova Gorica ter nadaljevanje v kraško progo

Grega Žorž (Ministrstvo za kulturo Republike Slovenije):
Dokumentiranje železniške infrastrukture na gorenjskem delu Bohinjske proge

Grega Žorž (Ministrstvo za kulturo Republike Slovenije):
Dokumentiranje železniške infrastrukture na soški strani Bohinjske proge

Odmor 11.50 – 12.20

Arhitektura in podoba železniške krajine, II. del **12.20 – 13.40**

Nataša Ülen, Katja Kosič (Zavod za varstvo kulturne dediščine Slovenije, OE Kranj, OE Nova Gorica):
Spremljajoči objekti, oprema in vrtovi ob Bohinjski železniški progi

Nataša Ülen, Katja Kosič (Zavod za varstvo kulturne dediščine Slovenije, OE Kranj, OE Nova Gorica):
Premostitveni objekti ter spremljajoča infrastruktura ob Bohinjski železniški progi

Sara Šifrar Krajnik (Inštitut za novejšo zgodovino):
Poseg v rečno krajino in izraba hidroenergije pri gradnji Karavanškega in Bohinjskega železniškega predora

Bernarda Jesenko Filipič (Zavod za varstvo kulturne dediščine Slovenije, OE Kranj):
Pomen dokumentarnega gradiva ob evidentiranju objektov kulturne dediščine ob Bohinjski železniški progi

Odmor za kosilo 13.40 – 14.40

Železniška dediščina v širšem alpskem prostoru **14.40 – 16.30**

Mag. Gorazd Živkovič (Zvezni urad za spomeniško varstvo Avstrije / Bundesdenkmalamt – BDA):
Stavbna dediščina ob progi: trije spomeniškovarstveni posegi na avstrijskem Koroškem

Mag. Dr. Gerd Pichler (Zvezni urad za spomeniško varstvo Avstrije / Bundesdenkmalamt – BDA):
Varstvo železniške dediščine: nedavne obnove predorskih portalov na Koroškem / Über den Umgang mit Gebrauchsspuren in der Eisenbahndenkmalpflege – jüngste Restaurierungen von Tunnelportalen in Kärnten

Tomaž Konrad (Evropsko združenje za teritorialno sodelovanje GO – EZTS GO):
Primer dobre prakse: ovrednotenje Bohinjske proge v okviru čezmejnega sodelovanja

Dr. Paola Ventura (Urad za arheologijo, umetnost in krajino za Furlanijo–Julijsko krajino / Sopritendenza Archeologia, belle arti e paesaggio per il Friuli Venezia Giulia – SABAP FVG), Sabato Gargiulo (Fundacija italijanskih državnih železnic – Fondazione FS Italiane), Gerardo Masiello (SMStrutture Srl, Univerza v Pisi – Università di Pisa – UNIPI):
Muzej na postaji Trst Campo Marzio – obnova in sprememba namembnosti / Museo Stazione di Trieste Campo Marzio – Restauro e Rifunzionalizzazione

Zaključek / razprava

Petek, 27. november 2026

Registracija in kava **8.30 – 9.00**

Dediščina in sodobni izzivi: obnova in nadgradnja železnice **9.00 – 10.40**

Matjaž Kranjc (Slovenske železnice, Infrastruktura d.o.o.):
Pomen Bohinjske proge v slovenskem železniškem omrežju

Mag. Boštjan Vuga, Petko Grabljić (Sadar + Vuga d.o.o.):
EPK Distrikt – prenova železniške postaje Nova Gorica

Jernej Markovič (Riko d.o.o.):
Obnova železniške postaje Jesenice – izvajalski izzivi pri ohranjanju modernistične arhitekturne dediščine

Luka Šošo (Tiring d.o.o):
Nadgradnja odseka Jesenice – Bohinjska Bistrica na Bohinjski železniški progi: izzivi ohranjanja kulturne in naravne dediščine ob hkratnemu izpolnjevanju sodobnih tehničnih zahtev

Aljoša Klobučar (KO-BIRO d.o.o.):
Celovit pristop k obnovi in nadgradnji kamnitega mostu Vintgar nad Radovno

Nejc Povšič, Peter Jemec, Marko Žibert (Elea iC d.o.o.):
Avstro-ogrski železniški predori v sodobnem prometnem sistemu: pristopi k diagnostiki, sanaciji in podaljševanju življenjske dobe

Mitja Kosec, Dejan Kociper (MIND INŽENIRING d.o.o.):
Predvidena prenova postajnih objektov na Bohinjski progi

Železnica med infrastrukturo, ljudmi in spominom, I. del **10.40 – 12.20**

Marjana Lesar Slovnik (Slovenske železnice, Sektor za nepremičnine):
Arhitektura Bohinjske železnice in detajli kot njeni pomembni prepoznavni elementi

Matjaž Marušič (Konzorcij za Bohinjsko progo):
Bohinjska proga – moderna regionalna železnica z nostalgičnim šarmom

Gorazd Humar (samostojni raziskovalec):
Vojaški pogled na projektiranje trase in objektov Bohinjske železnice ter o Wagnerjevi secesijski ograji na Solkanskem mostu

Dr. Ines Beguš Bavcon (Goriški muzej Kromberk – Nova Gorica):
Prvotna ograja Solkanskega mostu: predstavitev muzejske postavitve

Karla Kofol (Tolminski muzej):
Gospodarski in turistični potencial območja ob železniški postaji Most na Soči

Odmor 12.20 – 12.50

Železnica med infrastrukturo, ljudmi in spominom, II. del **12.50 – 14.30**

Dr. Marko Mugerli (Gornjesavski muzej Jesenice):
Jeseniško železniško križišče

Mag. Marjana Žibert (Gorenjski muzej):
Maks Klodič – ustvarjalec novih poti

Andreja Špitalar (Železniški muzej Slovenskih železnic):
Med tehniko in ljudmi: železniška dediščina kot nosilka znanja, spomina in identitete

Elizabeta Eržen Podlipnik (Zgodovinski arhiv Ljubljana)
Na tirih zgodovine – preteklost železnic v arhivskih zapisih

Primož Frajle (Arhiv Republike Slovenije):
Slovenski filmski arhiv – uporaba in hramba filmskega arhivskega gradiva s poudarkom na gradivu, ki se nanaša na železnice

Zaključek / razprava
Odmor za kosilo 14.30 – 15.30

Filmsko popoldne **15.30 – 17.00**

Izbor iz filmskega arhiva ARS (izbor pripravil: Primož Frajle)
Lepotica pod gorami (avtor: Matija Jerman)

Spremljevalni del simpozija – razstave

Na tirih zgodovine. Preteklost železnice v arhivskih virih (Zgodovinski arhiv Ljubljana)
Dediščina železnice skozi muzejske predmete (Gorenjski muzej)
Alpske proge na razglednicah (Nataša Ülen, Zavod za varstvo kulturne dediščine Slovenije, OE Kranj)
V objektiv ujeta železniška dediščina (Grega Žorž, Ministrstvo za kulturo)

SYMPOSIUM PROGRAMME

Thursday, 26 November 2026

Registration and coffee **8.30 – 9.00**

Opening session **9.00 – 9.30**

Welcome addresses

Space, Heritage and Conservation **9.30 – 10.30**

Dr. Maja Bricelj (Institute for the Protection of Cultural Heritage of Slovenia, Ljubljana Regional Unit):
Railway Heritage Considered as an Integrated System

Helena Štih (Ministry of Culture of the Republic of Slovenia):
National Spatial Plans for Railways

Mag. Ksenija Kovačec Naglič, Magda Miklavčič Pintarič (Ministry of Culture of the Republic of Slovenia):
Railway Heritage in the Register of Immovable Cultural Heritage

Architecture and the Character of the Railway Landscape, Part I **10.30 – 11.50**

Nataša Ülen (Institute for the Protection of Cultural Heritage of Slovenia, Kranj Regional Unit; University in Ljubljana, Faculty of Arts):
The Bohinj Railway in the Upper Carniola Section, Including Jesenice Station and its Connection to the Karawanks Line

Katja Kosič (Institute for the Protection of Cultural Heritage of Slovenia, Nova Gorica Regional Unit):
The Bohinj Railway in the Littoral Section, Including Nova Gorica Station and its Continuation into the Karst Line

Grega Žorž (Ministry of Culture of the Republic of Slovenia):
Documenting Railway Infrastructure in the Upper Carniola Section of the Bohinj Railway

Grega Žorž (Ministry of Culture of the Republic of Slovenia):
Documenting Railway Infrastructure on the Soča Side of the Bohinj Railway

Break 11.50 – 12.20

Architecture and the Character of the Railway Landscape, Part II **12.20 – 13.40**

Nataša Ülen, Katja Kosič (Institute for the Protection of Cultural Heritage of Slovenia, Kranj Regional Unit, Nova Gorica Regional Unit):
Ancillary Buildings, Railway Equipment and Gardens Along the Bohinj Railway

Nataša Ülen, Katja Kosič (Institute for the Protection of Cultural Heritage of Slovenia, Kranj Regional Unit, Nova Gorica Regional Unit):
Bridges and other Structures, and Associated Infrastructure Along the Bohinj Railway

Sara Šifrar Krajnik (Institute of Contemporary History):
Intervention in the River Landscape and Use of Hydropower During the Construction of the Karawanks and Bohinj Railway Tunnels

Bernarda Jesenko Filipič (Institute for the Protection of Cultural Heritage of Slovenia, Kranj Regional Unit):
The Importance of Documentary Sources when Recording Heritage Sites Along the Bohinj Railway

Lunch Break 13.40 – 14.40

Railway Heritage in the Wider Alpine Region **14.40 – 16.30**

Mag. Gorazd Živkovič (Federal Monuments Authority Austria / Bundesdenkmalamt – BDA):
Architectural Heritage Along the Railway Line: Three Heritage Conservation Interventions in Austrian Carinthia

Mag. Dr. Gerd Pichler (Federal Monuments Authority Austria / Bundesdenkmalamt – BDA):
Railway Heritage Conservation: Recent Restoration of Tunnel Portals in Carinthia

Tomaž Konrad (European Grouping of Territorial Cooperation – EGTC GO / Gruppo europeo di cooperazione territoriale GO – GECT GO):
A Case of Good Practice: Enhancing the Value of the Bohinj Railway through Cross-Border Cooperation

Dr. Paola Ventura (Superintendency for Archaeology, Fine Arts and Landscape for Friuli Venezia Giulia – SABAP FVG), Sabato Gargiulo (Italian State Railways Foundation – Fondazione FS Italiane), Gerardo Masiello (SMStrutture Srl, University of Pisa – UNIPI):
The Museum at Trieste Campo Marzio Station: Restoration and Adaptive Reuse

Closing Remarks / Discussion

Friday, 27 November 2026

Registration and coffee **8.30 – 9.00**

Heritage and contemporary challenges: railway renewal and modernisation **9.00 – 10.40**

Matjaž Kranjc (Slovenian Railways, Infrastructure d.o.o.):
The Importance of the Bohinj Railway in Slovenia's Railway Network

Mag. Boštjan Vuga, Petko Grabljić (Sadar + Vuga d.o.o.):
EPK District: the Renovation of Nova Gorica Railway Station

Jernej Markovič (Riko d.o.o.):
Renovating Jesenice Railway Station: the Contractor's Challenges in Conserving Modernist Architectural Heritage

Luka Šošo (Tiring d.o.o):
Upgrading the Jesenice–Bohinjska Bistrica Section of the Bohinj Railway: Conserving Cultural and Natural Heritage while Meeting Current Technical Requirements

Aljoša Klobučar (KO-BIRO d.o.o.):
A Comprehensive Approach to the Restoration and Upgrading of the Vintgar Stone Bridge Over the Radovna

Nejc Povšič, Peter Jemec, Marko Žibert (Elea iC d.o.o.):
Austro-Hungarian Railway Tunnels in Today's Transport System: Approaches to Assessment, Rehabilitation and Extending Service Life

Mitja Kosec, Dejan Kociper (MIND INŽENIRING d.o.o.):
Planned Renovation of Station Buildings Along the Bohinj Railway

The railway between infrastructure, people and memory, Part I **10.40 – 12.20**

Marjana Lesar Slovnik (Slovenian Railways, Real Estate Sector):
The Architecture of the Bohinj Railway and its Details as Defining Features

Matjaž Marušič (Consortium for the Bohinj Railway):
The Bohinj Railway: a Modern Regional Railway with a Nostalgic Charm

Gorazd Humar (Independent Researcher):
A Military Perspective on the Design of the Bohinj Railway Route and Structures, and Wagner's Secession-Style Railing on Solkan Bridge

Dr. Ines Beguš Bavcon (Regional Museum Goriški muzej):
The Original Railing of Solkan Bridge: Presentation of the Museum Display

Karla Kofol (Tolmin Museum):
The Economic and Tourism Potential of the Area Around Most Na Soči Railway Station

Break 12.20 – 12.50

The railway between infrastructure, people and memory, Part II **12.50 – 14.30**

Dr. Marko Mugerli (Upper Sava Valley Museum Jesenice):
The Jesenice Railway Junction

Mag. Marjana Žibert (Gorenjski Museum):
Maks Klodič: Creator of New Routes

Andreja Špitalar (Slovenian Railway Museum):
Between Technology and People: Railway Heritage as a Carrier af Knowledge, Memory and Identity

Elizabeta Eržen Podlipnik (Historical Archives of Ljubljana)
On the Tracks of History: the Past of the Railways in Archival Records

Primož Frajle (Archives of the Republic of Slovenia):
The Slovenian Film Archive: Use and Preservation of Film Materials, with a Focus on Railway-Related Holdings

Closing Remarks / Discussion

Lunch Break 14.30 – 15.30

Film programme **15.30 – 17.00**

A Selection from the Archives of the Republic of Slovenia Film Collection (Selected by Primož Frajle)
Beauty Beneath the Mountains (Original Title: *Lepotica pod gorami*; Directed by Matija Jerman)

Symposium exhibitions

On the Tracks of History: the Past of the Railways in Archival Records (Historical Archives Ljubljana)
Railway Heritage through Museum Objects (Gorenjski muzej)
Alpine Railway Lines on Postcards (Nataša Ülen, Institute for the Protection of Cultural Heritage of Slovenia, Regional Unit Kranj)
Railway Heritage through the Camera Lens (Grega Žorž, Ministry of Culture of the Republic of Slovenia)

foto: Železniška postaja Avče, vir: Tolminski muzej / photo: Railway Station Avče, source: Tolmin Museum

Uvodna beseda

Železnice sodijo med najpomembnejše infrastrukturne dosežke moderne Evrope. V alpskem prostoru niso bile zgolj prometne povezave, temveč so pomembno vplivale na gospodarski razvoj, tehnične inovacije, kulturne izmenjave in preobrazbo pokrajin. Danes predstavljajo izjemno tehniško, arhitekturno in kulturno dediščino ter pričajo o zgodovinskem povezovanju držav, regij in skupnosti. Zato železniška dediščina ni omejena na posamezne postaje, mostove, predore in druge izjemne objekte ob tirih, temveč je bistveni del značaja naselbin in krajin. Njeno varstvo zato zahteva celovit pristop, ki povezuje prepoznavanje in ohranjanje dediščinskih vrednot s potrebami sodobne železniške infrastrukture.

Ob 120-letnici Bohinjske proge smo želeli pripraviti simpozij, ki bi presegel okvir jubilejnega obeleževanja in odprl širši razmislek o dediščini alpskih železnic, njenem pomenu in prihodnosti. Bohinjska proga je pri tem pomembno izhodišče, saj njena vrednost ni le v posameznih sestavinah, temveč v povezanosti infrastrukture, arhitekture in krajine, ki je skozi desetletja sooblikovala prostor in življenje ob njej.

V času obsežnih obnov in posodobitev železniškega omrežja postajajo vprašanja prepoznavanja, varstva in prihodnje rabe te dediščine še posebej aktualna. Prepričani smo, da lahko izmenjava znanj, izkušenj in različnih strokovnih pogledov prispeva k boljšemu razumevanju železniške dediščine ter k odgovornemu načrtovanju njene prihodnosti. Želimo si, da bi simpozij ponudil prostor za takšno razpravo in spodbudil nadaljnje sodelovanje med vsemi, ki železniško dediščino raziskujejo, varujejo, obnavljajo in uporabljajo.

Jernej Hudolin,
direktor Zavoda za varstvo kulturne dediščine Slovenije

Dr. Robert Peskar,
predsednik Slovenskega konservatorskega društva

Foreword

Railways rank among the most significant infrastructure achievements of modern Europe. In the Alpine region, they were much more than transport links: they profoundly influenced economic development, technical innovation, cultural exchange and the transformation of landscapes. Today, they represent outstanding technical, architectural and cultural heritage, bearing witness to the historical connections forged between countries, regions and communities. Railway heritage therefore extends beyond individual stations, bridges, tunnels and other exceptional structures along the tracks; it is an essential part of the character of settlements and landscapes. Its conservation calls for an integrated approach, combining the identification and preservation of heritage values with the needs of contemporary railway infrastructure.

On the 120th anniversary of the Bohinj Railway, we wished to organise a symposium that would go beyond commemorating a milestone and open a wider discussion about the heritage of the Alpine railways, its significance and its future. The Bohinj Railway offers an important starting point, since its value lies not only in its individual elements but also in the relationship between infrastructure, architecture and landscape, which has shaped the surrounding environment and the lives of its communities over the decades.

At a time of extensive railway renewal and modernisation, questions concerning the identification, conservation and future use of this heritage are especially pertinent. We believe that exchanging knowledge, experience and different professional perspectives can contribute to a better understanding of railway heritage and more responsible planning for its future. We hope the symposium will provide a forum for such discussion and encourage continued cooperation among all those who study, conserve, restore and use railway heritage.

Jernej Hudolin,
Director-General of the Institute for the Protection of Cultural Heritage of Slovenia

Dr. Robert Peskar,
President of the Slovenian Conservation Society

foto: Solkanski most, vir: Tolminski muzej / photo: Solkan Bridge, source: Tolmin Museum

Železniška dediščina – od prostora do interpretacije

Bohinjska in Karavanška proga sta glavni izhodišči za širši razmislek o vlogi železniške dediščine v alpskem prostoru. Z gradnjo alpskih železnic so se povezovali kraji in regije nekdanje Avstro-Ogrske, spreminjali so se gospodarski tokovi, podoba pokrajine in načini življenja. Alpske proge pa so uspele ohraniti svojo značilno podobo do danes. Njihova kompleksno sestavljena dediščina zato presega posamezne arhitekturne in tehniške objekte. Njeno vrednost sestavljajo povezanost trase, infrastruktura, arhitekture, krajine ter družbene in kulturne vsebine, ki so nastajale in se spreminjale skupaj z železnico.

Vsebinska zasnova prvega dne simpozija vodi od vprašanj prostora, prostorskega načrtovanja in samega varstva dediščine k arhitekturi in podobi širše železniške krajine. Osrednjo pozornost namenjamo Bohinjski progi, saj se je na njej pričela nadgradnja in s tem tudi potrebe po poglobljenem razumevanju njenih postaj, postajališč, spremljajočih objektov in druge soodvisne infrastrukture. Pregled se razširi na primere pozitivne prakse iz Avstrije in Italije, s katerima si delimo to progo. Ti predstavljajo sicer različne pristope varstva, a vse v luči obnove, ohranitve in nadaljnje rabe železniške infrastrukture v širšem alpskem prostoru.

Drugi dan odpira primere usklajevanja dediščinskih vrednot s sodobnimi tehničnimi in funkcionalnimi zahtevami železniške infrastrukture. Sledijo prispevki, ki železnico osvetljujejo z družbenega, zgodovinskega in kulturnega vidika – skozi njeno vlogo v življenju ljudi, gospodarskem razvoju, muzejskih zbirkah in arhivskem gradivu. Filmsko popoldne pa ponuja še pogled na železnico kot motiv in pričevalca časa, ohranjenega v gibljivih podobah.

S prispevki in spremljevalnimi razstavami želimo predstaviti raznolikost železniške dediščine ter različne strokovne in družbene poglede nanjo. Hkrati želimo spodbuditi razmislek o njenem prihodnjem razvoju. Železnica je namreč živa infrastruktura, ki jo uporabljamo, vzdržujemo in spreminjamo. Izziv je, kako jo razvijati, ne da bi pri tem izgubili razumevanje njenih izjemnih zgodovinskih, prostorskih in družbenih vrednot.

Uredniški odbor simpozija

Railway Heritage: From Landscape to Interpretation

The Bohinj and Karawanks railways provide the main starting points for a broader reflection on the role of railway heritage in the Alpine region. The construction of Alpine railway lines connected towns and regions of the former Austro-Hungarian Empire, reshaping economic flows, landscapes and ways of life. These lines have nevertheless retained much of their distinctive character. Their complex heritage extends beyond individual architectural and engineering structures. Its value arises from the interconnectedness of railway alignments, infrastructure, architecture, landscape and the social and cultural dimensions that emerged and evolved alongside the railway.

The programme for the first day moves from questions of space, spatial planning and heritage conservation to the architecture and character of the wider railway landscape. Particular attention is given to the Bohinj Railway, where upgrading works have begun and have increased the need for a thorough understanding of stations, halts, ancillary structures and other interdependent infrastructure. The discussion then broadens to examples of good practice from Austria and Italy, with which we share this railway heritage. These examples present different approaches to conservation, all considered in the context of the renewal, preservation and continued use of railway infrastructure across the wider Alpine region.

The second day opens with examples of how heritage values can be reconciled with the modern technical and functional requirements of railway infrastructure. Further contributions explore the railway from social, historical and cultural perspectives, examining its role in everyday life, economic development, museum collections and archival records. An afternoon of film screenings offers another perspective on the railway as both a subject and a witness of its time, preserved in moving images.

Through the papers and accompanying exhibitions, we aim to present the diversity of railway heritage and the different professional and social perspectives from which it can be understood. We also wish to encourage reflection on its future development. The railway is, after all, living infrastructure: we use it, maintain it and adapt it. The challenge is to develop it without losing sight of its exceptional historical, spatial and social values.

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Obravnava železniške dediščine kot celovitega sistema

Ključne besede: železniška dediščina, vrednotenje, varstvo kulturne dediščine, Bohinjska proga, Giacomo Ceconi di Montececon

Bohinjska proga je izjemen primer železniške kulturne dediščine. Njena dediščinska pomembnost je povezana z vlogo mednarodne železniške povezave, z izjemnimi inženirskimi rešitvami, prilagoditvijo zahtevnemu alpskemu terenu, ohranjenostjo številnih objektov ter značilno umestitvijo v prostor. Proga je hkrati še vedno delujoča železniška infrastruktura, zato je njeno varstvo neposredno povezano z vprašanjem ohranjanja avtentičnosti, celovitosti in identitete ob nadaljnji rabi ter nujnih prilagoditvah. V prispevku bodo izpostavljena temeljna konservatorska merila za vrednotenje tehniške kulturne dediščine in mednarodna strokovna izhodišča. Izpostavljen bo furlanski gradbeni podjetnik Giacomo Ceconi di Montececon, ki je sodeloval pri gradnji Borovniškega viadukta, pri železniških projektih na območju nekdanje Avstro-Ogrske ter pri izvedbi Bohinjskega predora. Njegova dejavnost omogoča razmislek o razvoju gradbenih znanj, tehnologij in inženirskih dosežkih v času intenzivnega širjenja železniškega omrežja ter dodatno osvetljuje čezmejno razsežnost železniške dediščine.

Railway Heritage Considered as an Integrated System

Keywords: railway heritage, heritage assessment, cultural heritage conservation, Bohinj Railway, Giacomo Ceconi di Montececon

The Bohinj Railway is an outstanding example of railway cultural heritage. Its heritage significance derives from its role as an international railway connection, its exceptional engineering solutions, their adaptation to challenging Alpine terrain, the survival of numerous structures and the distinctive way in which the railway is integrated into the landscape. At the same time, it remains an operational railway, meaning that its conservation is directly linked to questions of preserving authenticity, integrity and identity while accommodating continued use and necessary adaptations. The paper will outline the fundamental conservation criteria used to assess technical heritage and relevant international professional principles. Particular attention will be given to the Friulian building contractor Giacomo Ceconi di Montececon, who was involved in constructing the Borovnica Viaduct, railway projects across the former Austro-Hungarian Empire and the Bohinj Tunnel. His work offers an opportunity to consider the development of construction expertise, technologies and engineering achievements during a period of rapid railway expansion, while further illuminating the cross-border dimension of railway heritage.

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Državni prostorski načrti za železnice

Ključne besede: državni lokacijski načrt, državni prostorski načrt, zakonodaja, preventivna arheologija, umeščanje v prostor, železniška dediščina

Železnice v Sloveniji predstavljajo ključno infrastrukturo za gospodarski razvoj, trajnostno mobilnost in geostrateško povezovanje države, saj čez slovensko ozemlje potekata pomembna vseevropska prometna koridorja (V. in X. koridor) ter povezava do Luke Koper. Zakonodaja s področja urejanja prostora in varstva kulturne dediščine se je skozi čas spreminjala, v samostojni državi pa so bili postavljeni temelji sodobnemu načinu umeščanja železniške infrastrukture v prostor. Posebno mesto pri umeščanju infrastrukture predstavlja preventivna arheologija. Z nadgradnjo železniškega omrežja se sledi zahtevam uredbe vseevropskega prometnega omrežja glede potniškega in tovornega prometa. Trenutno je v pripravi 14 državnih prostorskih načrtov za železniško infrastrukturo. Umeščanje železnic v prostor je skozi zgodovino prineslo temeljite gospodarske, družbene in prostorske spremembe, ki so preoblikovale celotne regije. Danes umeščanje sodobnih železnic velja za ključni ukrep za zmanjšanje izpustov toplogrednih plinov, saj vlak predstavlja okolju prijaznejšo alternativo letalskemu in cestnemu prometu. Železniška infrastruktura igra pomembno vlogo pri varstvu kulturne dediščine, saj je neprecenljiva priča tehnološkega napredka skozi čas. Bomo kot družba sposobni ravnati na način, da bo današnja modernizacija železnic nekoč del kontinuiranega procesa ohranjanja in varstva naše dediščine?

National spatial plans for railways

Keywords: national location plan, national spatial plan, legislation, preventive archaeology, spatial placement, railway heritage

Railways in Slovenia are a key part of the infrastructure for economic development, sustainable mobility, and the country's geostrategic connections, as two major pan-European transport corridors (Corridors V and X) and the connection to the Port of Koper run through Slovenian territory. Legislation on spatial planning and cultural heritage protection has changed over time, and in the independent state, the foundations for a modern way of integrating railway infrastructure into space were laid. Preventive archaeology plays a special role in placing infrastructure. Upgrading the railway network follows the requirements of the pan-European transport network regulations regarding passenger and freight transport. Currently, 14 national spatial plans for railway infrastructure are being prepared. The placement of railways in space has historically brought significant economic, social, and spatial changes that have reshaped entire regions. Today, integrating modern railways is considered a key measure for reducing greenhouse gas emissions, as trains are a more environmentally friendly alternative to air and road travel. Railway infrastructure also plays an important role in protecting cultural heritage, as it is an invaluable witness to technological progress over time. Will we as a society be able to act in a way that makes today's modernization of railways part of a continuous process of preserving and protecting our heritage?

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Železniška dediščina v Registru nepremične kulturne dediščine

Ključne besede: Register kulturne dediščine, železniška dediščina, tipologija, pravni status

Register nepremične kulturne dediščine je osrednja zbirka podatkov o nepremični kulturni dediščini v Republiki Sloveniji. Vodi ga Ministrstvo za kulturo zaradi informacijske podpore izvajanju varstva dediščine, namenjen pa je tudi predstavljanju in raziskovanju dediščine ter vzgoji, izobraževanju in razvijanju zavesti javnosti o pomenu dediščine. Predloge za vpis v Register nepremične kulturne dediščine pripravlja Zavod za varstvo kulturne dediščine Slovenije, ki dediščino pred vpisom prepoznava, preučuje in ovrednoti. Z vpisom v Register kulturna dediščina še ne pridobi pravne zaščite in varstvenega režima. Ta se določa v drugih postopkih varstva dediščine (z razglasitvijo za kulturni spomenik, določitvijo varstvenega območja dediščine ali opredelitvijo varstvenega režima v prostorskih aktih).

V Register nepremične kulturne dediščine je trenutno vpisanih 31.107 enot. Od tega je 165 enot, povezanih z železnicami. Izbor vključuje predvsem stavbe in infrastrukturne objekte (postaje, mostove, predore, vodne postaje, remize, čuvajnice), ki so bile zasnovane neposredno na železniški infrastrukturi. V prispevku so podrobneje predstavljeni vpisi železniške dediščine v Register nepremične kulturne dediščine, zvrsti, tipologija in pravni status posameznih enot dediščine ter časovnica vpisov.

Railway Heritage in the Register of Immovable Cultural Heritage

Keywords: cultural heritage register, railway heritage, typology, legal status

The Register of Immovable Cultural Heritage is Slovenia's central database of immovable cultural heritage. It is maintained by the Ministry of Culture to support heritage protection and to facilitate the presentation, study and public understanding of heritage, as well as education and awareness-raising. Proposals for registration are prepared by the Institute for the Protection of Cultural Heritage of Slovenia, which identifies, studies and assesses heritage before it is entered in the Register. Registration does not itself confer legal protection or establish a protection regime. Such measures are determined through other heritage-protection procedures: designation as a cultural monument, establishment of a heritage protection area or definition of a protection regime in spatial planning documents.

The Register currently contains 31,107 entries, of which 165 relate to railways. These primarily comprise buildings and infrastructure structures — stations, bridges, tunnels, water stations, locomotive sheds and railway watchmen's houses — originally designed as integral parts of the railway infrastructure. The paper examines railway-related entries in the register in greater detail, focusing on heritage categories, typology, the legal status of individual assets and the chronology of their registration.

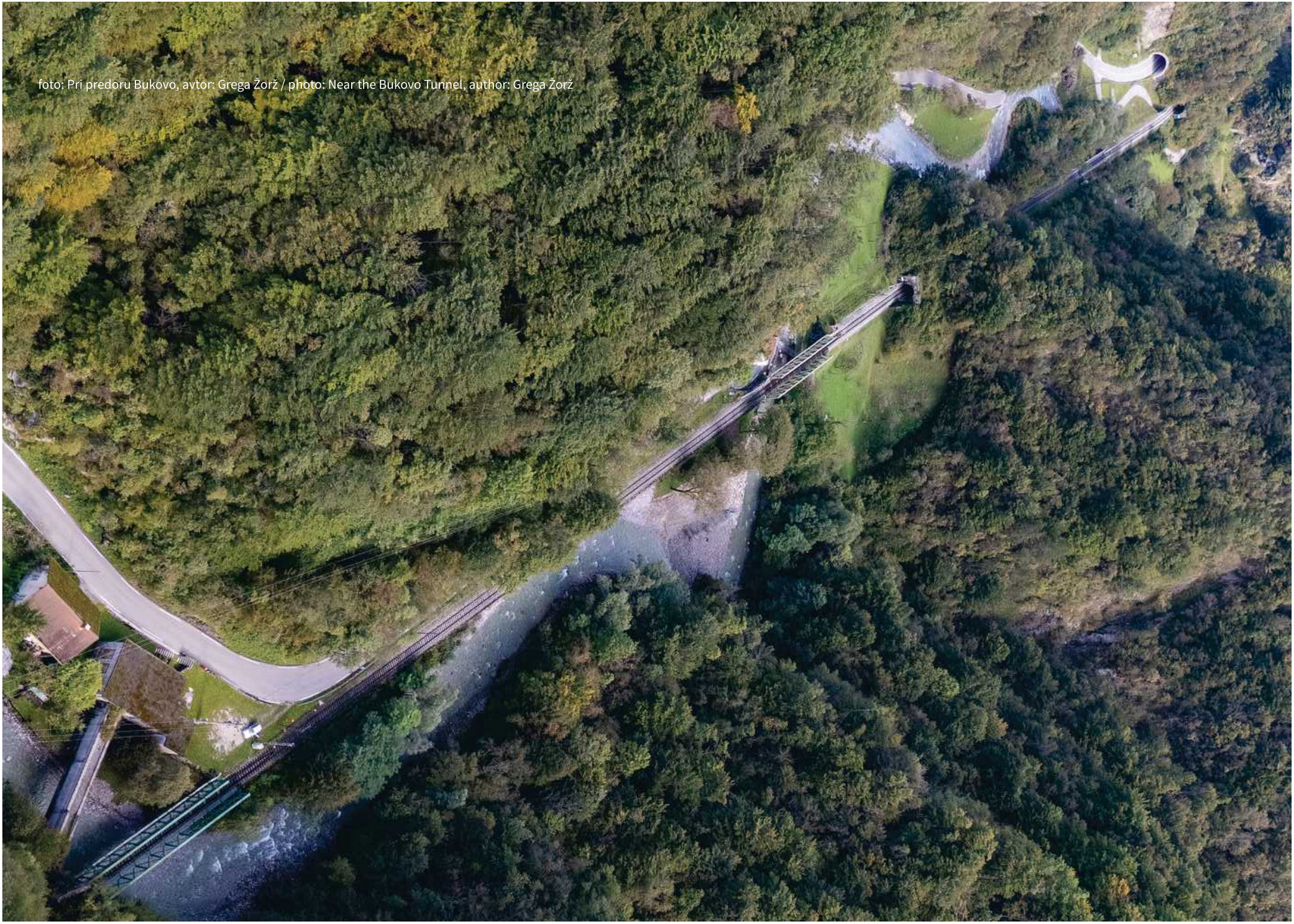

foto: Pri predoru Bukovo, avtor: Grega Žorž / photo: Near the Bukovo Tunnel, author: Grega Žorž

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Bohinjska proga na Gorenjskem s postajo Jesenice in povezavo s Karavanško progo

Ključne besede: Bohinjska proga, Karavanška proga, letovišče, železniška postaja Jesenice, tehniška dediščina

Prispevek obravnava gorenjski del Bohinjske proge od železniškega vozlišča na Jesenicah do Bohinjskega predora kot obsežen historičen pregled, s poudarkom na pričetku načrtovanj, zatem na sami gradnji in do danes ohranjenih tehničnih značilnostih železniške infrastrukture v gorenjskem delu Bohinjske proge. Posebna pozornost je namenjena postaji Jesenice, ki je s stikom Bohinjske in Karavanške proge prevzela pomembno vlogo v mednarodnem železniškem prometu, obenem pa doživela preoblikovanja in med drugo svetovno vojno tudi popolno porušitev, zatem pa modernistično novogradnjo priznanega slovenskega arhitekta Stanka Rohrmana. Na podlagi izvirne projektne dokumentacije, sistematično urejenih arhivskih načrtov, obsežnih gradbenih poročil in zgodovinskih fotografij so predstavljeni zahtevni gradbeni posegi, med njimi premostitveni objekti, predori, podporne konstrukcije ter postajni objekti na tem odseku. Prispevek osvetljuje tudi organizacijo gradnje, uporabo tedanjih inženirskih rešitev ter vpliv železnice na prostorski in gospodarski razvoj Gorenjske. Zgodovinska analiza je dopolnjena s prepoznavanjem ohranjenih materialnih pričevanj gradnje in njihovim pomenom v okviru tehniške in arhitekturne dediščine.

The Bohinj Railway in Upper Carniola, Jesenice Station and Its Connection with the Karawanks Railway

Keywords: Bohinj Railway, Karawanks Railway, resort, Jesenice railway station, technical heritage

This paper offers an extensive historical survey of the Upper Carniolan section of the Bohinj Railway, from the Jesenice railway junction to the Bohinj Tunnel. It focuses on the initial planning, subsequent construction and technical features of the railway infrastructure that have survived to the present day. Particular attention is devoted to Jesenice station, which assumed a major role in international rail transport at the junction of the Bohinj and Karawanks railways. The station underwent several transformations and was completely destroyed during the Second World War, before being replaced by a modernist building designed by the distinguished Slovenian architect Stanko Rohrman. Drawing on original design documentation, systematically organised archival plans, extensive construction reports and historical photographs, the paper examines major engineering works along this section, including bridges and other crossing structures, tunnels, retaining structures and station buildings. It also addresses the organisation of construction, the engineering solutions employed at the time and the railway's impact on the spatial and economic development of Upper Carniola. The historical analysis is complemented by an assessment of the surviving material evidence of the line's construction and its significance as technical and architectural heritage.

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Bohinjska proga v primorskem delu s postajo Nova Gorica ter nadaljevanja v kraško progo

Ključne besede: Bohinjska proga, Kraška proga, železniška postaja Nova Gorica, železniška infrastruktura, tehniška dediščina

Prispevek obravnava goriški in kraški del Bohinjske proge od Bohinjskega predora skozi Baško grapo in dolino Soče, mimo Gorice in čez Kras do današnje slovensko-italijanske meje, od koder se proga nadaljuje proti Trstu. Podaja obsežen zgodovinski pregled, s poudarkom na začetkih načrtovanja, gradnji ter do danes ohranjenih tehničnih in arhitekturnih značilnostih železniške infrastrukture. Posebna pozornost je namenjena zahtevnim gradbenim posegom na razgibanem terenu. Obravnavane so tudi posebnosti kraškega odseka, zlasti vzpon iz doline Branice proti Štanjelu in potek trase čez kraško planoto. Med postajnimi objekti je posebej izpostavljena železniška postaja Nova Gorica, ki je imela pomembno vlogo v mednarodnem železniškem prometu ter je skozi različna zgodovinska obdobja doživela številna preoblikovanja. Na podlagi izvirne projektne dokumentacije, arhivskih načrtov, gradbenih poročil in zgodovinskih fotografij so predstavljeni gradnja predorov, galerij, mostov, viaduktov, črpališč, prezračevalnih sistemov, podpornih konstrukcij in postajnih objektov ter uporabljene inženirske rešitve. Prispevek osvetljuje tudi organizacijo gradnje in vpliv železnice na prostorski in gospodarski razvoj Goriške, Posočja in Krasa. Zgodovinski pregled dopolnjuje prepoznavanje ohranjenih materialnih pričevanj prvotne gradnje in poznejših preoblikovanj, ki predstavljajo pomembno izhodišče za celostno vrednotenje in varstvo Bohinjske proge kot tehniške, arhitekturne in krajinske dediščine.

The Bohinj Railway in the Primorska Region, Nova Gorica Station and its Continuation towards the Karst Railway

Keywords: Bohinj Railway, Karst Railway, Nova Gorica railway station, railway infrastructure, technical heritage

The paper examines the Gorizia and Karst sections of the Bohinj Railway, extending from the Bohinj Tunnel through the Bača Gorge and the Soča Valley, past Gorizia and across the Karst Plateau to the present-day Slovenian–Italian border, from where the line continues towards Trieste. It provides a comprehensive historical overview, focusing on the initial planning and construction of the railway, as well as the technical and architectural features of its infrastructure that have survived to the present day. Particular attention is devoted to the demanding engineering works undertaken in the varied terrain. The paper also examines the distinctive characteristics of the Karst section, especially the ascent from the Branica Valley towards Štanjel and the alignment across the Karst Plateau. Among the station buildings, particular emphasis is placed on Nova Gorica railway station, which played an important role in international railway transport and underwent numerous transformations during successive historical periods. Drawing on original design documentation, archival plans, construction reports and historical photographs, the paper presents the construction of tunnels, galleries, bridges, viaducts, pumping stations, ventilation systems, retaining structures and station buildings, together with the engineering solutions employed. It also explores the organisation of construction works and the railway's influence on the spatial and economic development of the Gorizia region, the Soča Valley and the Karst.
The historical overview is complemented by an examination of surviving physical evidence of the original construction and subsequent alterations, providing an important basis for the comprehensive assessment and conservation of the Bohinj Railway as technical, architectural and landscape heritage.

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Dokumentiranje železniške infrastrukture na gorenjskem delu Bohinjske proge

Ključne besede: dokumentiranje železnic, Bohinjska proga, Gorenjska, 3D-modeliranje, brezpilotni letalniki

Gorenjski odsek Bohinjske proge med Jesenicami in Bohinjsko Bistrico predstavlja izjemen preplet alpskega železniškega inženirstva in značilne arhitekture z začetka 20. stoletja. Ob 120-letnici izgradnje proge je na pobudo Zavoda za varstvo kulturne dediščine Slovenije (ZVKDS) Informacijsko-dokumentacijski center za dediščino (INDOK center Direktorata za kulturno dediščino Ministrstva za kulturo) v tesnem sodelovanju z Območno enoto Kranj ZVKDS izvedel sistematično dokumentiranje ohranjenih elementov železniške infrastrukture.

Poleg klasičnega fotografskega dokumentiranja je bil glavni poudarek dela na zajemu prostorskih podatkov za izdelavo natančnih 3D-modelov. Ti bodo v prihodnje omogočali celovit vpogled v konstrukcijo objektov ter natančno preverjanje njihove podobe, oblike in mer brez potrebe po nenehnih terenskih izmerah. Prispevek obravnava tudi specifične omejitvene dejavnike pri uporabi brezpilotnih letalnikov (dronov) na tem odseku. Trasa proge namreč poteka skozi strnjeno urbano območje mesta Jesenice, v neposredni bližini heliporta bolnišnice, letališča Lesce ter vojašnice v Bohinjski Beli, kar zahteva prilagajanje metod terenskega zajema. Kljub regulativnim in prostorskim omejitvam zbrano gradivo ponuja digitalni zapis stanja proge in podlago za njeno nadaljnje konservatorsko varstvo.

Documenting the Bohinj Railway on the Upper Carniolan Section

Keywords: railway documentation, Bohinj Railway, Upper Carniola, 3D modelling, unmanned aerial vehicles (UAVs)

The Upper Carniolan section of the Bohinj Railway, between Jesenice and Bohinjska Bistrica, represents an outstanding combination of Alpine railway engineering and characteristic early twentieth-century architecture. On the occasion of the railway's 120th anniversary, the Information and Documentation Centre for Cultural Heritage (INDOK Centre), operating within the Cultural Heritage Directorate of the Ministry of Culture, undertook systematic documentation of the surviving elements of railway infrastructure. The project was initiated by the Institute for the Protection of Cultural Heritage of Slovenia (ZVKDS) and carried out in close cooperation with its Regional Unit Kranj. In addition to conventional photographic documentation, the primary focus was on collecting spatial data for the production of accurate three-dimensional (3D) models. These models will provide a comprehensive insight into the structures and enable precise examination of their appearance, geometry and dimensions without the need for repeated on-site measurements.

The paper also addresses specific restrictions affecting the use of unmanned aerial vehicles (UAVs or drones) along this section. The railway passes through the densely built-up urban area of Jesenice and close to the hospital helipad, Lesce airfield and the military barracks at Bohinjska Bela. These circumstances require adaptations to field-survey methods. Despite regulatory and spatial constraints, the collected documentation provides a digital record of the railway's present condition and an essential basis for its future conservation.

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Dokumentiranje železniške infrastrukture na soški strani Bohinjske proge

Ključne besede: dokumentiranje železnic, Bohinjska proga, Posočje, 3D-modeliranje, dostopnost

Južni, primorski del Bohinjske proge skozi Baško grapo in dolino Soče se zaradi izjemno zahtevnega reliefa ponaša z nekaterimi najbolj drznimi inženirskimi objekti v tem delu Evrope, ki so skozi stoletje doživeli tudi močne zgodovinske pretrese. Sistematično dokumentiranje tehniške in stavbne dediščine na tem odseku je na pobudo ZVKDS izvedel INDOK center Direktorata za kulturno dediščino Ministrstva za kulturo v sodelovanju z Območno enoto Nova Gorica ZVKDS.

Tudi na soški strani je bil osrednji cilj ob fotografskem zapisu pridobiti kakovostne vhodne podatke za izdelavo 3D-modelov objektov, s katerimi konservatorska stroka in upravljavci pridobijo trajen digitalni vpogled v celotno konstrukcijo, njeno geometrijo, mere in stanje ohranjenosti. Glavni izziv pri terenskem delu je predstavljala slaba fizična dostopnost proge. Trasa namreč v veliki meri poteka po strmih pobočjih na drugi strani reke in zajezitve pri Mostu na Soči, stran od glavnih prometnic, pri čemer se neprekinjeno izmenjujejo številni predori, galerije, podporni zidovi in visoki mostovi, ki so s tal pogosto nepregledni ali težko dosegljivi. Prispevek prikazuje pristope za premagovanje teh terenskih ovir ter pomen ustvarjene 3D-dokumentacije za načrtovanje prihodnjih vzdrževalnih posegov in ohranjanje dediščine Posočja.

Documenting the Bohinj Railway on the Soča Valley Section

Keywords: railway documentation, Bohinj Railway, Soča Valley, 3D modelling, accessibility

The southern, Primorska section of the Bohinj Railway, running through the Bača Gorge and the Soča Valley, is distinguished by exceptionally challenging terrain and some of the most ambitious railway engineering structures in this part of Europe. Over the past century, these structures have also witnessed major historical upheavals. Systematic documentation of the technical and architectural heritage along this section was undertaken by the Information and Documentation Centre for Cultural Heritage (INDOK Centre) of the Cultural Heritage Directorate at the Ministry of Culture, at the initiative of the Institute for the Protection of Cultural Heritage of Slovenia (ZVKDS), in cooperation with its Nova Gorica Regional Unit.

As on the Upper Carniolan section, the principal objective, alongside photographic recording, was to acquire high-quality spatial data for the production of three-dimensional (3D) models. These models will provide conservation professionals and infrastructure managers with a lasting digital record of the structures, enabling detailed examination of their overall configuration, geometry, dimensions and state of preservation. The main challenge encountered during fieldwork was the difficult physical accessibility of the railway. Much of the route follows steep hillsides on the opposite banks of the Soča River and the reservoir near Most na Soči, away from major roads. Numerous tunnels, galleries, retaining walls and high bridges occur in close succession, making many structures difficult to inspect from ground level or physically inaccessible. The paper presents the approaches adopted to overcome these fieldwork challenges and highlights the importance of the resulting 3D documentation for planning future maintenance interventions and safeguarding the railway heritage of the Soča Valley region.

foto: V dolini Soče, avtor: Grega Žorž / photo: In the Soca Valley, author: Grega Žorž

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Spremljajoči objekti, oprema in vrtovi ob Bohinjski železniški progi

Ključne besede: Bohinjska železniška proga, spremljajoči objekti, železniška oprema, postajni vrtovi

Bohinjska železniška proga ima poleg izjemnih inženirskih objektov številne spremljajoče stavbe, infrastrukturne ureditve, opremo in zelene površine, ki so pomembno sooblikovali njeno prvotno podobo. Prispevek obravnava manj raziskane sestavine železniškega prostora, med katere sodijo pomožni in gospodarski objekti, čuvajnice, vodne postaje, signalnovarnostne naprave, ograje, svetila ter druga značilna železniška oprema. Posebna pozornost je namenjena vrtovom, drevoredom in parkovnim ureditvam ob postajnih poslopjih, ki pričajo o načrtnem oblikovanju železniškega prostora ter njegovih funkcionalnih, estetskih in družbenih razsežnostih. Na podlagi arhivskih načrtov, zgodovinskih fotografij, tehnične dokumentacije in terenskega pregleda so predstavljene značilnosti teh ureditev, njihova tipologija, prvotna namembnost in poznejše spremembe.

Prispevek opozarja na pomen celostnega vrednotenja železniške dediščine, ki poleg monumentalnih gradbenih dosežkov vključuje tudi drobnejše arhitekturne, tehnične in krajinske prvine, ključne za razumevanje zgodovinske podobe Bohinjske proge.

Ancillary Buildings, Railway Equipment and Gardens along the Bohinj Railway

Keywords: Bohinj Railway, ancillary buildings, railway equipment, station gardens

In addition to its outstanding engineering structures, the Bohinj Railway encompasses numerous ancillary buildings, infrastructure facilities, technical equipment and green spaces that played an important role in shaping its original character. The paper examines the less extensively researched elements of the railway environment, including auxiliary and service buildings, railway watchmen's houses, water stations, signalling and safety equipment, fences, lighting fixtures and other characteristic railway installations. Particular attention is devoted to gardens, tree-lined avenues and landscaped areas surrounding station buildings, which provide evidence of the deliberate planning and design of railway spaces and reflect their functional, aesthetic and social dimensions. Drawing on archival plans, historical photographs, technical documentation and field surveys, the paper examines the characteristics of these features, their typology, original functions and subsequent alterations.

The paper emphasises the importance of a comprehensive approach to railway heritage assessment that extends beyond monumental engineering achievements to include smaller architectural, technical and landscape elements essential to understanding the historical character of the Bohinj Railway.

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Premostitveni objekti ter spremljajoča infrastruktura ob Bohinjski železniški progi

Ključne besede: Bohinjska železniška proga, mostovi in viadukti, železniška infrastruktura, gradbena tehnika, tehniška dediščina

Bohinjska železniška proga, zgrajena med letoma 1900 in 1906 v okviru avstro-ogrskega programa alpskih železnic, predstavlja izjemen dosežek železniškega inženirstva začetka 20. stoletja. Zaradi zahtevnih geografskih in geoloških razmer je njena gradnja terjala številne tehnično dovršene rešitve, zlasti pri premoščanju vodotokov, sotesk in drugih naravnih ovir. Prispevek obravnava mostove, viadukte, prepuste ter pripadajočo infrastrukturo, vključno s podpornimi in opornimi zidovi, sistemi odvodnjavanja ter ureditvami za stabilizacijo železniškega telesa. Na podlagi izvirnih projektnih načrtov, statičnih izračunov, gradbenih poročil, zgodovinskih fotografij in terenskih raziskav so predstavljene konstrukcijske zasnove, uporabljeni materiali, tehnike gradnje ter prilagajanje objektov naravnim danostim. Posebna pozornost je namenjena izvirnim inženirskim rešitvam, njihovi tipološki raznovrstnosti in poznejšim konstrukcijskim spremembam.

Prispevek poudarja pomen celostnega evidentiranja in vrednotenja premostitvenih objektov ter spremljajoče infrastrukture kot bistvenih sestavin tehniške dediščine Bohinjske proge in njenega zgodovinskega razvoja.

Bridges and Associated Infrastructure along the Bohinj Railway

Keywords: Bohinj Railway, bridges and viaducts, railway infrastructure, construction techniques, technical heritage

The Bohinj Railway, constructed between 1900 and 1906 as part of the Austro-Hungarian programme for the development of Alpine railway connections, represents an outstanding achievement of early twentieth-century railway engineering. Owing to the demanding geographical and geological conditions along its route, its construction required numerous technically sophisticated solutions, particularly for crossing watercourses, gorges and other natural obstacles. The paper examines bridges, viaducts, culverts and associated infrastructure, including retaining and supporting walls, drainage systems and structures designed to stabilise the railway formation. Drawing on original design plans, structural calculations, construction reports, historical photographs and field investigations, it explores the structural principles, materials and construction techniques employed, together with the adaptation of individual structures to local environmental conditions. Particular attention is devoted to the original engineering solutions, their typological diversity and subsequent structural alterations.

The paper highlights the importance of systematically recording and comprehensively assessing bridges and associated infrastructure as essential components of the technical heritage of the Bohinj Railway and its historical development.

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Poseg v rečno krajino in izraba hidroenergije pri gradnji Karavanškega in Bohinjskega železniškega predora

Ključne besede: hidroenergija, Bohinjska Bistrica, Radovna, avstro-ogrsko ministrstvo za železnico, železniški predori

Z naraščajočimi potrebami po energiji sta se v 19. stoletju na različnih predelih alpskega loka raba vode kot energetskega vira in up vodnih naprav začeli povečevati. Za boljši izkoristek vodne moči so se ob vodnih kolesih začele postopno uveljavljati turbine, moč vode pa se je vedno pogosteje uporabljala za proizvodnjo elektrike. Znotraj Avstro-Ogrske je zanimanje za izrabo vodnih virov alpskih rek in potokov za proizvodnjo elektrike začelo zlasti naraščati na začetku 20. stoletja. Med interesenti za rabo energetskega potenciala alpskih rek in potokov se tedaj pojavi tudi avstro-ogrsko ministrstvo za železnico. Z namenom pridobivanja potrebnih virov energije, namenjene gradnji odsekov železnic in elektrifikaciji železniških prog, je bila leta 1901 ustanovljena Direkcija za gradnjo železnic. Ta je v deželi Kranjski postala posebej znana v času gradnje Bohinjske železniške proge. Tedaj je direkcija zasnovala načrte za izrabo hidroenergije alpskih rek in potokov za gradnjo železniških predorov. Prispevek preko analize ohranjenih arhivskih virov osvetljuje projekte Direkcije za gradnjo železnic na potoku Bohinjska Bistrica in reki Radovni v času gradnje Karavanškega in Bohinjskega predora. Prikazan bo poseg v rečno krajino, ki razkriva razširjene prakse rabe izbranih vodotokov med lokalnimi skupnostmi ter hkrati pomen veljavne vodne zakonodaje v primeru vzniklih konfliktov okoli vodnih virov.

Interventions in River Landscapes and the Use of Hydropower during Construction of the Karawanks and Bohinj Railway Tunnels

Keywords: hydropower, Bohinjska Bistrica, Radovna, Imperial-Royal Ministry of Railways, railway tunnels

With the growing energy demands in the 19th century, the use of water as an energy source and the construction of water installations began to increase in various parts of the Alpine region. To make better use of water power, turbines gradually started to replace water wheels, and the power of water was increasingly used to generate electricity. Within Austria-Hungary, interest in using Alpine rivers and streams to produce electricity began to grow particularly at the beginning of the 20th century. Among those interested in harnessing the energy potential of Alpine rivers and streams was also the Imperial-Royal Railway Ministry. To obtain the necessary energy resources for building railway sections and electrifying railway lines, the Directorate for Railway Construction was established in 1901. This one in the Kranjska region became particularly well-known during the construction of the Bohinj railway. At that time, the railway administration planned to use the hydro power of Alpine rivers and streams to build railway tunnels. The article sheds light on the Railway Administration's projects on the Bohinjska Bistrica stream and the Radovna river during the construction of the Karawanks and Bohinj tunnels, based on analysis of preserved archival sources. It will show the intervention in the river landscape, revealing common practices of using selected watercourses among local communities, as well as the importance of existing water legislation in cases of emerging conflicts over water resources.

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Pomen dokumentarnega gradiva ob evidentiranju objektov kulturne dediščine ob Bohinjski železniški progi

Ključne besede: železniška proga, tehniška dediščina, arhivsko gradivo, arhitekturna in geodetska dokumentacija, fototeka

Bohinjska železniška proga, zgrajena med letoma 1900 in 1906 kot del obsežnega avstro-ogrskega projekta alpskih železniških povezav, predstavlja izjemen primer tehniške in stavbne dediščine začetka 20. stoletja. Prispevek obravnava pomen zgodovinskega dokumentarnega gradiva pri evidentiranju, prepoznavanju in vrednotenju objektov kulturne dediščine vzdolž železniške trase. Posebna pozornost je namenjena izvirnim načrtom, gradbeni dokumentaciji, tehničnim poročilom, zgodovinskim fotografijam in arhivskim zapisom, ki omogočajo rekonstrukcijo prvotnega stanja objektov, razumevanje njihovih konstrukcijskih značilnosti ter ugotavljanje poznejših sprememb. S primerjavo arhivskih virov in današnjega stanja je mogoče natančneje opredeliti stopnjo ohranjenosti, avtentičnosti in dediščinskega pomena posameznih objektov ter prepoznati tudi tiste sestavine železniške infrastrukture, ki doslej niso bile ustrezno evidentirane ali ovrednotene. Prispevek na izbranih primerih poudarja vlogo sistematičnega arhivskega raziskovanja kot temeljnega izhodišča za strokovno dokumentiranje, celovito vrednotenje in načrtovanje varstva Bohinjske železniške proge kot povezane tehniške, arhitekturne in prostorske celote

The Significance of Documentary Sources in the Identification and Recording of Cultural Heritage Structures along the Bohinj Railway

Keywords: Bohinj Railway, technical heritage, archival records, architectural and surveying documentation, photographic archives

The Bohinj Railway, constructed between 1900 and 1906 as part of an extensive Austro-Hungarian project to establish railway connections across the Alps, represents an outstanding example of early twentieth-century technical and architectural heritage. This paper examines the significance of historical documentary sources in the identification, recording and assessment of cultural heritage structures along the railway line. Particular attention is devoted to original plans, construction documentation, technical reports, historical photographs and archival records, which provide essential evidence for reconstructing the original condition of structures, understanding their engineering characteristics and identifying subsequent alterations. By comparing archival sources with the present condition of the structures, it is possible to assess their state of preservation, authenticity and heritage significance more accurately, while also identifying elements of railway infrastructure that have not yet been adequately documented or evaluated. Through selected case studies, the paper highlights the importance of systematic archival research as a fundamental basis for professional documentation, comprehensive heritage assessment and conservation planning, treating the Bohinj Railway as an interconnected technical, architectural and spatial ensemble.

foto: Čuvajnica in železniški most pred postajo Bohinjska Bistrica, Grega Žorž / photo: Railway watchman's hut and railway bridge near Bohinjska Bistrica Railway Sation, author: Grega Žorž

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Stavbna dediščina ob progi: trije spomeniškovarstveni posegi na avstrijskem Koroškem

Ključne besede: historicizem, železnica, most, ruševine kapele, spomenik miru

Nameščena in usklajena infrastruktura je bila ob izgradnji železniških prog predpogoj za njihovo brezhibno delovanje. Z modernizacijo so jo izgrajevali naprej. Danes ponekod tudi posodobljene strukture ne zadoščajo potrebam časa in tehničnemu razvoju. Dva taka primera sta iz Annenheima ob Osojskem jezeru. Čeprav stojita obe zgradbi pod spomeniškim varstvom, sta bili odstranjeni. Ena je premaknjena na drugo mesto. Druga pa je še desiderat. Tretji primer iz Podrožce/Rosenbach je le tri leta služil prvotnemu namenu. Pri mejnih bojih v letu 1919 je bil hudo poškodovan in leta 2016 spremenjen v vojno obeležje.

Architectural Heritage along Railway Lines: Three Conservation Interventions in Austrian Carinthia

Keywords: Historicism, railway, bridge, chapel ruin, peace monument

The installation and coordination of infrastructure was a prerequisite for the seamless operation of railway lines at the time of their construction. This infrastructure was further developed through subsequent modernization. Today, in some instances, even these modernized structures no longer meet contemporary needs or keep pace with technical advancements. Two such examples come from Annenheim, on Lake Ossiach. Although both buildings were protected as heritage sites, they were removed; one was relocated, while the fate of the other remains a matter of ongoing discussion. A third example, from Podrožca/Rosenbach, served its original purpose for only three years. Severely damaged during border conflicts in 1919, it was transformed in 2016 into a memorial against war.

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Über den Umgang mit Gebrauchsspuren in der Eisenbahndenkmalpflege - jüngste Restaurierungen von Tunnelportalen in Kärnten

Keynotes: Tunnelportale, Gebrauchsspuren, Alterswert

Gebrauchsspuren der Nutzungsgeschichte lassen sich manchmal an Tunnelportalen einer Eisenbahnlinie bis heute sehr gut ablesen. Gründliche Befundung ist die Basis für ein Restaurierziel, das die Geschichte der technischen Entwicklung einer Bahnlinie sichtbar lässt und in keinem Wiederspruch zur aktuellen Nutzung steht. Dies soll anhand zweier Restaurierungen von Tunnelportalen gezeigt werden, die in den letzten Jahren in Kärnten durchgeführt wurden.

Ohranjanje sledov uporabe pri varstvu železniških spomenikov: nedavna restavratorska dela na portalih predorov na Koroškem

Ključne besede: vhodi v predore, znaki uporabe, starostna vrednost

Sledi uporabe skozi zgodovino se včasih še danes zelo dobro vidijo na tunelskih portalih železniške proge. Natančna analiza je osnova za cilj obnove, ki pokaže zgodovino tehničnega razvoja železniške proge in ne nasprotuje njeni današnji uporabi. To bomo prikazali na primeru dveh obnov tunelskih portalov, ki sta bili v zadnjih letih izvedeni na Koroškem.

Preserving Traces of Use in Railway Heritage Conservation: Recent Restoration of Tunnel Portals in Carinthia

Keywords: tunnel portals, traces of use, age value

Traces of historical use can sometimes be seen very clearly on the tunnel portals of a railway line even today. Thorough documentation is the basis for a restoration goal that makes the history of a railway line's technical development visible and does not conflict with its current use. This will be illustrated using two restorations of tunnel portals that were carried out in recent years in Carinthia.

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Primer dobre prakse: Ovrednotenje Bohinjske proge v okviru čezmejnega sodelovanja

Ključne besede: Bohinjska proga, trajnostna mobilnost, čezmejno povezovanje, regionalni železniški promet, turistični koridor

Pri Evropskem združenju za teritorialno sodelovanje Gorica – Nova Gorica – Šempeter Vrtojba (EZTS GO) se že vrsto let zavzemamo za oživitve in ovrednotenja Bohinjske proge, kot ene najpomembnejših, najlepših in najbolj povezovalnih infrastruktur v širši regiji. Trdimo, da ima proga vse pogoje, da postane na eni strani sodobna regionalna železnica v Republiki Sloveniji, ki zagotavlja učinkovito povezavo med Primorsko in Gorenjsko ter spodbuja trajnostni javni potniški promet metropolitanskega značaja na širšem italijansko-slovenskem čezmejnem območju in na drugi strani, da se razvije v izjemen mednarodni in čezmejni turistični koridor med Italijo, Slovenijo in Avstrijo. V sodelovanju s Posoškim razvojnim centrom iz Tolmina, smo sodelovali pri pripravi Socioekonomske študije valorizacije Bohinjske železnice za mobilnost turistov in prebivalcev (avtor študije je podjetje QNEX iz Bolzana), financirane v okviru projekta CROSSMOBY (Interreg V-A Italia-Slovenia 2014-2020). Dokument (avgusta 2021) prinaša operativne smernice glede upravljanjna in razvoja infrastrukture ter storitev vzdolž proge. Leta 2019 smo v sodelovanju s Kulturnim domom Nova Gorica in Kulturno informacijsko točko (KIT) pripravil stalno razstavo z naslovom Bohinjska proga: tir za tri narode ob Soči. Projekt je bil sofinanciran v okviru programa Interreg V-A Italija–Slovenija 2014–2020 (projekt Isonzo–Soča). Ob letošnji 120. obletnici odprtja Bohinjske proge smo stalno razstavo dopolnil z novim razstavnim panojem, ki obeležuje visoki jubilej. Glede na aktualne geopolitične razmere in negotovosti na področju prometa pridobiva železniška Bohinjska proga dodaten strateški pomen, zato bo v prihodnje nujno podrobneje preučiti tudi okrepitev vloge Bohinjske proge na področju tovorne logistike.

A Case of Good Practice: Enhancing the Value of the Bohinj Railway through Cross-Border Cooperation

Keywords: Bohinj Railway, sustainable mobility, cross-border cooperation, regional rail transport, tourist corridor

For many years, the European Grouping of Territorial Cooperation Gorizia–Nova Gorica–Šempeter-Vrtojba (EGTC GO) has been committed to revitalising and enhancing the value of the Bohinj Railway as one of the most important, scenic and unifying elements of infrastructure in the wider region. We firmly believe that the railway has the potential to develop into a modern regional railway within Slovenia, providing an efficient connection between the Primorska and Gorenjska regions and promoting sustainable metropolitan-scale public passenger transport throughout the wider Italian–Slovenian cross-border area. At the same time, it has the potential to become an exceptional international tourist corridor linking Italy, Slovenia and Austria.
In cooperation with the Soča Valley Development Centre in Tolmin, we contributed to the preparation of the Socio-Economic Study on the Valorisation of the Bohinj Railway for Tourist and Resident Mobility, carried out by QNEX, a company based in Bolzano. The study was funded through the CROSSMOBY project under the Interreg V-A Italy–Slovenia 2014–2020 programme. Completed in August 2021, it provides operational guidelines for the management and development of railway infrastructure and services along the line.
In 2019, we organised a permanent exhibition entitled The Bohinj Railway: A Track Connecting Three Nations along the Soča River, in cooperation with Kulturni dom Nova Gorica and the Cultural Information Point (KIT). The project was co-financed through the Interreg V-A Italy–Slovenia 2014–2020 programme (Isonzo–Soča project). To mark the 120th anniversary of the opening of the Bohinj Railway in 2026, the permanent exhibition was expanded with an additional panel commemorating this important milestone.
In view of current geopolitical developments and uncertainties in the transport sector, the Bohinj Railway is gaining additional strategic importance. It will therefore be essential to examine in greater detail the potential for strengthening its role in freight transport and logistics.

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Museo Stazione di Trieste Campo Marzio – Restauro e rifunzionalizzazione

Parole chiave: Riqualificazione urbana, restauro, ingegneria, cultura, valorizzazione

La Fondazione FS, attraverso il proprio Servizio Infrastrutture e Lavori, ha curato lo sviluppo di un articolato progetto d'intervento, finanziato con fondi PNC, dedicato al recupero, al restauro e alla rifunzionalizzazione dell'ex stazione di Trieste Campo Marzio. L'iniziativa mira a restituire alla collettività uno storico complesso ferroviario, trasformandolo in un moderno Museo Ferroviario e in un dinamico centro polifunzionale per la cultura e gli eventi. L'intervento non si limita alla conservazione del patrimonio storico-architettonico e rotabile, ma punta a creare uno spazio vivo, integrato nel tessuto urbano e aperto all'esterno, capace di dialogare direttamente con il territorio circostante. Il successo dell'operazione è frutto di una sinergia strategica e del fondamentale supporto della Regione Autonoma Friuli Venezia Giulia, che ha creduto fortemente nel potenziale di sviluppo culturale e turistico dell'opera. Trieste Campo Marzio si attesta così come hub polivalente di riferimento regionale e nazionale, dove la memoria della tradizione ferroviaria incontra l'innovazione, la rigenerazione urbana e la valorizzazione del territorio.

Muzej na postaji Trst Campo Marzio – obnova in sprememba namembnosti

Ključne besede: urbana prenova, restavriranje, inženiring, kultura, valorizacija

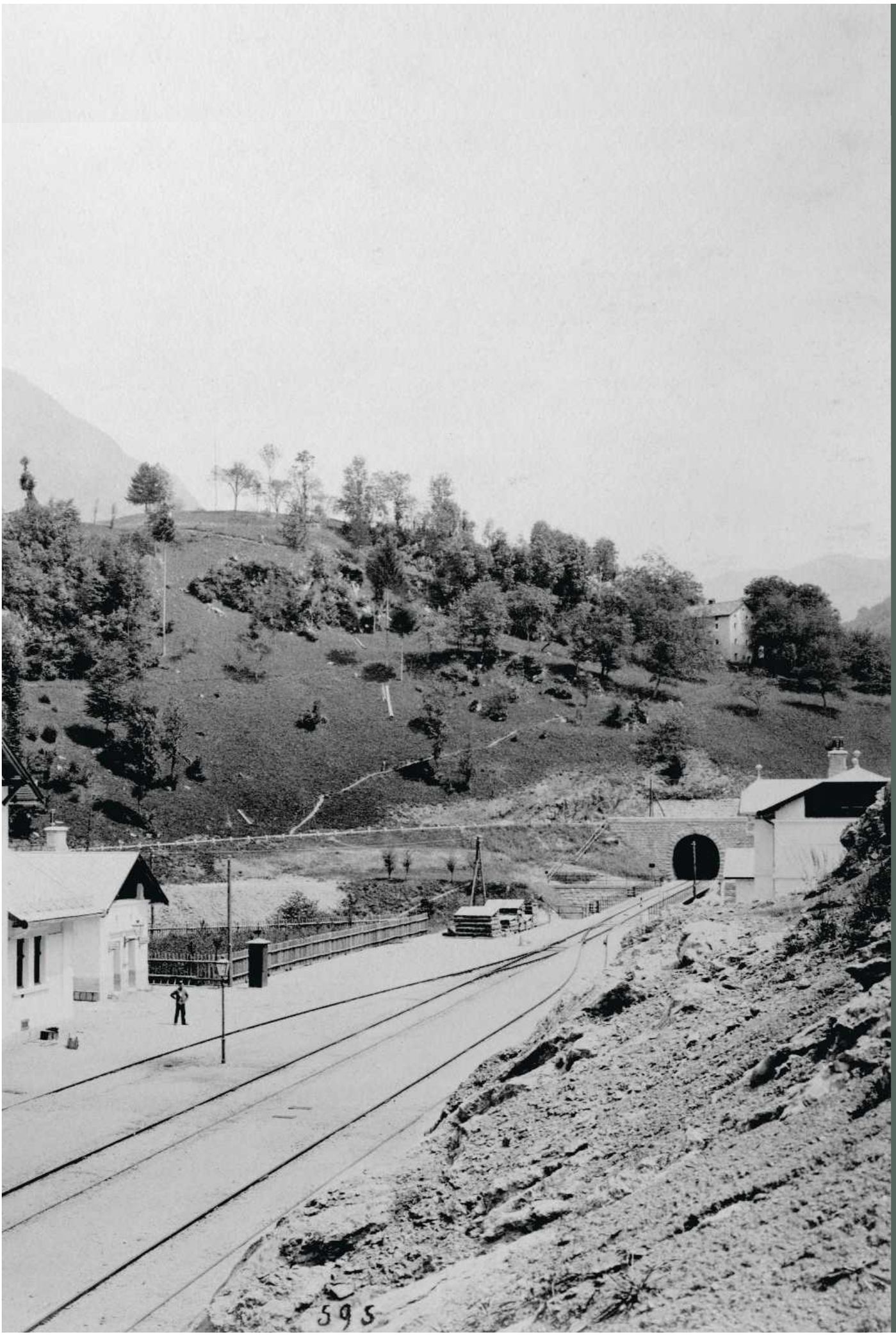
Fundacija FS je preko svoje službe za infrastrukturo pripravila obsežen projekt, financiran s sredstvi PNC, namenjen obnovi, restavriranju in ponovni funkcionalni uporabi nekdanje železniške postaje Trst Campo Marzio. Pobuda si prizadeva vrniti skupnosti zgodovinski železniški kompleks ter ga preoblikovati v sodoben železniški muzej in dinamičen večnamenski kulturni center. Intervencija ni omejena le na ohranjanje zgodovinskega, arhitekturnega in prometnega prostora, ampak si prizadeva ustvariti živi prostor, vključen v urbano tkivo in odprt navzven, sposobno neposrednega dialoga s sosednjim območjem. Uspeh projekta je rezultat strateškega sodelovanja in ključne podpore Avtonomne dežele Furlanija – Julijska krajina, ki je močno verjela v kulturni in turistični razvojni potencial projekta. Trst Campo Marzio se tako uveljavlja kot vsestransko regionalno in nacionalno središče, kjer se spomin na železniško tradicijo sreča z inovacijami, urbano prenovo in valorizacijo območja.

Trieste Campo Marzio Station Museum – Restoration and Repurposing

Keywords: Urban redevelopment, restoration, engineering, culture, enhancement

The FS Foundation, through its Infrastructure and Works Service, has overseen the development of a detailed intervention project, funded with PNC funds, dedicated to the recovery, restoration, and repurposing of the former Trieste Campo Marzio station. The initiative aims to give back to the community a historic railway complex, turning it into a modern Railway Museum and a dynamic multifunctional center for culture and events. The project is not just about preserving the historical and architectural heritage and rolling stock, but aims to create a lively space, integrated into the urban fabric and open to the outside, able to directly engage with the surrounding area. The success of the initiative is the result of strategic synergy and the essential support of the Autonomous Region of Friuli Venezia Giulia, which strongly believed in the cultural and tourist development potential of the project. Trieste Campo Marzio thus establishes itself as a versatile hub of regional and national importance, where the memory of railway tradition meets innovation, urban regeneration, and the enhancement of the territory.

foto: Postaja Podmelec, vir: Tolminski muzej / photo: Podmelec Railway Station, source: Tolmin Museum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Pomen Bohinjske proge v slovenskem železniškem omrežju

Ključne besede: javna železniška infrastruktura, vzdrževanje, obratovanje, Študija razvoja regionalnih prog

Regionalna proga št. 70, Sežana – Nova Gorica – Jesenice, predstavlja slabih 130 kilometrov proge, odsek same Bohinjske proge od Nove Gorice do Jesenic pa je dolg 72 kilometrov. Na tem odseku je do Nove Gorice 7 postaj (vključno s postajo Nova Gorica), ki so tako kot proga, namenjene za mešani promet. Kategorija proge C2 zagotavlja obremenitev 20 t/os in 6,4 t/tm. Prepustnost proge znaša 37 vlakov / dan in je trenutno izkoriščena v dobrih 60 odstotkih. Proga ni elektrificirana, po njej vozijo samo vlaki z dizel vleko. Na progi so še vedno nameščene pretežno mehanske signalnovarnostne naprave, promet se ureja z lokalno zasedbo prometnih mest. Prometniki v največji meri z dogovarjanjem skrbijo za varnost železniškega prometa, proga je v komunikacijskem smislu opremljena s sodobnimi GSM-R napravami. Projekt GSM-R je bil tudi edini večji projekt na železniških tirih na tej progi in se je zaključil leta 2018. Na odseku od Nove Gorice do Jesenic danes dnevno vozi 15 potniških vlakov in 8 avtovlakov, ki poleg boljše mobilnosti prebivalstva na odseku od Mosta na Soči do Bohinjske Bistrice, predstavljajo tudi izjemen turistični potencial. Proga ne potrebuje samo vzdrževanja, ampak predvsem nadgradnjo in celovito obnovo, po kateri bo lahko prevzela obremenitve, kot jih potrebujemo za učinkovito obvozno progo na relaciji Koper / Divača – Sežana – Jesenice – državna meja.

The Significance of the Bohinj Railway within Slovenia's Railway Network

Keywords: public railway infrastructure, maintenance, operations, Regional railway development study

Regional railway line no. 70, Sežana–Nova Gorica–Jesenice, extends for just under 130 kilometres, while the Bohinj Railway section between Nova Gorica and Jesenice is 72 kilometres long. This section has seven stations, including Nova Gorica, and accommodates both passenger and freight traffic. Its C2 line classification permits an axle load of 20 tonnes and a linear load of 6.4 tonnes per metre. The line has a capacity of 37 trains per day, currently used at slightly over 60 per cent. It is not electrified and is served exclusively by diesel-powered trains. Signalling and safety installations are still predominantly mechanical, while train operations are managed by locally staffed operating points. Traffic controllers rely largely on direct coordination to ensure safe operations; for communications, however, the line is equipped with modern GSM-R technology. The GSM-R project, completed in 2018, was the only major railway infrastructure project undertaken on this line in recent years. Today, 15 passenger trains and 8 car-shuttle trains operate daily between Nova Gorica and Jesenice. In addition to improving mobility between Most na Soči and Bohinjska Bistrica, the car-shuttle service offers considerable tourism potential. The line requires more than routine maintenance: it needs upgrading and comprehensive renewal to accommodate the loads necessary for an effective diversionary route between Koper – Divača, Sežana, Jesenice and the national border.

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EPK Distrikt – prenova Železniške postaje Nova Gorica

Ključne besede: EPK Distrikt, Nova Gorica, javni prostor, prenova železniške infrastrukture, trajnostna urbana prenova

Projekt EPK Distrikt predstavlja celovito prostorsko preobrazbo območja železniške postaje Nova Gorica v novo urbano stičišče Nove Gorice in Gorice. Evropska prestolnica kulture GO! 2025 je postala sprožilec dolgoročne vizije razvoja čezmejnega prostora, ki temelji na prenovi obstoječih struktur, trajnostnem urbanizmu in povezovanju obeh mest. SADAR+VUGA je skozi proces sodelovanja različnih deležnikov oblikoval razvojno strategijo, ki presega posamezne arhitekturne posege in območje železniške infrastrukture prepoznava kot potencial za nove javne, kulturne in izobraževalne programe. Osrednja posega sta prenova historičnega postajnega poslopja Transalpine iz leta 1906 in izgradnja podhoda Vrtača. Z zmanjšanjem števila železniških tirov se je sprostil prostor za novo povezavo med mestoma. Podhod ni zasnovan zgolj kot prometna infrastruktura, temveč kot nov javni prostor z dvema poglobljenima trgoma, spiralnimi klančinami, zelenimi brežinami in naravno osvetlitvijo. Prenova postajnega poslopja združuje sodobne potrebe potnikov z ohranjanjem arhitekturne dediščine. Prenova železniške infrastrukture tako presega svojo funkcionalno vlogo in nekdanjo mejo spreminja v prostor srečevanja, kulturne izmenjave in skupne prihodnosti obeh mest.

EPK District – Renovation of Nova Gorica Railway Station

Keywords: EPK District, Nova Gorica, public space, railway infrastructure renovation, sustainable urban renovation

The ECoC District project represents a complete spatial transformation of the Nova Gorica railway station area into a new urban meeting point for Nova Gorica and Gorizia. The European Capital of Culture GO! 2025 has become a trigger for a long-term vision of cross-border development, based on the renovation of existing structures, sustainable urbanism, and connecting the two cities. SADAR+VUGA, through a process involving various stakeholders, designed a development strategy that goes beyond individual architectural interventions, recognizing the railway infrastructure area as a potential for new public, cultural, and educational programs. The main interventions are the renovation of the historic Transalpine station building from 1906 and the construction of the Vrtača underpass. By reducing the number of railway tracks, space was freed up for a new connection between the two towns. The underpass is designed not just as transport infrastructure, but as a new public space with two sunken plazas, spiral ramps, green slopes, and natural lighting. The renovation of the station building combines modern passenger needs with the preservation of architectural heritage. The railway infrastructure upgrade thus goes beyond its functional role and transforms the former boundary into a space for meeting, cultural exchange, and a shared future for both towns.

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Obnova železniške postaje Jesenice – izvajalski izzivi pri ohranjanju arhitekturne dediščine

Ključne besede: železniška postaja Jesenice, arhitekturna dediščina, konservatorsko varstvo, sanacija obstoječega objekta, izvajalska koordinacija

Nadgradnja železniškega vozlišča Jesenice vključuje obnovo postajnega poslopja iz leta 1955, prepoznavnega primera povojne modernistične arhitekture in registrirane kulturne dediščine. Prispevek z vidika glavnega izvajalca obravnava usklajevanje ohranjanja arhitekturne identitete s sodobnimi zahtevami glede funkcionalnosti, varnosti, dostopnosti in trajnosti.

Na primerih sanacije kamnite fasadne obloge, rekonstrukcije lesenega stavbnega pohištva in obnove armiranobetonskih nadstreškov s steklenimi prizmami bodo predstavljeni izzivi ugotavljanja dejanskega stanja, izbire združljivih materialov ter potrjevanja delavniških načrtov in vzorcev v sodelovanju z ZVKDS. Posebna pozornost bo namenjena prenovi glavne avle: odstranitvi poznejših predelav, ohranitvi kamnitih stenskih oblog in izvorne opreme, rekonstrukciji kamnitega tlaka ter prilagoditvi prostora sodobnim vsebinam in dostopnosti.

Prispevek bo izpostavil pomen koordinacije med investitorjem, projektanti, konservatorsko stroko in specializiranimi izvajalci, predvsem pri reševanju posegov, katerih obseg in tehnične rešitve je mogoče dokončno določiti šele po pregledu konstrukcij ali materialov. Primer Jesenic ponazarja preplet ohranjanja železniške dediščine, izvedljivosti in dolgoročne uporabnosti javnega objekta.

Renovation of the Jesenice Railway Station – Contractor Challenges in Preserving Architectural Heritage

Keywords: Jesenice Railway Station, architectural heritage, heritage conservation, renovation of the existing building, contractor coordination

The upgrade of the Jesenice railway hub includes the renovation of the station building from 1955, a recognizable example of post-war modernist architecture and registered cultural heritage. From the perspective of the main contractor, the article looks at balancing the preservation of the building's architectural identity with modern requirements for functionality, safety, accessibility, and sustainability.

Examples of restoring the stone facade cladding, reconstructing wooden windows and doors, and refurbishing reinforced concrete canopies with glass prisms will showcase the challenges of assessing actual conditions, selecting compatible materials, and approving shop drawings and samples in cooperation with ZVKDS. Special attention will be given to renovating the main hall: removing later alterations, preserving the stone wall cladding and original fittings, reconstructing the stone flooring, and adapting the space to modern uses and accessibility.

The contribution will highlight the importance of coordination between the investor, designers, conservation experts, and specialized contractors, especially when dealing with interventions where the scope and technical solutions can only be determined after inspecting the structures or materials. The Jesenice example illustrates the interplay between preserving railway heritage, feasibility, and the long-term usability of a public building.

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Nadgradnja odseka Jesenice–Bohinjska Bistrica na Bohinjski železniški progi: izzivi ohranjanja kulturne in naravne dediščine ob hkratnem izpolnjevanju sodobnih tehničnih zahtev

Ključne besede: Bohinjska proga, nadgradnja železniške infrastrukture, kulturna in naravna dediščina, prometno-tehnološka analiza, projektiranje v omejenem železniškem koridorju

Bohinjska proga je bila zgrajena in predana prometu leta 1906. Je del omrežja TEN-T, njena geometrija, objekti in oprema pa v veliki meri še vedno izvirajo iz časa gradnje. Prispevek na primeru nadgradnje 27,35 km dolgega odseka Jesenice – Bohinjska Bistrica prikazuje izzive ohranjanja kulturne in naravne dediščine ob hkratnem zagotavljanju sodobnih tehničnih in prometno-tehnoloških zahtev. Poseben izziv projekta predstavlja umeščanje sodobnih infrastrukturnih rešitev v več kot stoletje star železniški koridor, ki ga zaznamujejo številni zahtevni in zgodovinsko pomembni objekti ter občutljivo naravno okolje. Pomembno izhodišče pri načrtovanju je bila prometno-tehnološka analiza celotne Bohinjske proge, s katero so bile preverjene zmogljivosti proge, opredeljene potrebne spremembe prometnih mest in prepoznana infrastrukturna ozka grla.

Prispevek predstavlja razvoj projektnih rešitev od začetnih variantnih preveritev do izvedbenega načrta ter ključne izzive pri usklajevanju sodobnih tehničnih zahtev z varstvom kulturne in naravne dediščine ter prostorskimi omejitvami obstoječega koridorja. Na konkretnih primerih so predstavljeni pristopi, usklajevanja in kompromisi, ki so privedli do končnih projektnih rešitev.

Upgrading the Jesenice–Bohinjska Bistrica Section of the Bohinj Railway: Preserving Cultural and Natural Heritage while Meeting Modern Technical Requirements

Keywords: Bohinj Railway, railway infrastructure upgrading, cultural and natural heritage, transport operations analysis, design within a constrained railway corridor

The Bohinj Railway was built and opened to traffic in 1906. It forms part of the TEN-T network, while much of its alignment, structures and equipment still dates from the original construction period. Using the proposed upgrading of the 27.35-kilometre Jesenice–Bohinjska Bistrica section as a case study, this paper explores the challenges of preserving cultural and natural heritage while meeting contemporary engineering and operational requirements. A particular challenge lies in integrating modern infrastructure into a railway corridor more than a century old, characterised by numerous technically demanding and historically significant structures and a sensitive natural environment. An important basis for the design work was an operational and transport analysis of the entire Bohinj Railway, which assessed line capacity, identified necessary modifications to operating points and located infrastructure bottlenecks.

The paper traces the development of design solutions from initial alternative assessments to detailed implementation plans. It considers the principal challenges of reconciling present-day technical requirements with heritage protection and the spatial limitations of the existing corridor, illustrating the coordination processes and compromises that informed the final design solutions.

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Celovit pristop k obnovi in nadgradnji kamnitega mostu Vintgar nad Radovno

Ključne besede: kamniti most, rehabilitacija, kulturna dediščina

V sklopu nadgradnje železniške proge št. 70 Jesenice–Bohinjska Bistrica je na medpostajnem odseku Vintgar–Bled Jezero most čez sotesko Vintgar. Obstoječi kamniti most je bil zgrajen v sklopu gradnje Bohinjske proge v letih 1903–1906. Most je danes edini od treh velikih kamnitih mostov, ki se je ohranil v izvorni obliki, vključno z vhodnim portalom v predor. V celoti je zgrajen iz kamna, s svetlo razpetino krožnega loka 41 m in puščico loka 15,32 m, kar daje razmerje približno 1 : 2,7, značilno za kamnite ločne mostove. Predvidena je sanacija mostu z ojačitvijo kamnitega loka z vstavitvijo prečnih kablov, obnovo kamnitih delov objekta in obnovo mostnega krova.

An Integrated Approach to the Rehabilitation and Upgrading of the Vintgar Stone Bridge over the Radovna

Keywords: stone arch bridge, structural rehabilitation, cultural heritage

The upgrade of railway line no. 70 between Jesenice and Bohinjska Bistrica includes the bridge crossing the Vintgar Gorge on the section between Vintgar and Bled Jezero. The existing stone bridge was erected during construction of the Bohinj Railway between 1903 and 1906. It is the only one of the line's three large stone bridges to survive in its original form, together with the adjacent tunnel portal. Built entirely of stone, it has a circular arch with a clear span of 41 metres and a rise of 15.32 metres, yielding a rise-to-span ratio of approximately 1:2.7, characteristic of stone arch bridges. The proposed works include strengthening the stone arch by installing transverse tendons, repairing the masonry and renewing the bridge deck.

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Avstro-ogrski železniški predori v sodobnem prometnem sistemu: pristopi k diagnostiki, sanaciji in podaljševanju življenjske dobe

Ključne besede: Avstro-ogrski železniški predori, Bohinjska proga, kamnita predorska obloga, diagnostika stanja, sanacija in injektiranje

Predori na Bohinjski progi, predani v uporabo leta 1906, so po več kot stoletju obratovanja še vedno del javne železniške infrastrukture. Zaradi neustrezne hidroizolacije in dotokov hribinske vode se v njih pojavljajo izpiranje fug, izpadanje kamnitih blokov, degradacija betonskih temenskih svodov in tvorjenje ledu. V prispevku so na primeru izvedbenih načrtov za odsek Jesenice – Bohinjska Bistrica obravnavani izzivi sanacije tovrstnih objektov. Ugotavljanje stanja je temeljilo na pregledu arhivskega gradiva in predhodnih študij, terenskih ogledih v različnih hidroloških razmerah ter preiskavah obloge. Zaradi omejenega obsega arhivskih podatkov in nedostopnosti zaledja obloge je stanje konstrukcije v fazi projektiranja mogoče oceniti le delno, kar zahteva prilagodljive rešitve.

Osrednji izziv predstavlja usklajevanje zahtev varnosti in zanesljivosti železniškega prometa, tehničnih predpisov, zahteve naročnika po ohranitvi obstoječega svetlega profila ter varovanja izvorne kamnite obloge kot dela železniške dediščine. Sanacijski ukrepi so zato diferencirani glede na stanje posameznih odsekov in omejeni na nujni obseg. Dodatne omejitve izhajajo iz kratkih zapor prometa in slabe dostopnosti gradbišč.

Austro-Hungarian Railway Tunnels in the Modern Transport System: Approaches to Condition Assessment, Rehabilitation and Service-Life Extension

Keywords: Austro-Hungarian railway tunnels, Bohinj Railway, stone tunnel lining, condition assessment, rehabilitation and grouting

The tunnels of the Bohinj Railway, opened to traffic in 1906, remain part of the public railway network after more than a century of operation. Inadequate waterproofing and groundwater ingress cause the washing out of mortar joints, detachment of stone blocks, deterioration of concrete crown vaults and ice formation. Drawing on detailed design documentation for the Jesenice–Bohinjska Bistrica section, this paper examines the challenges involved in rehabilitating such structures. Condition assessment was based on archival records and previous studies, site inspections under different hydrological conditions, and investigations of the tunnel lining. Because archival information is limited and the ground behind the lining is inaccessible, the structural condition can only be assessed partially at the design stage, requiring adaptable solutions.

The central challenge is to reconcile rail safety and reliability, technical standards, the client's requirement to retain the existing clearance envelope, and the protection of the original stone lining as railway heritage. Rehabilitation measures are therefore tailored to the condition of individual sections and restricted to what is necessary. Further constraints arise from short track closures and limited access to construction sites.

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Predvidena prenova postajnih objektov na Bohinjski progi

Ključne besede: obnove postajnega poslopja, urejanje okolice objektov železniških postaj, nadgradnja, tehnične rešitve

Prispevek obravnava izzive pri načrtovanju obnove obstoječih postajnih objektov na Bohinjski progi. Na primerih projektiranja železniških postaj bodo predstavljeni izzivi pri iskanju ustreznih arhitekturnih, oblikovnih in tehničnih rešitev, ki morajo poleg zahtev varovanja kulturne dediščine zagotavljati tudi sodobno funkcionalnost, dostopnost, varnost in enotno vizualno podobo železniškega sistema, obenem pa ne smejo okrniti značilne podobe.

Posebna pozornost bo namenjena procesu usklajevanja različnih deležnikov, iskanju kompromisnih rešitev ter pomenu pravočasnega vključevanja vseh ključnih udeležencev v proces projektiranja.

Proposed Renovation of Station Buildings on the Bohinj Railway

Keywords: railway station building renovation, landscaping and improvement of railway station surroundings, railway infrastructure upgrading, technical solutions

The paper examines the challenges involved in planning the renovation of existing railway station buildings along the Bohinj Railway. Drawing on selected railway station design projects, it explores the process of identifying appropriate architectural, design and technical solutions that must reconcile cultural heritage conservation requirements with contemporary standards of functionality, accessibility and safety, while ensuring a consistent visual identity across the railway network without compromising the distinctive architectural character of the historic stations.

Particular attention is given to the coordination of various stakeholders, the development of mutually acceptable solutions and the importance of involving all key participants at an early stage of the design process.



foto: Hudourniški preliv preko galerije nad železniško progo ob Soči, avtor: Grega Žorž / photo: Torrent spillway over railway gallery along Sola River, author: Grega Žorž

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Arhitektura Bohinjske železnice in detajli kot njeni pomembni prepoznavni elementi

Ključne besede: arhitektura Bohinjske proge, elementi železniške postaje, raba materialov, detajli postajnih objektov, urbana oprema

Tematika obsega raziskavo arhitekture in tipizacije železniških postaj ter ugotovitve stanja posameznih detajlov hkrati z rabo materialov na stavbah Bohinjske železnice. Železnica kot pomemben dejavnik deluje v oblikovanju in razvoju prostora in hkrati vključuje tudi tehnološki napredek na vseh nivojih. Sklop omenjenih indikatorjev vpliva in spreminja tako stavbo železniške postaje kot železniško postajo kot kompleks. Naloga podrobneje raziskuje detajle in elemente urbane opreme stavbe železniške postaje ter ob tem izpostavlja vprašanje rabe materialov v ohranjeni izvirni ali dodani arhitekturi postajnih stavb Bohinjske železnice. Detajli se znotraj tipologije postajnih stavb razlikujejo oblikovno in materialno glede na čas in prostor. Določeni elementi so prepoznani kot pomembni sestavni in funkcionalni deli postajne stavbe. Skozi vzorčenje dokumentiranega stanja in z analizo različnih skupin detajlov in urbane opreme se z metodo vrednotenja ugotavlja pomen le teh kot prepoznavnih elementov železniške arhitekture.

The Architecture of the Bohinj Railway and Its Characteristic Details

Keywords: Bohinj Railway architecture, railway station elements, use of materials, station-building details, street furniture

The paper examines the architecture and typological standardisation of railway stations on the Bohinj Railway, alongside the condition of individual architectural features and the materials used in station buildings. Railways have played a major role in shaping and developing the built environment, while incorporating advances in technology at various levels. These combined factors have influenced both individual station buildings and railway stations as wider complexes. The study investigates architectural details and elements of street furniture associated with station buildings, with particular attention to the materials used in surviving original fabric and later additions. Within the typology of station buildings, details vary in design and material according to period and location. Certain features are recognised as important structural and functional components of station architecture. By sampling documented conditions and analysing different groups of details and street-furniture elements, the study uses heritage assessment methods to establish their significance as characteristic features of railway architecture.

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Bohinjska proga – moderna regionalna železnica z nostalgičnim šarmom

Ključne besede: Bohinjska proga, trajnostna mobilnost, železniška dediščina, trajnostni turizem, razvoj podeželja

Bohinjska proga povezuje območja severozahodne Slovenije, na katerih se ustvari več kot četrtina vsega turističnega prometa v državi. Hkrati se ta z okolijskega vidika občutljiva območja soočajo z demografskimi izzivi, prometna povezanost z drugimi deli države in sosednjimi državami pa je slaba. Bohinjska proga, ki se skozi zahtevni teren teh krajev prebija zelo učinkovito, bi lahko ob ustrezni posodobitvi ponudila še bistveno boljše storitve tako za vsakodnevno mobilnost lokalnega prebivalstva kot za upravljanje turističnih tokov. Njena arhitekturna in tehnična dediščina ter vpetost v pokrajino so aduti, ki lahko pomembno prispevajo k privlačnosti prevoznih storitev in pozitivni potniški izkušnji. V prispevku bomo skušali najprej opredeliti vlogo Bohinjske proge, kakršno si za zagotavljanje celovitega trajnostnega razvoja želijo kraji ob progi. V skladu s tem bomo iskali ravnovesje med potrebno posodobitvijo ter ohranjanjem in vrednotenjem kulturnega, krajinskega in turističnega pomena proge. Raziskali bomo, kaj železnica pomeni kot element pokrajine in vsakdanjega življenja prebivalcev; kako so železniške postaje ne le točke odhoda in prihoda, temveč tudi prvi obraz kraja in prostori doživetij; ter kako lahko proga z raznoliko ponudbo prevoznih storitev zaživi in postane privlačna za različne skupine uporabnikov.

The Bohinj Railway – a modern regional railway with a nostalgic charm

Keywords: Bohinj Railway, sustainable mobility, railway heritage, sustainable tourism, rural development

The Bohinj railway connects areas in northwestern Slovenia, where more than a quarter of all tourist traffic in the country takes place. At the same time, these environmentally sensitive areas face demographic challenges, and transport links to other parts of the country and neighboring countries are poor. The Bohinj railway, which cuts through the demanding terrain of these regions very efficiently, could, with proper modernization, offer much better services both for the daily mobility of local residents and for managing tourist flows. Its architectural and technical heritage and integration into the landscape are assets that can significantly enhance the appeal of transport services and the overall travel experience. In this article, we will first try to define the role of the Bohinj railway line, as the communities along the line envision it for ensuring comprehensive sustainable development. In line with this, we will look for a balance between necessary modernization and preserving and valuing the cultural, landscape, and tourist significance of the railway. We will explore what the railway means as an element of the landscape and everyday life of residents; how railway stations are not just points of departure and arrival, but also the first face of a place and spaces for experiences; and how the railway, with a diverse range of transport services, can come to life and become attractive to different groups of users.

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Vojaški pogled na projektiranje trase in objektov Bohinjske železnice ter o Wagnerjevi secesijski ograji na Solkanskem mostu

Ključne besede: Bohinjska proga, provizorij Roth Waagner, Solkanski most, Soška fronta, Otto Wagner, secesija, Jože Plečnik

Glede na dejstvo, da je bila trasa Bohinjske proge projektirana v večjem delu v neposredni bližini meje avstro-ogrskega cesarstva z Italijo, je bilo pomembno določiti njen potek v primeru možnega vojaškega konflikta med obema državama. Posebej zanimiv je v tem pogledu potek proge po desnem bregu Soče med Ajbo pri Kanalu in Gorico, v zavetju okoliških hribov. Posebno vojaško varovanje z utrdbami na obeh bregovih so imeli tudi vsi veliki železniški mostovi (Bača pri Modreju, Ajba, Solkan). Posebej je zanimiva statična zasnova velikih kamnitih mostov, ki se ob možnem umiku z razstrelitvijo enega nosilnega dela mostu ne bi smeli v celoti porušiti in bi omogočilo hitro ponovno vzpostavitev prometa z zasilnim jeklenim provizorijem tipa Roth Waagner. Taka predvidevanja so se pokazala kot pravilna med boji na soški fronti (1915-1917), ko je Bohinjska proga odigrala ključno vlogo pri preboju fronte pri Kobaridu oktobra 1917. Predstavljena bodo odkritja vezana na postavitev secesijske ograje Otta Wagnerja na Solkanskem mostu. Solkanski most je bil edini objekt v celotnem sistemu avstro-ogrskih železnic, ki je nosil tako ograjo in hkrati edini objekt izven Dunaja s tako ograjo. Z Wagnerjevo ograjo je bil Solkanskemu mostu, ki ima največji kamniti lok med mostovi na svetu, dan cesarski pečat. Nekatere še ne povsem raziskane sledi o projektiranju te ograje vodijo tudi do arhitekta Jožeta Plečnika.

A Military Perspective on the Design of the Route and Structures of the Bohinj Railway and on Wagner's Secessionist Railing on the Solkan Bridge

Keywords: Bohinj Railway, Roth–Waagner temporary bridge, Solkan Bridge, Isonzo Front, Otto Wagner, Secession, Jože Plečnik

Given the fact that most of the Bohinj railway route was designed very close to the border of the Austro-Hungarian Empire with Italy, it was important to determine its path in case of a possible military conflict between the two countries. The route along the right bank of the Soča River between Ajba near Kanal and Gorizia, protected by the surrounding hills, is particularly interesting in this regard. Special military protection with fortifications on both banks was also provided for all major railway bridges (Bača near Modrej, Ajba, Solkan). What's especially interesting is the structural design of the large stone bridges, which, in the event of a retreat and the demolition of one supporting part of the bridge, were not supposed to completely collapse, allowing for a quick restoration of traffic later using a temporary steel structure like the Roth-Waagner type. And these considerations proved to be correct during the battles on the Isonzo Front (1915-1917), when the Bohinj railway played a key role in breaking through the front at Kobarid in October 1917. In addition, there will be presented findings related to the installation of Otto Wagner's Art Nouveau railing on the Solkan Bridge. The Solkan Bridge was the only structure in the entire Austro-Hungarian railway system to feature such a railing, and at the same time the only structure outside Vienna with it. With Wagner's railing, the Solkan Bridge, which has the largest stone arch among bridges in the world, was given an imperial seal. Some still not fully researched traces of the design of this railing also lead to the architect Jože Plečnik.

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Prvotna ograja Solkanskega mostu: predstavitev muzejske postavitve

Ključne besede: Wagnerjeva ograja, Solkanski most, 1. svetovna vojna

Solkanski most, zgrajen leta 1906 kot del Bohinjske železniške proge, je v predelu nad lokom krasila litoželezna ograja, oblikovana v secesijskem slogu. Med bombardiranjem v I. svetovni vojni je bil lok porušen in je skupaj z ograjo padel v Sočo. Danes njene dele hrani Goriški muzej. Raziskavo o ograji je leta 2022 opravil Gorazd Humar, univ. dipl. inž. grad., ki je ugotovil, da je bila ograja Solkanskega mostu enaka, kot jo je arhitekt Otto Wagner predvidel na liniji Dunajske mestne železnice. V sodelovanju z Gorazdom Humarjem smo leta 2023 pripravili razstavo o ograji Solkanskega mostu, na kateri so bili predstavljeni kontekst njenega nastanka, snovalci in izdelovalci ter njene specifike. Njena zgodba je bila umeščena v širši okvir zgodovine Bohinjske železniške proge in I. svetovne vojne. Kot osrednji eksponat je bila razstavljena ograja mostu, ki so jo muzejski konservatorji-restavratorji predhodno konservirali. V referatu bodo predstavljeni snovanje razstave, sodelovanjem z avtorjem raziskave in vsebine ter odzivi na razstavo.

The Original Railing of the Solkan Bridge: Presentation of the Museum Exhibit

Keywords: Wagner railing, Solkan Bridge, World War I

The Solkan Bridge, built in 1906 as part of the Bohinj Railway, used to have a cast-iron railing over the arch, designed in an Art Nouveau style. During bombing in World War I, the arch was destroyed and fell into the Soča River along with the railing. Today, parts of it are kept at the Goriški muzej. In 2022, Gorazd Humar, a civil engineering graduate, researched the railing and found that the Solkan Bridge's railing was identical to the one architect Otto Wagner had planned for the Vienna City Railway. In collaboration with Gorazd Humar, we organized an exhibition in 2023 about the railing of the Solkan Bridge, which showcased the context of its creation, its designers and manufacturers, as well as its unique features. Its story was placed within the broader history of the Bohinj Railway and World War I. The main exhibit was the bridge's railing, which museum conservators-restorers had previously preserved. The paper will present the planning of the exhibition, our collaboration with the research author, the content, and the responses to the exhibition.

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Gospodarski in turistični potencial območja ob železniški postaji Most na Soči

Ključne besede: Most na Soči, železniška postaja, gospodarski potencial, turistični razvoj

Železniška postaja Most na Soči (nekdaj Sv. Lucija - Tolmin) je glavna postaja Zgornjega Posočja ter krajev v dolini reke Idrijce. Zgrajena je bila kot postaja višjega ranga, kar pomeni, da so že pri načrtovanju proge predvideli tudi njen širši gospodarski in turistični namen. V naslednjih desetletjih so se predvidevanja načrtovalcev v celoti udejanjila; postaja je postala pomembno blagovno središče in bila več desetletij glavna turistična vstopna točka za obisk Zgornjega Posočja.

Ob koncu 20. stoletja je z razvojem cestnega in upadom železniškega prometa to vlogo izgubila, potencial, ki ga zaradi lege ima, pa bi s premišljenim in usklajenim načrtovanjem lahko ponovno s pridom izkoristili. Pomembna in najlažje dosegljiva je predvsem boljša vključenost v turistično ponudbo tega območja. Območje železniške postaje bi bilo skupaj s Mostom na Soči in kopališčem v Bači pri Modreju smiselno razvijati kot povezano turistično območje ter pri tem izpostaviti tudi izstopajoče železniške objekte, železniški promet pa bolje povezati s turističnimi in prometnimi tokovi, ki tečejo po dolinah Zgornjega Posočja.

Economic and tourist potential of the area around the Most na Soči railway station

Keywords: Most na Soči, railway station, economic potential, tourism development

Most na Soči railway station (formerly Sv. Lucija - Tolmin) is the main station for Upper Soča Valley and the towns in the Idrijca River valley. It was built as a higher-ranking station, which means that even during the planning of the railway, they envisioned a broader economic and tourist purpose for it. In the following decades, the planners' expectations fully came true; the station became an important goods center and was for many decades the main tourist gateway for visiting Upper Soča Valley.

At the end of the 20th century, with the development of roads and the decline of rail traffic, it lost that role, but the potential it has due to its location could be effectively used again with thoughtful and coordinated planning. What's most important and easiest to achieve is better integration into the tourist offerings of this area. The area around the railway station, together with Most na Soči and the bathing area in Bača pri Modreju, could be sensibly developed as a connected tourist zone, highlighting also the standout railway structures, while better linking rail traffic with the tourist and transport flows running through the valleys of Upper Soča.

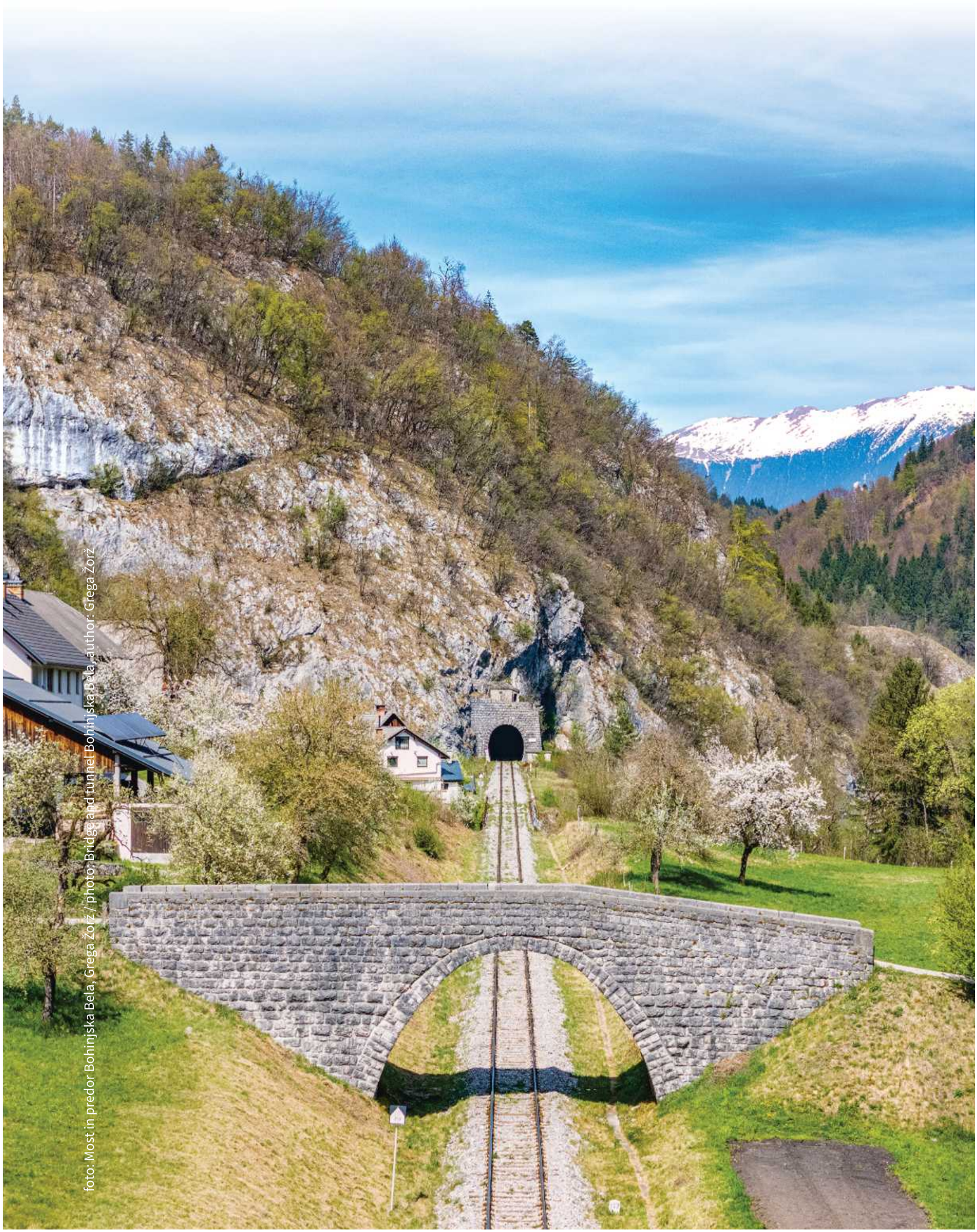

foto: Most in predor Bohinjska Bela, Grega Žorž / photo: Bridge and tunnel Bohinjska Bela, author: Grega Žorž

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Jeseniško železniško križišče

Ključne besede: železnica, predor železarna, Jesenice, Karavanke

Z izgradnjo karavanške, bohinjske in tovarniške proge so Jesenice pred 120. leti postale pomembno železniško križišče. Prvo železniško zvezo in tudi postajo na južni strani naselja so dobile že leta 1870 z odprtjem železnice Trbiž – Ljubljana. Pri projektiranju železniške povezave zahodnih dežel habsburške monarhije s Trstom je v sektorju med Savo in Jadranom zmagala bohinjska varianta, v sektorju med Dravo in Savo pa karavanški predor med Hrušico in Podrožco. Nezanemarljivo vlogo pri teh odločitvah je imel Karl Luckman, član državnega železniškega sveta in direktor Kranjske industrijske družbe, lastnice metalurških centrov na Jesenicah in v Škednju pri Trstu. Nova železnica je jeseniški industriji koristila iz več vidikov. Pridobila ni samo pomembno infrastrukturo za prevoz surovin in svojih izdelkov, ampak tudi gradbeni material prve jeseniške železniške postaje, možnost nakupa elektrarne in opreme delovne železnice. Gradbišče karavanškega predora je potrebovalo električno energijo, zato so v Vintgarju zgradili elektrarno. Po odprtju predora in bohinjske proge je Kranjska industrijska družba kupila elektrarno in del delovne železniške infrastrukture. Z njo so razširili omrežje tovarniške ozkotirne železnice. Leta 1906 je odprla najpomembnejšo linijo med jeseniško jeklarno in javorniško valjarno. Poskusno vožnjo so opravili z bencinsko lokomotivo, ki je prvotno služila na gradbišču bohinjske proge. Čeprav so leta 1966 ukinili planiško progo in 1988 ozkotirni tovarniški promet, so Jesenice ohranile vlogo pomembnega železniškega križišča.

The Jesenice Railway Junction

Keywords: railway, tunnel, ironworks, Jesenice, Karawanks

With the construction of the Karawanks and Bohinj railways and the industrial railway, Jesenice became an important railway junction 120 years ago. The town had gained its first railway connection and a station on its southern edge in 1870, with the opening of the Tarvisio–Ljubljana line. When the rail link between the western provinces of the Habsburg monarchy and Trieste was being planned, the Bohinj route was selected for the section between the Sava and the Adriatic, and the Karawanks Tunnel between Hrušica and Rosenbach was chosen for the section between the Drava and Sava. Karl Luckman, a member of the State Railway Council and director of the Carniolan Industrial Company, which owned metallurgical works in Jesenice and Škedenj near Trieste, played a significant part in these decisions. The new railway benefited Jesenice industry in several ways. Besides providing essential infrastructure for transporting raw materials and finished products, it offered construction materials from the first Jesenice station and an opportunity to purchase a power station and equipment from the construction railway. A hydroelectric power station was built in Vintgar to supply the Karawanks Tunnel construction site. Following the opening of the tunnel and the Bohinj Railway, the Carniolan Industrial Company bought the power station and part of the construction railway equipment and used it to expand its narrow-gauge industrial network. In 1906, the company opened its most important line, linking the Jesenice steelworks and the Javornik rolling mill. Trial runs were made with a petrol locomotive previously used on the Bohinj Railway construction site. Although the Planica line closed in 1966 and narrow-gauge industrial traffic ceased in 1988, Jesenice has retained its importance as a railway junction.

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Maks Klodič – ustvarjalec novih poti

Ključne besede: Maks Klodič, Bohinjski predor, Bohinj

Gorenjski muzej se od leta 2004 strokovno posveča dediščini gradnje bohinjskega predora in bohinjske proge. Posebno pozornost namenja inženirju Maksu Klodiču, ki je sodeloval pri gradnji predora. Maks Klodič se je rodil leta 1875 v Trstu. Njegova družina je po očetu Antonu izhajala iz Beneške Slovenije, iz vasi Klodiči, po materi Matildi pa iz Kobarida. Oče je bil izobražen in zaveden Slovenec, po poklicu šolnik, ki se je ukvarjal tudi z literaturo. Za svoje življenjsko delo je med drugim prejel viteški naslov, ki ga je podedoval tudi sin Maks. Šolal se je na reški pomorski akademiji, na goriški realki in na Tehniški visoki šoli na Dunaju, kjer si je pridobil naziv inženir. Službo je nastopil leta 1901 kot pomočnik v Direkciji državnih železnic v Beljaku. Od tod je bil premeščen na gradbišče bohinjskega predora, kjer je bil gradbeni nadzornik in geodet. Inženir Klodič je strokovno dokumentiral napredovanje del v predoru. Svoje zapise je znal poljubno in v žlahtnem jeziku predstaviti širši javnosti. Kot človek mnogih talentov je bil tudi slikar in izdajatelj humorističnega časopisa o gradnji bohinjskega predora. Inženir Klodič je za preteklost Bohinja pomemben tudi kot soavtor načrtov za cesto in žično železnico ter zobato železnico na Triglav. Vzpon njegove poklicne poti se je nadaljeval med obema vojnama, ko je pripravljal železniške projekte za Kraljevino Jugoslavijo. Umrl je leta 1953 kot pozabljen strokovnjak, za katerega v novem političnem sistemu ni bilo mesta.

Maks Klodič – creator of new paths

Keywords: Maks Klodič, Bohinj Tunnel, Bohinj

Since 2004, the Gorenjska Museum has been professionally dedicated to the heritage of the construction of the Bohinj Tunnel and the Bohinj railway line. It pays special attention to engineer Maks Klodič, who was involved in building the tunnel. Maks Klodič was born in 1875 in Trieste. His family, on his father Anton's side, came from Venetian Slovenia, from the village of Klodiči, and on his mother Matilda's side, from Kobarid. His father was an educated and proud Slovenian and worked as a teacher, also being involved in literature. For his lifetime achievements, he received, among other honors, a knighthood title, which his son Maks also inherited. He studied at the Rijeka Naval Academy, the Gorizia Real School, and the Technical University in Vienna, where he earned the title of engineer. He started working in 1901 as an assistant at the Directorate of State Railways in Villach. From there, he was transferred to the Bohinj Tunnel construction site, where he worked as a construction supervisor and surveyor. Engineer Klodič professionally documented the progress of work in the tunnel. He knew how to present his notes freely and elegantly to the wider public. As a man of many talents, he was also a painter and publisher of a humorous magazine about the construction of the Bohinj tunnel. Engineer Klodič is important for Bohinj's past also as a co-author of plans for the road and the cable railway, as well as the cog railway to Triglav. The rise of his professional career continued between the wars, when he prepared railway projects for the Kingdom of Yugoslavia. He died in 1953 as a forgotten expert, for whom there was no place in the new political system.

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Med tehniko in ljudmi: železniška dediščina kot nosilka znanja, spomina in identitete

Ključne besede: železniški muzej, železniška dediščina, muzejske zbirke, prostori spomina

Železniška dediščina je pomemben del tehnične, industrijske, družbene in prostorske preteklosti. Razvoj in širitev železnice sta znatno vplivala na povezovanje krajev, gospodarski razvoj, oblikovanje (kulturne) krajine ter na življenje in delo številnih generacij ljudi. Njeno ohranjanje posledično zajema vozila, naprave in drugo tehnično opremo kot tudi dokumentacijo, strokovno znanje, delovne izkušnje in kolektivni spomin. Prispevek obravnava vlogo Železniškega muzeja Slovenskih železnic pri ohranjanju in predstavljanju železniške dediščine. Poudarek namenja povezovanju muzejskih predmetov z njihovim zgodovinskim tehnološkim in družbenim kontekstom. Predstavlja muzej kot prostor muzejskih zbirk, ki skozi njihovo pričevalno vrednost osvetljuje možnosti za razumevanje železniške dediščine onkraj posameznih tehničnih predmetov in hkrati odpira razmislek o različnih načinih ohranjanja in predstavljanja železniške dediščine, od muzejskih zbirk do spominskih sob na železniških postajah.

Between technology and people: railway heritage as a bearer of knowledge, memory, and identity

Keywords: railway museum, railway heritage, museum collections, spaces of memory

Railway heritage is an important part of our technical, industrial, social, and spatial history. The development and expansion of railways have greatly influenced the connection of places, economic growth, the shaping of (cultural) landscapes, and the life and work of countless generations of people. Preserving it therefore includes vehicles, equipment, and other technical gear as well as documentation, expert knowledge, work experience, and collective memory. This article looks at the role of the Slovenian Railways Museum in preserving and showcasing railway heritage. It focuses on connecting museum objects with their historical, technological, and social context. It presents the museum as a space for museum collections, which through their testimonial value highlight ways to understand railway heritage beyond individual technical items and at the same time encourages reflection on different ways of preserving and presenting railway heritage, from museum collections to memorial rooms at railway stations.

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Na tirih zgodovine – Preteklost železnic v arhivskih zapisih

Ključne besede: arhivski viri, razstava, katalog, Na tirih zgodovine – Preteklost železnic v arhivskih zapisih

Namen razstave in istoimenskega kataloga Na tirih zgodovine – preteklost železnic v arhivskih zapisih je bil opozoriti na primarne arhivske vire, ki so raziskovalcem na voljo v arhivih. Devet tematskih sklopov osvetljuje spregledane ali že pozabljene zanimivosti, povezane z železnico na Slovenskem. Železnica je namreč pomembno prispevala k modernizaciji, razvoju industrije in preoblikovanju krajine. Številni železniški projekti na Slovenskem zaradi političnih, gospodarskih ali vojaških okoliščin niso bili nikoli dokončani. Prihod železnice je sicer pomenil velik tehnološki napredek, vendar je hkrati vzbujal tudi strahove in pomisleke. Lokomotive so pogosto povzročale požare, širjenje železniškega omrežja pa je spremljal tudi strah pred tujimi vplivi in izgubo narodne identitete. Železnice so imele pomembno strateško vlogo med obema svetovnima vojnama in v času osamosvojitve Slovenije, zlasti pri prevozu vojakov, opreme in drugega materiala. Po drugi svetovni vojni so zaradi razvoja cestnega prometa postopoma izgubljale nekdanji pomen, kar je privedlo tudi do ukinitve številnih prog. Vlak je dolgo veljal za prestižno in hitro prevozno sredstvo, zato so ga pogosto uporabljali monarhi, državniki in druge pomembne osebnosti, ki so potovali v posebej prilagojenih dvornih ali salonskih vagonih. Z razvojem železniškega omrežja so postala potovanja dostopnejša širšemu krogu prebivalstva, kar je spodbudilo tudi razvoj turizma, ki je bil dotlej predvsem privilegij premožnejših slojev.

On the Tracks of History – The Past of Railways in Archival Records

Keywords: archival sources, exhibition, catalogue, On the Tracks of History – The Past of Railways in Archival Records

The purpose of the exhibition and the accompanying catalogueue On the Tracks of History – the Past of Railways in Archival Records was to draw attention to the primary archival sources available to researchers in archives. Nine thematic sections highlight overlooked or long-forgotten interesting aspects related to railways in Slovenia. Railways significantly contributed to modernization, industrial development, and the transformation of the landscape. Many railway projects in Slovenia were never completed due to political, economic, or military circumstances. The arrival of the railway certainly meant a major technological advance, but it also raised fears and concerns. Locomotives often caused fires, and the expansion of the railway network was accompanied by fear of foreign influence and loss of national identity. Railways played an important strategic role between the two world wars and during Slovenia's independence, especially in transporting soldiers, equipment, and other materials. After World War II, they gradually lost their former importance due to the development of road traffic, which also led to the closure of many lines. Trains were long considered a prestigious and fast means of transport, so they were often used by monarchs, statesmen, and other important figures who traveled in specially adapted royal or luxury carriages. With the development of the railway network, travel became more accessible to a wider range of people, which also encouraged the growth of tourism, which until then had been mainly a privilege of the wealthier classes.

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Slovenski filmski arhiv – uporaba in hramba filmskega arhivskega gradiva s poudarkom na gradivu, ki se nanaša na železnice

Ključne besede: Slovenski filmski arhiv, Arhiv Republike Slovenije, predstavitev dela, filmska zbirka, hramba gradiva

Prispevek bo predstavil delovanje Slovenskega filmskega arhiva s poudarkom na hrambi, uporabi in materialnem varstvu filmskega arhivskega gradiva. Predstavljene bodo količina in raznolikost hranjenega gradiva, filmski nosilci ter postopki naročanja, ogledovanja in reproduciranja arhivskih filmskih zapisov. Orisane bodo tudi temeljne zakonske podlage, ki urejajo delovanje arhiva in dostop do filmskega arhivskega gradiva.

Poseben poudarek bo namenjen filmskim zapisom, povezanim z železnicami. Predstavitev bo osvetlila obseg tovrstnega gradiva v fondih Slovenskega filmskega arhiva ter izpostavila najstarejše ohranjene filmske zapise z železniško tematiko. Ti predstavljajo dragocen vir za raziskovanje razvoja železniške infrastrukture, njenega delovanja in spreminjanja skozi čas ter dopolnjujejo razumevanje železnice kot pomembnega dela tehnične in kulturne dediščine.

Slovenian Film Archive – Use and Storage of Film Archival Material with a Focus on Material Related to Railways

Keywords: Slovenian Film Archive, Archives of the Republic of Slovenia, work presentation, film collection, material storage

The article will present the operations of the Slovenian Film Archive, focusing on the storage, use, and physical preservation of archival film materials. It will cover the quantity and variety of the stored materials, film carriers, and the procedures for ordering, viewing, and reproducing archival film recordings. It will also outline the basic legal frameworks that govern the archive's operations and access to film archival materials.

A special focus will be on film recordings related to railways. The presentation will highlight the extent of this type of material in the collections of the Slovenian Film Archive and showcase the oldest preserved films with railway themes. These provide a valuable resource for exploring the development of railway infrastructure, its operation and changes over time, and complement our understanding of the railway as an important part of technical and cultural heritage.

foto: Most čez pritok Soče, avtor: Grega Žorž; photo: Bridge over a tributary of the Soča River, author: Grega Žorž



foto: Solkanski most, avtor: Grega Žorž / photo: Solkan Bridge, author: Grega Žorž

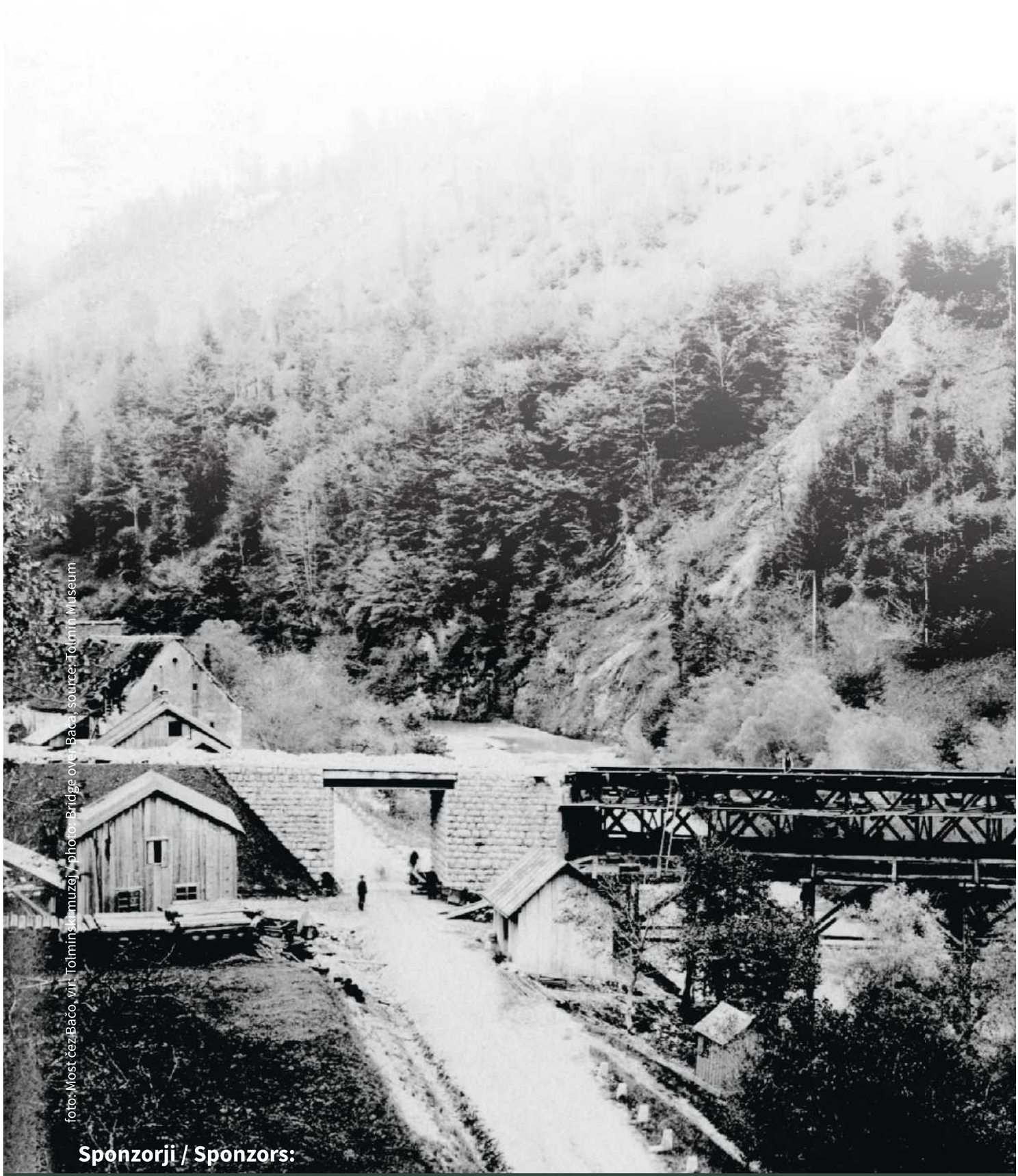

foto: Most čez Bačo, vir: Tolminski muzej / photo: Bridge over Bača, source: Tolmin Museum

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