



Darko Knez

Instrumentalna dediščina

Glasbila in glasbeni avtomati iz zbirke
Narodnega muzeja Slovenije



Instrumental Heritage

Musical Instruments and Music
Machines from the Collection of the
National Museum of Slovenia

NARODNI
MUZEJ
SLOVENIJE







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Ljubljana 2017

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Narodnega muzeja Slovenije

*„Glasba daje dušo vesolju,
krila razumu,
polet domišljiji in
življenje vsemu.“*

Platon



Darko Knez

Instrumental Heritage

Musical Instruments and Music
Machines from the Collection of the
National Museum of Slovenia

*“Music is a moral law.
It gives soul to the universe,
wings to the mind, flight
to the imagination, and
charm and gaiety to life
and to everything.”*

Plato

UVOD

V publikaciji predstavljamo Zbirko glasbil in glasbenih avtomatov, ki jih hrani Oddelek za zgodovino in uporabno umetnost Narodnega muzeja Slovenije.

Zbirka obsega obdobje od 17. stoletja do sodobnosti. Glasbila smo v tej publikaciji razdelili po načinu igranja, pri tem pa, kolikor je to bilo mogoče, upoštevali kronološko razvrstitev. Imenu glasbila sledijo osnovni standardni muzeološki podatki, ki opredeljujejo glasbeni inštrument, v tem vrstnem redu: izdelovalec predmeta, kraj izdelave, leto izdelave, materiali, iz katerih je inštrument izdelan, mere predmeta oziroma delov predmeta, signatura, če je na glasbilu, vir pridobitve, provenienca oziroma kdo je inštrument uporabljal, restavrator, ki je glasbilo restavriral ter letnica restavriranja, objava predmeta, literatura, analogije, fotografija in opis glasbila.

Tukaj objavljeno gradivo, ki je bilo desetletja večinoma skrito v depojih, je kot materialni vir namenjeno nadaljnjemu preučevanju.

INTRODUCTION

This publication presents the Collection of Musical Instruments and Music Boxes held at the Department of History and Applied Arts.

The collection spans the period from the 17th century to the modern age. For the purposes of this publication we have categorised instruments according to the way they are played. Within each category we followed chronological classification as much as possible. The name of an instrument was followed by the basic standard museology data, which defines instruments in the following order: the maker of the musical instrument, the place and year of manufacture, the materials the instrument is made from, the measurements of the instrument or its parts, the signature (if present) on the instrument, details of how or from whom the instrument was obtained for the museum, the instrument's provenance (that is, who used to play it), the name of the restoration specialist who restored it and the year of restoration, and the publications, literature, analogies, photograph and description of the instrument.

The material presented in this publication has been hidden in the museum depots for decades and as material source it is intended for use in future research.

12 ZBIRKA GLASBIL IN GLASBENIH AVTOMATOV ODDELKA ZA ZGODOVINO IN UPORABNO UMETNOST NARODNEGA MUZEJA SLOVENIJE

Čeprav so zbirke Deželnega muzeja za Kranjsko začele nastajati takoj po ustanovitvi muzeja leta 1821,¹ je bil Kulturnozgodovinski oddelek (danes Oddelek za zgodovino in uporabno umetnost Narodnega muzeja Slovenije) formalno ustanovljen šele leta 1946. Zbiralna politika je bila določena v ustanovnih aktih Deželnega muzeja za Kranjsko. Okrog leta 1830 je bil poudarek na zbiranju predmetov sodobne obrtne in industrijske proizvodnje. Leta 1885 je muzej pridobil izjemno pomembno zbirko, in sicer volilo Viktorja Smoleta. Naslednja večja pridobitev je zbirka sodobne umetne obrti, ki jo je muzeju podarila avstrijska država leta 1908. Leta 1929 je bila odkupljena Grebenčeva zbirka. V tridesetih letih 20. stoletja je tedanji ravnatelj Narodnega muzeja Josip Mal na dražbah inventarja nekaterih slovenskih gradov (Turn pri Velenju, Strahlova graščina v Stari Loki, Szaparyjev grad v Murski Soboti, Puchenstein pri Dravogradu in drugi) odkupil številne predmete, med katerimi je bilo tudi nekaj glasbenih inštrumentov. Tako je dr. Mal kot močna intelektualna osebnost s svojim vsestranskim zanimanjem in skrbjo za muzeološki razvoj pripomogel k razvoju novih zbirk in oddelkov znotraj muzeja.

Začetni fond Zbirke glasbil je nastajal z odkupi in darili posameznikov, med katerimi zasledimo tudi znane osebnosti slovenske zgodovine, ki jih bomo omenili v nadaljevanju.

Prvo strokovno obdelavo muzejskih inštrumentov v Narodnem muzeju Slovenije je opravila prva kustodinja za Zbirko glasbil

1 Leta 1821 so Kranjski deželni stanovi sprejeli odločitev o ustanovitvi deželnega muzeja, imenovanega Kranjski stanovski muzej (*Krainisch Ständisches Museum*). Skrb zanj je prevzela Kranjska kmetijska družba. Prve prostore je dobil muzej v Pogačnikovi hiši v Salendrovi ulici. Leta 1826 je cesar Franc I. odobril ustanovitev muzeja in določil, naj se imenuje deželni muzej: Deželni muzej za Kranjsko (*Krainisches Landesmuseum*). Arhiv Narodnega muzeja Slovenije.

COLLECTION OF MUSICAL INSTRUMENTS AND MUSIC MACHINES OF THE DEPARTMENT OF HISTORY AND APPLIED ARTS AT THE NATIONAL MUSEUM OF SLOVENIA

The Regional Museum of Carniola began building its collections right after it was first established in 1821.¹ However, the Culture and History Department (today the Department of History and Applied Arts) was formally established only in 1946. The policies of collection practice were set in the constitutional document of the Regional Museum of Carniola. In the 1830s the museum focused on collecting objects of contemporary craft as well as those of industrial production. In 1885 the museum obtained an important collection, a bequest by Viktor Smole. The next of the museum's bigger acquisitions was a collection of contemporary applied arts, donated by the Austrian state in 1908. In 1929 the museum bought the Oton Grebenc collection. In the 1930s the National Museum director Josip Mal bought numerous objects at the auctions of the inventories of several Slovenian castles (Turn near Velenje, Strahl Castle in Stara Loka, Szapary castle in Murska Sobota, Puchenstein castle in Dravograd and others). Among them there were also several musical instruments. Mal was an incredible intellectual, his versatile interests combined with his concern for museological development contributed to the growth of collections and departments within the museum.

The Collection of Musical Instruments was started with acquisitions and bequests from individuals, including several well-known personalities from Slovenian history, who we will refer to later on in this text.

1 In 1821 the Carniolan Provincial Estates made a decision to establish a regional museum to be named the Carniolan Provincial Museum (*Krainisch Ständisches Museum*). The Carniolan Farming Society took over the responsibility for the museum and the first premises were set up in Pogačnik House on Salendrova Street in Ljubljana. In 1826 Emperor Francis I approved the establishment of the museum and endorsed it as a regional museum: Carniolan Regional Museum (*Krainisches Landsmuseum*). Taken from the Archive of the National Museum of Slovenia.

dr. Jasna Horvat.² V času njenega delovanja je bilo izvedenih več odkupov zanimivih glasbenih inštrumentov. Nekateri so bili občasno razstavljeni na različnih muzejskih razstavah.

Narodni muzej Slovenije danes v skladu s posodobljeno zbiralno politiko načrtno zbira glasbeno dediščino. Po desetletjih zbiranja danes ta zbirka obsega nekaj izjemnih primerkov glasbil tujih in domačih mojstrov izdelovalcev.

Narodni muzej Slovenije, ki slovi po tem, da na Arheološkem oddelku hrani najstarejše glasbilo na svetu – piščal iz Divjih bab, staro 60.000 let, na Oddelku za zgodovino in uporabno umetnost hrani tudi Zbirko glasbil in glasbenih avtomatov. Zbirka obsega več kot sto muzealij in je za Pokrajinskim muzejem Ptuj Ormož³ druga največja zbirka glasbil v slovenskih muzejih.

Med te izjemne primerke zagotovo sodi žepna violina francoskega izdelovalca François Saraillaca iz leta 1679. Žepno violino ali *pochette* so kot najmanjši inštrument v družini violin začeli izdelovati v 16. stoletju in izdelovali so ga vse do zgodnjega 19. stoletja, 17. stoletje pa je bilo njegovo najbolj cvetoče obdobje.

Posebno omembo v Zbirki glasbil Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije si gotovo zaslužijo sobne orgle iz druge četrtine 18. stoletja, ki so jih izdelali v sloviti Göblovi orglarski delavnici v Ljubljani. Baročne sobne orgle sodijo med tako imenovane pozitive v tem primeru z dvema registroma in so enkraten primerek salonskih orgel iz 18. stoletja. To so hkrati najmanjše baročne orgle, ohranjene v Sloveniji (imajo le dva registra), zanimive pa so toliko bolj tudi zato, ker so bile vgrajene v starejši kos pohištva.

Omeniti moramo tudi tri klavikorde, od tega dva iz 18. stoletja, ki ju je prav tako izdelal pri nas delujoči orglar Janez Jurij Eisl.

V Zbirko glasbil Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije sodijo tudi trije klavirji, ki jih je izdelal Andrej Bitenc, ljubljanski izdelovalec klavirjev, ki je živel v letih 1802–1874, čigar ime je vedno omenjeno v nemški različici (Andreas Wittenz), danes pa ga slovenimo. Njegovi ohranjeni

2 Dr. Jasna Horvat, umetnostna zgodovinarica in muzejska svetnica. Med letoma 1975 in 2008 je bila v Narodnem muzeju Slovenije kustodinja Zbirke slik, Kiparske zbirke in Zbirke glasbil. Arhiv Narodnega muzeja Slovenije.

3 Muzejska glasbena zbirka na Ptujskem gradu še vedno velja za najobsežnejšo v Sloveniji, evidentiranih imajo okrog 300 glasbil za igranje umetne in ljudske glasbe.

Jasna Horvat was the first museum curator responsible for the Musical Instruments Collection and so the first to research the instruments in the National Museum of Slovenia.² During her time at the museum, the collection was enriched by several very interesting musical instruments. Some of them have occasionally been shown at various exhibitions at the National Museum.

Today the National Museum of Slovenia is committed to the systematic collection of musical heritage, in accordance with updated collecting policies. Following decades of collecting efforts, the museum's collections boast several exceptional examples of musical instruments made by European and Slovenian masters.

The National Museum of Slovenia is renowned for holding the oldest known musical instrument – the Divje babe flute, a 60,000-year-old Neanderthal flute – in its Archaeological Department. It is also home to the Collection of Musical Instruments and Music Boxes, which is held by the Department for History and Applied Arts. This collection includes over one hundred artefacts, making it the second largest collection of musical instruments in Slovenia, after the Ptuj – Ormož Regional Museum collection of instruments.³

A kit violin made by François Sarailac in 1679 is certainly an exceptional example. The kit violin, called *pochette*, first appeared in the 16th century, and was the smallest instrument in the violin family. Luthiers were making them up until the early 19th century; however, the 17th century was the most productive period for them.

Among the instruments in the Collection of Musical Instruments at the Department of History and Applied Arts, the reed organ from the second quarter of the 18th century deserves a special mention. The instrument was made in the workshop of Marko Göbl, an organ-builder from Ljubljana. It is a positive organ with two stops and, as such, is a unique example of an 18th century pump organ. It is also the smallest baroque organ preserved in Slovenia (it has only two stops), and is especially interesting because it was built into an older piece of furniture.

2 Jasna Horvat, PhD, art historian and museum councillor, was a curator at the National Museum of Slovenia between 1975 and 2008, and was responsible for the Collection of Paintings, the Collection of Sculpture and the Collection of Musical Instruments.

3 The collection of musical instruments held in the Ptuj Castle is still considered the largest collection in Slovenia. It holds approximately 300 classical and folk music instruments.

16 klavirji sodijo med redka ohranjena in prepoznana glasbila slovenskih izdelovalcev.

Bitenčevi klavirji gotovo niso skladni po značilnostih s časom nastanka, saj so narejeni po vsaj deset let starih dunajskih predlogah. Kljub temu o Bitenčevem znanju in sposobnostih največ izvemo prav zaradi njegovih ohranjenih klavirjev, ki so med skromno dediščino domačih izdelkov po svojih značilnostih v marsičem izjemni. Ti klavirji so dragocen dokaz o aktivnosti in kakovosti domačega mojstra iz sredine 19. stoletja, ki je s svojim znanjem in veščinami ustvarjal slovensko glasbilarsko dediščino.

V Zbirki glasbil Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije zasledimo še veliko drugih glasbil iz družin godal, pihal, trobil, tolkal, brenkal in glasbil s tipkami, med katerimi so prav tako izjemni predmeti naše dediščine. Nekateri izmed teh glasbil (vojaški bobni, signalni rogovi) bi lahko bili uvrščeni tudi v druge zbirke Narodnega muzeja Slovenije, na primer v Zbirko orožja in bojne opreme. Prav tako bi lahko otroška glasbila, ki so uvrščena v Zbirko igrač obravnavali tudi v Zbirki glasbil. Enako velja za gramofone in kasetofone iz Zbirke aparatov in naprav in bi jih lahko obravnavali kot glasbene avtomate.

V Narodnem muzeju Slovenije smo leta 2016 izvedli akcijo *Podari glasbilo muzeju in ga zapiši v zgodovino*. Z njo smo pozivali ljudi, naj nam podarijo stare inštrumente, in odziv je bil izjemen. Podarjeni inštrumenti so bili strokovno pregledani, ovrednoteni, kataloško popisani, mnogi med njimi so bili restavrirani in bodo postavljeni na ogled splošni javnosti. In na nekatere se bo celo še igralo.

Rezultat celoletne zbiralne akcije *Podari glasbilo muzeju in ga zapiši v zgodovino*, ki je bila večkrat predstavljena v različnih medijih, je bil, da smo v dar prejeli 22, v pregled pa kar 50 raznovrstnih glasbil. Opravili smo tudi 7 strokovnih ekspertiz.

Also worth mentioning are three clavichords, two of them originating from the 18th century, both made by a local organ-builder Janez Jurij Eisl.

The Musical Instruments Collection at the Department of History and Applied Arts also includes three pianos made by Andrej Bitenc. Bitenc (1802–1874) was a piano maker from Ljubljana. His name used to be Germanised, but today the Slovenian name is used. His pianos are some of the rarest and most recognisable preserved instruments made by a Slovenian maker.

Historically, Bitenc's pianos are not ground-breaking. They were made according to 10-year-old (or older) plans from Vienna. However, his preserved instruments, in many ways exceptional within the small family of Slovenian heritage, speak volumes of his knowledge and skill. They are important proof of the activities and quality of the local master from the mid-19th century, whose knowledge and expertise helped create Slovenian musical instrument heritage.

The Collection of Musical Instruments at the Department of History and Applied Arts at the National Museum of Slovenia includes many other instruments; stringed instruments, woodwind instruments, brass instruments, percussion, plucked stringed instruments and keyboard instruments. Many of them are exceptional examples of Slovenian heritage. Some of these instruments could also form part of other collections in the National Museum of Slovenia. For example, the Collection of Arms and Combat Equipment (army drums, bugle). Similarly, children's musical instruments from the Toy Collection could be considered part of the Collection of Musical Instruments, or the gramophones and cassette players from the Collection of Appliances could be treated as music machines.

In 2016 the National Museum of Slovenia held an event called "*Podari glasbilo muzeju*", which appealed to people to donate old instruments. The response was extraordinary and the event was a great success. The donated instruments were checked and evaluated by experts, and were then entered into the museum catalogue, many being restored so as to be exhibited in the museum. Some can still be played.

The result of the event, which was well publicised in the media, was 22 donated instruments, 50 instruments checked and evaluated by experts, and 7 scientific reports.

Glasbeno življenje na ozemlju današnje Slovenije je bilo v preteklih stoletjih zelo intenzivno, čeprav to ozemlje nikoli ni bilo izrazito središče glasbenega delovanja. Sledilo je glasbenemu razvoju v Zahodni Evropi. Čeprav mu je po navadi sledilo z nekaj zamude, prav Zbirka glasbil Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije potrjuje tezo, da ozemlje Slovenije nikakor ni brez tradicije v umetniški glasbi. Zato v tej publikaciji predstavljamo v celoti fond Zbirke glasbil Oddelka za zgodovino Narodnega muzeja Slovenije, saj je strokovno obdelan in urejen v skladu z mednarodnim standardom Spectrum⁴. Vsi inštrumenti iz zbirke so restavrirani in po desetletjih „pozabe“ spet na voljo splošni javnosti.

Kolikor nam je znano, je bil prvi traktat o glasbilih natisnjen leta 1511, napisal ga je nemški avtor Sebastian Virdung.⁵ Priročnik je opremljen z lesorezi, ki ilustrirajo inštrumente tistega časa, in je ob dodatnem zanimanju za takrat vse bolj priljubljeno popularno inštrumentalno glasbo najverjetneje opozoril tudi na vrednost samih inštrumentov.

Zbirke glasbenih inštrumentov so večinoma sestavni deli fundusa narodnih, zgodovinskih in etnografskih muzejev, ter muzejev za uporabno umetnost. Zato danes zelo veliko teh muzejev v Evropi in drugod po svetu, ki v svojih zbirkah hranijo glasbene inštrumente, objavlja svoje fonde glasbil (Avstrija: Barbara Hagen–Walther, *Die Sammlung der Musikinstrumente im Salzburg Museum*, Salzburg 2015; Belgija: Malou Haine, *Les instruments de musique dans les collections belges = Musical instruments in Belgian collections = Muziek-instrumenten in Belgische verzamelingen*, Liège 1989; Francija: Philippe Rouillé, *Musée d'instruments de musique mécanique*, Pariz 1987; Hrvaška: Nela Tarbuk, *Glasbeni instrumenti iz fundusa Muzeja za umjetnost i obrt*, Zagreb, 2007; Tea Blagaić

4 V Sloveniji ni uradno predpisanega standarda po katerem bi muzeji vodili svojo dokumentacijo, vendar jo večina slovenskih muzejev vodi v skladu s standardom Spectrum. Standard Spectrum je strokovni standard za dokumentacijo in upravljanje s podatki, je podlaga za upravljanje z večino podatkov v muzejski in arhivski stroki. Dostopno na: <http://www.collectionstrust.org.uk/spectrum>, obiskano 21. februarja 2017.

5 Sebastian Virdung, *Musica getuscht: A Treatise on Musical Instruments*, Basel 1511, v: *Das Cembalo. Tage Alter Musik in Herne*, razstavní katalog Herne, 1981, str. 51.

The musical life of Slovenia has always been quite intensive, although the country has never been in the centre of the musical world. Rather, it has followed developments in Western Europe. Although Slovenia might have been a step behind, the Collection of Musical instruments at the Department of History and Applied Arts at the National Museum of Slovenia is a clear proof that Slovenia is a country with a long musical tradition. For this reason, we have decided that this publication should include the entire fund of the collection. The musical instruments fund has been expertly processed and classified in accordance with the Spectrum International Collections Management Standard.⁴ After having been “forgotten” for decades, all the instruments from the collection have now been restored and exhibited.

As far as we know today, the first treatise on musical instruments was written in 1511 by German author Sebastian Virdung.⁵ The manual, which includes wood engravings illustrating the instruments of the time, indicates the interest people had in music, which at the time was becoming more and more popular, and calls attention to the value of instruments as such.

Collections of musical instruments usually form an integral part of museum holdings, whether they be national, historical or ethnographic museums, or museums of applied arts. Today there are numerous museums in Europe and around the world holding such collections (Austria: Barbara Hagen–Walther, *Die Sammlung der Musikinstrumente im Salzburg Museum*, Salzburg 2015; Belgium: Malou Haine, *Les instruments de musique dans les collections belges = Musical instruments in Belgian collections = Muziek–instrumenten in Belgische verzamelingen*, Liège 1989; Francija: Philippe Rouillé, *Musée d’instruments de musique mécanique*, Paris 1987; Croatia:

4 Officially, Slovenia does not have a prescribed standard outlining the management of museum documentation. The majority of Slovenian museums keep records of their holdings in accordance with Spectrum International Museum Collection Standard, a professional standard, which represents the basis for documentation and data management in museums and archives. Available at: <http://www.collectionstrust.org.uk/spectrum>, accessed on: 21st February, 2017.

5 Sebastian Virdung, *Musica getuscht: A Treatise on Musical Instruments*, Basel 1511, in: *Das Cembalo. Tage Alter Musik in Herne*, exhibition catalogue Herne, 1981, p. 51.

Januška, *Muzikalije = Music manuscripts : iz fundusa Muzeja grada Splita = from the holdings of the City Museum of Split*, Split 2015; Nemčija: Bettina Wackernagel, *Musikinstrumente des 16. bis 18. Jahrhunderts in Bayerischen Nationalmuseum*, München, 1999; Španija: Joaquim Hort Jeremy Montagu, a, *Museu de la Música 1. Cataleg d'instruments*, Barcelona 1991).⁶ Hkrati pa vse pogosteje zasledimo objavo teh zbirk tudi na spletu (Avstrija: Eboardmuseum, Celovec; Belgija: Musée des instruments de musique, Bruselj; Francija: Musée de la musique – Cité de la musique, Pariz; Music. Musee des Instruments, Céret; Grčija: Museum of Popular Music Instruments, Atene; Italija: Accademia Nazionale di Santa Cecilia Musical Instruments Museum, Rim; Galleria Borghèse – Museo nazionale degli strumenti musicali, Rim; Museo degli Strumenti musicali, Milano; Litva: Povilas Stulga Museum of Lithuanian Folk Instruments, Kaunas; Nemčija: Staatliches Institut für Musikforschung, Berlin; Museum für Musikinstrumente der Universität Leipzig, Leipzig; Poljska: Museum of Musical Instruments, Poznań; Portugalska: Stringed Instruments Museum, Tebosa; Tajikistan. Gurminj Museum of Musical Instruments, Dušanbe; Združeno kraljestvo: Bate Collection of Musical Instruments, Oxford; Združene države Amerike: Museum of Making Music, Carlsbad, Kalifornija; Musical Instrument Museum, Phoenix, Arizona; National Music Museum, Vermillion, Južna Dakota; Schubert Club Museum of Musical Instruments, St. Paul, Minnesota; Yale University Collection of Musical Instruments, New Haven, Connecticut).

Dosedanje raziskave na področju glasbilarstva na Slovenskem je temeljito opravila predvsem dr. Darja Koter^{7,8} in na njene izsledke se opira tudi naša študija.

6 Za več glej poglavje Literatura in viri.

7 Darja Koter, *Glasbilarstvo na Slovenskem*, Maribor 2001.

8 Dr. Darja Koter je redna profesorica na Akademiji za glasbo Univerze v Ljubljani. Med letoma 1990 in 2002 je bila kustodinja za zbirko glasbil v Pokrajinskem muzeju Ptuj Ormož.

Nela Tarbuk, *Glasbeni instrumenti iz fundusa Muzeja za umjetnost i obrt*, Zagreb, 2007; Tea Blagaić Januška, *Muzikalije = Music manuscripts : iz fundusa Muzeja grada Splita = from the holdings of the City Museum of Split*, Split 2015; Germany: Bettina Wackernagel, *Musikinstrumente des 16. bis 18. Jahrhunderts in Bayerischen Nationalmuseum*, Munich, 1999; Spain: Joaquim Hort Jeremy Montagu, a, *Museu de la Música 1. Cataleg d'instruments*, Barcelona 1991).⁶ They hold musical instruments and publish the contents of their holdings. More and more, we are also able to find collections on internet (Austria: Eboardmuseum, Klagenfurt; Belgium: Musée des instruments de musique, Brussels; France: Musée de la musique – Cité de la musique, Paris; Music. Musee des Instruments, Céret; Greece: Museum of Popular Music Instruments, Athens; Italy: Accademia Nazionale di Santa Cecilia Musical Instruments Museum, Rome; Galleria Borghese – Museo nazionale degli strumenti musicali, Rome; Museo degli Strumenti musicali, Milan; Lithuania: Povilas Stulga Museum of Lithuanian Folk Instruments, Kaunas; Germany: Staatliches Institut für Musikforschung, Berlin; Museum für Musikinstrumente der Universität Leipzig, Leipzig; Poland: Museum of Musical Instruments, Poznań; Portugal: Stringed Instruments Museum, Tebosa; Tajikistan. Gurminj Museum of Musical Instruments, Dushanbe; Great Britain: Bate Collection of Musical Instruments, Oxford; United States of America: Museum of Making Music, Carlsbad, California; Musical Instrument Museum, Phoenix, Arizona; National Music Museum, Vermillion, South Dakota; Schubert Club Museum of Musical Instruments, St. Paul, Minnesota; Yale University Collection of Musical Instruments, New Haven, Connecticut).

Thorough examination of, and research into, the field of musical instruments has been done by Darja Koter, whose findings have also been paramount for this study.^{7,8}

6 For more see Bibliography and Resources.

7 Darja Koter. *Glasbilarstvo na Slovenskem*, Maribor 2001.

8 Draja Koter, PhD, is a Professor at the Academy of Music at the University of Ljubljana. Between 1990 and 2002 she also worked as a curator of the Collection of Musical Instruments in the Ptuj – Ormož Regional Museum.

ZBIRANJE GLASBENIH INŠTRUMENTOV

Muzejske zbirke glasbil so vir podatkov in izhodišča glasbenikom ter izdelovalcem glasbil, hkrati pa se trudijo to zgodovinsko dediščino interpretirati. Glasbila imajo med muzealijami poseben status, glasbilo ni le klasičen muzejski predmet, ki se ga ne sme nenadzorovano dotikati, ampak je pomembno, da ga tudi slišimo oziroma da pod določenimi pogoji nanj lahko tudi igramo.

Sestavni del večstoletnega razvoja kulture glasbe so njena orodja – glasbeni inštrumenti. Imajo pomembno vlogo tako v umetnosti kakor tudi v drugih družbenih kontekstih. Ta vloga se ne kaže samo pri zvoku, ki ga proizvajajo, ampak tudi v njihovi obliki in namenu. Glasbila so lahko nenavadnih oblik, izdelana iz plemenitih materialov ali okrašena s čudovitimi dekoracijami, zato so unikatna in zanimiva za zbiratelje.

Maloštevilni glasbeni inštrumenti so tisti, nastali pred letom 1600, sploh na ozemlju Slovenije, ki so se ohranili do danes. Prve resne poskuse zbiranja glasbil zasledimo v obdobju renesanse, čeprav so jih v tistem času obravnavali bolj kot inventar inštrumentalnih ansamblov aristokratov kakor pa kot predmete muzejskega pomena. To je zato, ker osnovno vrednost inštrumentov opredeljujejo njihove glasbene značilnosti, ki so odvisne od materialov, tehničnih spretnosti izdelovalcev in ne nazadnje njihovih glasbenih veščin. Kajti ko inštrument ne bi več izpolnjeval novih tehničnih zahtev oziroma preprosto ne bi bil več moden, bi izgubil vrednost, postal bi nekoristen in na koncu bi ga zavrgli.⁹

Sprva so bili zbiratelji inštrumentov predstavniki plemstva in aristokracije, potem pa se je zbiranje glasbil razširilo tudi med predstavnike meščanstva. Glasbila, predvsem tista umetniško oblikovana, so obravnavali kot sestavne dele pohištvenih ambientov, dragocene dele opreme palač in domov uglednih veljakov.

Prvo javno zbirko glasbenih inštrumentov je ustanovilo Društvo prijateljev glasbe (*Gesellschaft der Musikfreunde*) na Dunaju leta 1824. Fond zbirke je temeljil na zasebni zbirki, kakor je primer

9 Nela Tarbuk, *Glazbeni instrumenti iz fundusa Muzeja za umjetnost i obrt*, Zagreb 2007, str. 5.

COLLECTING MUSICAL INSTRUMENTS

Museum musical instrument collections provide crucial information to musicians and musical instruments makers, while also aiming to interpret historical heritage. Musical instruments have a special place among museum artefacts. An instrument is not only a classic museum exhibit, it is also important that it be heard and, under certain conditions, played.

Musical instruments represent an integral part of the evolution of musical culture spanning over centuries. They have an essential role, both in art and in other social contexts. This is reflected not only in the sound they produce, but also in their form and purpose. They can come in unusual forms, sometimes being made of precious materials or being otherwise beautifully embellished, which makes them unique and interesting to collectors.

There are not many old musical instruments, especially in Slovenia, that have been well preserved. The first serious attempts at collecting go back to the renaissance. At that time, though, they were mostly considered more an inventory of instrumental ensembles playing for the aristocracy than objects of historical importance. This view was the result of their basic material value, which was in turn defined by the degree of technical expertise required for their manufacture. When instruments ceased to be up to the latest technical demands, or were simply not fashionable any more, they lost their value and became useless, and would ultimately be discarded.⁹

At first, only the nobility and aristocracy were able to collect instruments, but later they were joined by the bourgeoisie. Musical instruments, especially beautifully embellished ones, were thought of as an integral part of furniture; precious objects complementing the interior design of the palaces and homes of the respected and respectable.

The first collection of musical instruments was established by the Society of Friends of Music (*Gesellschaft der Musikfreunde*) in Vienna in 1824. The collection holdings are based on a private collection,

9 Nela Tarbuk, *Glazbeni instrumenti iz fundusa Muzeja za umjetnost i obrt*, Zagreb 2007, p. 5.

v večini muzejskih zbirk nasploh. Tako je v 19. stoletju nastalo največje število zasebnih zbirk po vsej Evropi in Ameriki.¹⁰

Glede na to da je glasbena dediščina snovna in nesnovna, se njene številne materialne oblike hranijo v muzejih, med njimi so glasbila specifičen muzejski predmet. Nesnovna glasbena dediščina obsega način izdelave glasbila in njegove akustične značilnosti. Številni avtorji soglašajo, da je zvok, ki ga ustvarja glasbilo, njegova poglobitna estetska komponenta. Če ga ne moremo slišati bo naše doživetje glasbila pomanjkljivo, njegova naloga zgodovinskega dokumenta pa bo samo delno izpolnjena.¹¹

V osemdesetih letih 20. stoletja je ICOM objavil smernice o dostopnosti glasbil v javnih zbirkah.¹² Vsako glasbilo ima pričakovano dobo uporabe, po kateri se mu lahko vrne originalna kakovost zvoka. Na primer, predvidevamo, da se akustične lastnosti godal lahko ohranjajo na vrhunski ravni okoli 200 let. Seveda obstajajo številni načini podaljševanja aktivnega življenja glasbil, vendar zahtevajo nadomeščanje originalnih delov.¹³ S konzervatorskega stališča je treba narediti vse, da se obdobje delovanja glasbila čim bolj podaljša. Predvsem je glasbilu treba omogočiti ustrezne makroklimatske razmere in nanj občasno igrati. Hkrati moramo njihove akustične značilnosti posneti na sodobnih nosilcih zvoka.

10 Tarbuk 2007, str. 6.

11 Tea Blagaić Januška, *Muzikalije iz fundusa Muzeja grada Splita*, Split 2015, str. 57–58.

12 ICOM, *Recommendations for Regulating the Access to Musical Instruments in Public Collections*, Pariz 1984.

13 Andrew Lamb, *To Play Or Not To Play: The Ethics Of Musical Instrument Conversation*, 1995. Dostopno na: <http://www.wam.ac.uk/content/journals/conservation-journal/issue-15/>

which is generally the case with most museum collections. The 19th century saw the making of the largest number of private collections in Europe and America.¹⁰

Musical heritage is both material and non-material, and many of its material forms are preserved in museums. Among them, musical instruments are a rather specific museum artefact. Non-material musical heritage includes the methods by which instruments have been made, and their acoustic characteristics. Many authors agree that the sound produced by an instrument is its main aesthetic component. If we cannot hear an instrument, our experience of this instrument will be lacking and its role as a historical document will be only partly fulfilled.¹¹

In the 1980s, ICOM published guidelines on the accessibility of musical instruments in public collections.¹² Each instrument has an expected useful life, within which its original sound quality can be restored. For example, the acoustic characteristics of top quality stringed instruments are believed to last up to 200 years. Of course, there are many ways the life of an instrument can be prolonged. However, this requires changes to the instrument's original parts.¹³ Conservators believe that everything should be done to prolong the useful life of instruments. Above all, instruments need to be kept in the best macroclimatic conditions, and occasionally they need to be played. At the same time, we have to record their acoustic characteristics on modern sound carriers.

10 Tarbuk 2007, p. 6.

11 Tea Blagaić Januška, *Muzikalije iz fundusa Muzeja grada Splita*, Split 2015, p. 57–58.

12 ICOM, *Recommendations for Regulating the Access to Musical Instruments in Public Collections*, Pariz 1984.

13 Andrew Lamb, *To Play Or Not To Play: The Ethics Of Musical Instrument Conversation*, 1995. Available at: <http://www.wam.ac.uk/content/journals/conservation-journal/issue-15/>

Glasbila so predmeti, s katerimi lahko proizvajamo glasbo. Najstarejši glasbeni inštrument je človeško telo. S petjem, ploskanjem ali ritmičnim udarjanjem so ljudje od nekdaj slavili, hvalili, žalovali in se veselili, klicali bojevnike ali ustražovali sovražnike.

Prvi glasbeni inštrumenti so bili oblikovani iz kosti, kosov lesa, bambusa ali morskih školjk.¹⁴ Piščal je najstarejše glasbeno orodje, ki ga je izdelal človek.¹⁵

Piščal iz Divjih bab¹⁶

Starost: 60.000 let, najdišče: podzemna jama Divje babe blizu Cerkna, Slovenija, kost jamskega medveda, d. 11,2 cm, Arheološki oddelek Narodnega muzeja Slovenije, inv. št. D b 652.



14 Miezian van Zyl (urednik), *Glasba, velika slikovna enciklopedija*, Ljubljana 2015, str. 14.

15 *The New Grove Dictionary of Musical Instruments, 1, (A–F)*, New York 2014, str. 770.

16 Ivan Turk, Divje Babe I. Paleolitsko najdišče mlajšega pleistocena v Sloveniji (2. del: Arheologija) / Upper Pleistocene Palaeolithic site in Slovenia (Part 2: Archaeology). *Opera Instituti Archaeologici Sloveniae* 29, Ljubljana 2014; Ivan Turk, Divje Babe I. Paleolitsko najdišče mlajšega pleistocena v Sloveniji (1. del: Geologija in paleontologija) / Upper Pleistocene palaeolithic site in Slovenia (Part 1: Geology and Palaeontology). *Opera Instituti Archaeologici Sloveniae* 13, Ljubljana 2007; Ljuben Dimkaroski: Glasbena raziskovanja najdbe iz Divjih bab I. Neandertalčeva piščal: od domnevne piščali do sodobnega glasbila. *Argo*, 53/2, 2010, str. 10–17.

SI. 1 / Picture 1

Najstarejše glasbilo na svetu – piščal iz Divjih bab / The oldest known musical instrument in the world – the Divje babe Flute
Foto / Photo: Tomaž Lauko

Musical instruments are objects that enable us to produce music. The human body is the oldest musical instrument. Singing, clapping and rhythmic drumming have always been used to celebrate, praise, mourn or rejoice; and to call upon warriors or intimidate enemies. Among the first musical instruments, we can find objects made of bones, pieces of wood, bamboo or seashells.¹⁴ The Divje babe flute is the oldest manmade musical tool.¹⁵

The Divje babe Flute¹⁶

60,000 years old; archaeological site: Divje babe cave near Cerkno, Slovenia; a cave bear bone, l. 11.2 cm, the Archaeological Department of the National Museum of Slovenia, inv. No. D b 652.

The oldest known musical instrument in the world, a 60,000-year-old flute, is kept in the department of Archaeology at the National Museum of Slovenia. The instrument, a unique and priceless artefact of global importance, was found during the archaeological dig at the site of Divje babe in Slovenia. It is the handiwork of a Neanderthal, made from the femur of a cave bear. The bone was repurposed and transformed deliberately, with the intention of enabling musical expression. It is by no means a coincidental product. The arrangement of holes in the preserved length of the find create a system that allows for a broad range of sounds and melodic movement. Additionally, it was made into an instrument for a right-handed player. The flute from Divje babe is the only find from that site that was made by a Neanderthal. It is at least 10,000 years older than any other similar finds – flutes, which are the work

14 Miezian van Zyl (editor), *Glasba, velika slikovna enciklopedija*, Ljubljana 2015, p. 14.

15 *The New Grove Dictionary of Musical Instruments*, 1, (A–F), New York 2014, p. 770.

16 Ivan Turk, Divje Babe I. Paleolitsko najdišče mlajšega pleistocena v Sloveniji (Part 2: Arheologija) / Upper Pleistocene Palaeolithic site in Slovenia (Part 2: Archaeology). *Opera Instituti Archaeologici Sloveniae* 29, Ljubljana 2014; Ivan Turk, Divje Babe I. Paleolitsko najdišče mlajšega pleistocena v Sloveniji (Part 1: Geologija in paleontologija) / Upper Pleistocene palaeolithic site in Slovenia (Part 1: Geology and Palaeontology). *Opera Instituti Archaeologici Sloveniae* 13, Ljubljana 2007; Ljuben Dimkaroski, Glasbena raziskovanja najdbe iz Divjih bab I. Neandertalčeva piščal: od domnevne piščali do sodobnega glasbila. *Argo*, 53/2, 2010, p. 10–17.

Najstarejše glasbilo na svetu, 60.000–letno piščal, hrani Arheološki oddelek Narodnega muzeja Slovenije. Inštrument, dragocenost svetovnega pomena, je bil najden med arheološkimi izkopavanji najdišča Divje babe in je izdelek neandertalca. Stegnenica mladega jamskega medveda je bila preoblikovana prav z namenom zvočnega izražanja in ni naključni izdelek. Razporeditev luknjic in ohranjena dolžina najdbe ustvarjata sistem, ki omogoča velik razpon zvočnosti in melodijskega gibanja, inštrument pa je prilagojen desničarju. Piščal iz Divjih bab je edina odkrita piščal na svetu, ki jo je izdelal neandertalec. Od drugih podobnih piščali, ki so delo anatomskega modernega človeka, je vsaj 10.000 let starejša. Je temeljni dokaz, da je bil neandertalec tako kot mi popolnoma razvito duhovno bitje, zmožno prefinjenega umetniškega ustvarjanja, kot je glasbeno.

DELITEV GLASBIL PO NAČINU IGRANJA

V Zbirki glasbil Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije in v tej publikaciji smo glasbila razvrstili po načinu igranja, in sicer na godala, inštrumente s tipkami, brenkala, pihala, trobila, tolkala, in elektroakustične inštrumente:

- **Godala:** kordofoni¹⁷ – po katerih vlečemo z lokom – nanje „godemo“ (violina, viola, violončelo, kontrabas, gambe, gosli ...)
- **Inštrumenti s tipkami:** glasbila, pri katerih tipka sproži mehanizem, katerega končni rezultat je zvok (klavikord, orgle, klavir)
- **Brenkala:** kordofoni na katere brenkamo, trzamo po struni oziroma po kakšnem elastičnem zvočilu (harfa, kitara, citre, mandolina, tamburica ...)
- **Pihala:** aerofoni¹⁸ z ustničnimi (flavta, pikolo) ali jezičnimi piščalmi (klarinet, oboa, angleški rog, fagot, saksofon)
- **Trobila:** areofoni z ustnikom – izvajalčeve ustnice oblikujejo zvok – in odmevnikom (rog, trobenta, pozavna, tuba ...)

17 Kordofoni (gr. glasbila s struno): vsa glasbila pri katerih zvok nastaja z nihanjem strune (godala, brenkala, klavir)

18 Aerofoni (gr. glasbila z nihajočim zračnim stolpcem): glasbila, ki jim je zvočilo zrak (pihala, orgle, harmonika, orglice). Zvok nastaja z nihanjem zraka v inštrumentu.

of anatomically modern humans. It is the primary evidence that the Neanderthal was as equally developed a spiritual being as we are, capable of artistic expressions such as music.

CATEGORISATION OF MUSICAL INSTRUMENTS ACCORDING TO THE MODE OF PLAYING

The Collection of Musical Instruments at the Department of History and Applied Arts at the National Museum of Slovenia was, for the purposes of this publication, categorised according to the mode of playing; stringed instruments, keyboard instruments, plucked stringed instruments, woodwind instruments, brass instruments, percussion instruments and electroacoustic instruments:

- **Bowed Stringed Instruments:** chordophones,¹⁷ played with a bow – we draw the bow across the strings (violin, viola, cello, double bass, gamba, fiddle ...)
- **Keyboard Instruments:** All instruments played by pressing down a key, which in turn starts a sound-producing mechanism (clavichord, organs, piano)
- **Plucked Stringed Instruments:** chordophones that are played by way of plucking either strings or a similar elastic medium (harp, guitar, zither, mandolin, tamburica ...)
- **Woodwind Instruments:** edge-blown (flute and piccolo) and reed (clarinet, oboe, cor anglais, bassoon, saxophone) aerophones¹⁸
- **Brass Instruments:** aerophones with mouthpiece (the player produces sound with his lips) and resonator (french horn, trumpet, trombone, tuba ...)

17 Chordophones (from Greek: instruments with strings): all instruments that produce sound by way of vibrating string or strings (string instruments, plucked string instruments, the piano).

18 Aerophones (from Greek: musical instruments with vibrating body of air): musical instruments that use air as producer of sound (woodwind instruments, organs, accordions and the harmonica). Sound is produced when the body of air is made to vibrate.

- 30
- **Tolkala:** idiofoni¹⁹ in mebranofoni²⁰ – pri katerih zveni in šumi nastajajo z udarci, stresanjem, drgnjenjem, tolčenjem in teptanjem
 - **Elektroakustične inštrumente:** vsa glasbila²¹, ki za sintezo/proizvodnjo zvoka uporabljajo elektrotehnične oz. elektronske ali digitalne pripomočke (sintetizator, računalnik ...)

Tej razvrstitvi smo na koncu dodali še poglavji Glasbeni avtomati in Razno.

19 Idiofoni (gr. samozvočniki): vsa glasbila, ki zvenijo kot celo zvočno telo, brez strun, zračnega stebra ali membrane (vsa tolkala z zvenečimi palicami – gong, zvon, činele, ... vsa tolkala brez opne).

20 Membranofoni (gr. glasbila z opno/membrano) vsi inštrumenti, pri katerih je napeta opna oz. membrana (pavke, bobni).

21 Elektrofoni (gr. glasbila, pri katerih so zvočilo električni valovi (sintetizator, el. kitara ...), oz. glasbila, pri katerih elektrika sproži drugo zvočilo).

- **Percussion Instruments:** classified as idiophones¹⁹ and membranophones,²⁰ which are sounded by being struck, rattled, stamped, rubbed by hand or struck against another similar instrument.
- **Electroacoustic Instruments:** all instruments²¹ that can create sound by way of electrotechnical, electronic or digital devices (synthesiser, computer ...)

At the end we added two categories to this classification: Music Machines and Other Musical Instruments

19 Idiophones (from Greek: meaning a self-sounding instrument): any instrument that creates sound by vibrating as a whole without the use of strings or membranes (all struck idiophones, gongs, bells, cymbals ...).

20 Membranophones (from Greek: meaning an instrument with a membrane): any instrument that produces sound by way of a vibrating stretched membrane (timpani and drums).

21 Electrophones: any instrument that generates sound by way of electric oscillation (synthesizers, electric guitars ...) and any instrument where electricity is used to activate a sound generator.



STRUNSKA GLASBILA

Strunska glasbila (kordofoni) so glasbila, ki ustvarjajo zvok z njihajočimi napetimi strunami.

Med strunska glasbila prištevamo:

- godala,
- brenkala,
- glasbila s tipkami.

Strunska glasbila so opremljena s strunami iz različnih materialov, odvisno od namena in kraja izdelave. Najpogostejša so bila ovčja čreva (znana tudi kot *catgut*), ki so jih zvili v tanko struno za godala, uporabljali pa so tudi svilo in konjsko žimo.

Kovinsko žico so uporabljali za nekatera glasbila na katera so igrali z ubiranjem ali kladivci.²²

22 Grove 3, 2014, str. 464–465.



STRINGED INSTRUMENTS

Stringed instruments (chordophones) are those which create sound by vibrating strings stretched between two points.

They include:

- bowed stringed instruments,
- plucked stringed instruments,
- struck or tapped stringed instruments.

These instruments are outfitted with strings made from different materials, depending on the purpose and origin. The most common material was sheep gut (also known as *catgut*), which was twisted into a thin string. However, silk and horsehair were also used. Metal wire was used for some plucked or tapped stringed instruments.²²

²² Grove 3, 2014, p. 464–465.

GODALA

Godala, so glasbeni inštrumenti kordofoni, s katerimi ustvarjamo zvok tako, da po njih vlečemo z lokom – nanje „godemo“ (violina, viola, violončelo, kontrabas, gambe, gosli ...). Ko povzročamo, da napete strune nihajo oziroma vibrirajo, s pomočjo trupa ustvarjajo zvok.

Poleg igranja z lokom lahko nanje tudi brenkamo s prsti (izvajalska tehnika *pizzicato*), v skladbah 20. in 21. stoletja po njih tudi tolčemo z roko.

V Evropo so godala prišla z Bližnjega vzhoda v 10. stoletju.²³

GOSLARSTVO

Goslarji so od nekdaj izdelovali raznovrstna glasbila, največkrat pa godala in brenkala. Goslarstvo pomeni izdelovanje, popravljanje in restavriranje glasbil. V goslarskih delavnicah so tako nastajala godala različnih oblik in uglasitev, ob njih pa prav tako raznovrstna brenkala, kot so lutnje, mandoline, cistri, kitare in harfe. Čeprav ugotavljamo, da so na ozemlju današnje Slovenije igrali na takšna glasbila že v srednjeveškem času, je prvi goslar v pisnih virih omenjen šele leta 1691, in sicer kot izdelovalec lutenj. Žal pa so se sledi za goslarji izgubile, kajti ob omenjenem lutnarju se v davčnih knjigah za 17. stoletje pojavi le obrtnik strunar. Strunarji so bili v mestu, med kakršna je takrat sodila tudi Ljubljana, morda še bolj potrebni, kajti po strunah je bilo veliko povpraševanje in so se dobro prodajale. O tem, kako je potekala takšna trgovina, ne vemo podrobnosti. Darja Koter domneva, da so jih najverjetneje prodajali kar v delavnici.²⁴ Strune so tako kot druge potrebščine za glasbenike gotovo ponujali tudi trgovci z raznovrstnim blagom, ki so določene izdelke tudi uvažali. V 17. in 18. stoletju je bilo v Evropi največje povpraševanje po izdelkih nürnberških strunarjev.²⁵

23 Grove 3, 2014, str. 464.

24 Koter 2001, str. 140.

25 Koter 2001, str. 140. Primerjaj: Sabine Katharina Klaus, Ein Beitrag zur Geschichte des Saitendrahtherstellenden Handwerks in Nürnberg bis zum Beginn des 19. Jahrhunderts Dargestellt nach archivalischen und gedruckten Quellen, v: *Der „Schöne“ Klang, Studien zum historischen Musikinstrumentenbau in Deutschland und Japan unter besonderer Berücksichtigung des alten Nürnberg* (urednik D. Krickeberg), Germanisches Nationalmuseum, Nürnberg 1996, str. 112–142.

BOWED STRINGED INSTRUMENTS

Bowed stringed instruments are chordophones that create sound by way of pulling a bow along the strings (violin, viola, cello, double bass, gamba, fiddle ...). When the stretched strings vibrate against the instrument's body, they produce sound. They can also be played by plucking the strings (*pizzicato*), and in 20th and 21st century compositions the instrument's body is also sometimes tapped with a hand. Bowed string instruments arrived in Europe from the Middle East in the 10th century.²³

LUTHERIE

Although luthiers have always made various instruments, they have mostly focused on stringed instruments. The craft of lutherie includes making, repairing and restoring musical instruments. Luthiers' workshops have produced bowed stringed instruments of different shapes and sizes, as well as various plucked stringed instruments, such as lutes, mandolins, citterns, guitars and harps. We have found that these instruments were already being played in the area of Slovenia during the Middle Ages, but it was not until 1691 that the first luthier, a lute maker, is mentioned in written sources. Unfortunately, not much else is known of luthiers in the region. Apart from the aforementioned lute maker, the tax books of the 17th century mention only one other lutherie craftsman, a maker of strings. String makers might have been even more important in cities like Ljubljana. Strings were used a lot and consequently sold well, although we do not know the details of this trade. Darja Koter's assumption is that they were most likely sold from workshops.²⁴ Like all other equipment for musicians, strings could be sold by vendors who would also import some of their wares. In the 17th and 18th centuries, the most popular strings were those made by the string makers of Nuremberg.²⁵

23 Grove 3, 2014, p. 464.

24 Koter 2001, p. 140.

25 Koter 2001, p. 140. Compare: Sabine Katharina Klaus, Ein Beitrag zur Geschichte des Saitendrahtherstellenden Handwerks in Nürnberg bis zum Beginn des 19. Jahrhunderts Dargestellt nach archivalischen und gedruckten Quellen, vs. *Der Schöne Klang, Studien zum historischen Musikinstrumentenbau in Deutschland und Japan unter besonderer Berücksichtigung des alten Nürnberg* (editor D. Krickeberg), Germanisches Nationalmuseum, Nürnberg 1996, str. 112–142.

V Slokarjevem popisu ljubljanskih obrtnikov za čas med letoma 1732 in 1801 najdemo le enega goslarja. To je bil Janez Melling. Zanesljivo je deloval leta 1762, leta 1786 pa ga gradivo ne omenja več.²⁶ Drugih podatkov o Mellingu, najstarejšem po imenu znanem ljubljanskem goslarju, doslej ni.²⁷

Na seznamu obrtnikov v obdobju od leta 1801 do 1860 je rubrika „izdelovalec gosli“ že izpuščena, zadnji strunar pa je omenjen leta 1801. Na začetku 19. stoletja, okrog leta 1820, je v Ljubljani imel sorodno obrt Janez Echter, izdelovalec kitar, citer, dud in igrajočih ur. O njegovih izdelkih ne vemo ničesar, prav tako ga pogrešamo med evidentiranimi urarji. Echterja ne najdemo ne med lastniki hiš ne med obrtniki. Morda je kako povezan z mlajšim Johannom Echterjem, mizarjem, ki je dobil obrtne pravice leta 1853.²⁸

Zagotovo je v Ljubljani goslarstvo živelo tudi pozneje, kajti pred Ivanom Bajdetom (1855–1920) je v tridesetih letih tega stoletja deloval Johann Schidan (Židan),²⁹ ki je leta 1835 popravljajl žepno violino (*pochette*), ki jo v Zbirki glasbil danes hrani Narodni muzej Slovenije.

Koter meni, da se goslarstvo na ozemlju današnje Slovenije do tridesetih let 20. stoletja ni posebej razvijalo, najbrž tudi zaradi dobro organizirane trgovine, ki je, kar zadeva ceno in kakovost, zadostila potrebam tržišča. V nasprotju s klavirji pa goslarskih izdelkov niso tako intenzivno oglaševali.³⁰ V *Novicah* iz časa med letoma 1843 in 1864 najdemo le en oglas s takšno ponudbo. Z godali in brenkali je trgoval že Giontinni, bukvar iz Ljubljane. Oglas iz leta 1858 sporoča, da podpisani prodaja nove violine, kitare in druga glasbila po dostopni ceni.³¹

O nekoliko večjem razmahu goslarske obrti lahko govorimo šele v obdobju Banovinske šole za glasbila, ki je delovala med letoma 1932 in 1942 v Ljubljani.³²

26 Koter 2001, str. 142. Primerjaj: Ivan Slokar, Zgodovina rokodelstva v Ljubljani od leta 1732 do leta 1860, v: *Ljubljanska obrt od začetka 18. stoletja do srede 19. stoletja*, Razprave MAL, zvezek 4, Ljubljana 1977, str. 22.

27 Koter 2001, str. 142.

28 Koter 2001, str. 142.

29 Koter 2001, str. 142–143.

30 Koter 2001, str. 143.

31 *Novice*, 16 (1858), št. 17, *Oglasnik* št. 13, str. 28.

32 Koter 2001, str. 143.

Ivan Slokar's census of craftsmen in Ljubljana between 1732 and 1801 includes just one luthier, Janez Melling. We are certain that he worked in Ljubljana in 1762. However, he is not mentioned in the documents for the year 1786.²⁶ There is no other information on Janez Melling, so far the earliest known luthier in Ljubljana.²⁷

The list of craftsmen between 1801 and 1860 omits the 'violin maker' category, while the last string maker is mentioned in 1801. At the beginning of the 19th century, around 1820, there was a craftsman in Ljubljana, Janez Echter, who made guitars, zithers, bagpipes and musical clocks. There is nothing known about his instruments, nor is he mentioned among the registered clockmakers. He can be found neither among property owners nor among craftsmen. He might have been connected to a younger Echter, a carpenter Johann Echter, who was awarded craftsman rights in 1853.²⁸

What is certain is that lutherie was also present in Ljubljana later. Before Ivan Bajde (1855–1920), there was Johann Schidan (Židan), who was active in the 1830s.²⁹ In 1835 he repaired the same *pochette* that can today be found in the holdings of the National Museum of Slovenia.

Darja Kotar believes that lutherie in Slovenia did not develop much until the 1920s, most likely due to well-organised trade that met the price and quality needs of the Slovenian market. Unlike pianos, lutherie products were not aggressively advertised.³⁰ Between the years 1843 and 1864 the newspaper *Novice* advertised them only once. Giontini, a bookseller from Ljubljana, sold bowed and plucked stringed instruments. An advertisement from 1858 says that the person signed was selling new violins, guitars and other musical instruments at convenient prices.³¹

We can only talk about a growth in popularity of the lutherie craft during the time *Banovinska šola za glasbila* (the Provincial School for Musical Instruments) existed in Ljubljana, between 1932 and 1942.³²

26 Koter 2001, p. 142. Compare: Ivan Slokar, *Zgodovina rokodelstva v Ljubljani od leta 1732 do leta 1860, vs. Ljubljanska obrt od začetka 18. stoletja do srede 19. stoletja, Razprave MAL*, book 4, Ljubljana 1977, p. 22.

27 Koter 2001, p. 142.

28 Koter 2001, p. 142.

29 Koter 2001, p. 142–143.

30 Koter 2001, p. 143.

31 *Novice*, 16 (1858), No. 17, *Oglasnik* No. 13, p. 28.

32 Koter 2001, p. 143.

VIOLINA

Violina (starinsko tudi *gosli* in *škant*) sodi med najmanjše godalne inštrumente, ki so danes v uporabi. Tako njena oblika kot ime (pomanjševalnica), izhaja iz renesančnega inštrumenta, imenovanega viola oz. *viola da braccio*. Ima štiri strune, ki jih štejemo in označujemo po višini tonske uglasitve navzdol (e2, a1, d1, g).

Violino so razvili po letu 1500. Izpopolnili so jo italijanski izdelovalci glasbil (goslarji) in je sredi 17. stoletja postala vodilni godalni inštrument, cenjena po bogatem, trajajočem zvoku in primernosti za hitro igranje.³³

Podbradnik je izumil skladatelj in violinist Louis Spohr (1784–1859). Spohrov nastavek je počival sredi spodnjega dela glasbila, poznejše različice so nameščene levo od strunika.³⁴

Namesto bolj uveljavljenega polža so v obdobju baroka imela godala iz družin viol in violin pogosto na vrhu vijačnico z izrezljano glavo človeških ali živalskih figur (glej sl. 2).



Sl. 2 / Picture 2

Vijačnica z izrezljano levjo glavo na žepni violini iz Zbirke glasbil Narodnega muzeja Slovenije.
/ Pegbox with the carved head of a lion on the Kit Violin from the Collection of Musical Instruments at the National Museum of Slovenia.
Foto / Photo: Tomaž Lauko

33 Grove 3, 2014, str. 767.

34 Zyl, van 2015, str. 87.

VIOLIN

The violin (in archaic Slovenian also *gosli* or *škant*) is one of the smallest bowed stringed instruments still used today. Both its form and name (a diminutive) derive from the renaissance instrument, the viola (or *viola da braccio*). It has four strings, which are numbered and defined by their tone on the scale from the highest to the lowest (e2, a1, d1, g).

The violin was developed after 1500. It was further perfected by Italian luthiers, and by the mid-17th century it had become the leading stringed instrument, admired for its rich, resonating sound and its suitability for playing with agility.³³

The chin rest was invented by the composer and violinist, Louis Spohr (1784–1859). His rest was placed in the middle of the violin's back. Later versions are placed to the left of the tailpiece.³⁴

Instead of the now popular scroll, baroque stringed instruments from the viola and violin families often boasted a pegbox with a carved human or animal head (see picture 2).

Kit Violin (*Pochette, Tanzmeistergeige*)³⁵

François Sarailac, Lyon, France, 1679, ebony, maple wood, spruce wood, yew tree wood, silver wire, l. 42 cm, w. 3.7 cm, signature: *FRANÇOIS SARAILLAC / A LYON 1679*, source: Nepomucena Polak, restored by: Johann Schidan (Židan), 1835 and Vilim Demšar, 1989, inv. No. N 17218.

Publications: Koter 2001, p. 141, 147–148; Lozar Štamcar 2007, p. 118–119; Duša 2011, p. 14–15; Lozar Štamcar 2011, p. 54–55; Horvat and Knez 2011, 14–15; Koter 2014, 22–23.

Bibliography: Wackernagel 1999, p. 85–86.

Analogies: Musikinstrumenten–Museum Berlin, inv. No. 2489; Bayerischen Nationalmuseum München, inv. No. 31 and inv. No. 37.

33 Grove 3, 2014, p. 767.

34 Zyl, van 2015, p. 87.

35 As there is a register of French luthiers, the National Museum of Slovenia intends to enter the *pochette* from its holdings in the register as the heritage of the artisan Sarailac.

François Sarailac, Lyon, Francija, 1679, ebenovina, javorjev les, smrekov les, les tise, srebrna žica, d. 42 cm, š. 3,7 cm, signatura: *FRANÇOIS SARAILLAC / A LYON 1679*, vir: Nepomucena Polak, restavriral: Johann Schidan (Židan), 1835 in Vilim Demšar, 1989, inv. št. N 17218.

objave: Koter 2001, str. 141, 147–148; Lozar Štamcar 2007, str. 118–119; Duša 2011, str. 14–15; Lozar Štamcar 2011, str. 54–55; Horvat in Knez 2011, 14–15; Koter 2014, 22–23.

literatura: Wackernagel 1999, str. 85–86.

analogije: Musikinstrumenten Museum Berlin, inv. št. 2489; Bayerischen Nationalmuseum München, inv. št. 31 in inv. št. 37.

Žepna violina je imela pogosto obliko krepelca in je bila ravno pravnjsna, da so jo lahko vtaknili v zadnji žep fraka. Francozi so ji rekli *pochette*, žepnica (beseda *poche* pomeni „žep“). Žepne violine so večinoma uporabljali plesni učitelji za spremljanje svojih učencev, ki so vadili plesne korake.

Žepna violina je bila razširjena med 16. in 19. stoletjem. Njena vloga se je spreminjala, v 17. stoletju pa jo povezuje predvsem s plesnimi mojstri, ki so igrali na to glasbilo. Ime je dobila po značilni rabi, saj jo je učitelj spravil kar v velik žep dolgega suknjiča takrat značilne noše. Njega oblika in velikost sta namreč omogočali, da so jo plesni mojstri lahko shranili v žep suknjiča in jo nosili s seboj, ko so odhajali poučevat svoje učence.

Žepna violina ima zaradi svoje uporabe tudi kulturnozgodovinsko vrednost. K vzgoji plemiškega stanu je že od srednjega veka in v naslednjih stoletjih tudi pri bogatejših meščanih sodil ples. Plesni mojstri so delovali tudi na ozemlju današnje Slovenije. V Ljubljani so, kot poročajo arhivski viri, deželni stanovi zaposlili plesnega mojstra leta 1650 v novem plesišču tako imenovanem balovžu, prostoru za igro z žogo in ples in prav tako v leta 1743 odprtem balovžu, ki so ga uredili na Gradišču. Igrišče je imelo vse potrebne rekvizite in posebnega plesnega mojstra. V naslednjem obdobju so bili plesi v reduti in v stanovskem gledališču.³⁶

35 Narodni muzej Slovenije namerava *pochette* iz svoje zbirke vpisati v dediščino izdelovalca Sarailaca, saj obstaja register francoskih lutnjarjev/goslarjev.

36 Maja Lozar Štamcar (urednica), *Dragocenosti Narodnega muzeja Slovenije*, Ljubljana 2007, str. 118.

Sl. 3 / Picture 3

Pochette ali žepna
 violina François
 Sarailaca /
 Pochette or Kit
 Violin by François
 Sarailac
 Foto / Photo:
 Tomaž Lauko



Kit or pocket violins often came in the form of a cudgel, and at just the right size to be put in the back pocket of a tailcoat. The French called it a *pochette*, taken from the word *poche* meaning 'pocket'. They used to be played by dance teachers, who would accompany their students as they practiced dance steps.

The kit violin, *pochette*, was popular between the 16th and 19th centuries. Its role would change though. In the 17th century it was mostly linked to dancing masters. Its name derives from the way it was kept. The masters would simply put the instrument in the big pocket of a long coat, typical of the time. Its size and form made it possible for it to be put in this pocket and carried around when dancing masters went from student to student.

The use of the kit violin as a teaching tool has given the instrument a cultural and historical value as well. From the Middle Ages into the next several centuries, dancing was part of the aristocratic, and later the bourgeois, upbringing. Dancing masters could also be found in the area of today's Slovenia. According to historical resources, the provincial estates in Ljubljana hired a dance master as early as 1650. They taught in the newly built hall, the so-called *balovž*, a place dedicated to ball games and dances. In 1743 an open air *balovž* was built in Gradišče. The playground had all the

Randle Cotgrave je leta 1611 v svojem angleško–francoskem slovarju napisal: „*Plesalci ali učitelji plesa so jih jemali s seboj v kovčku, ko so šli na učne ure k svojim učencem.*“ Poleg lahke prenosljivosti so kot prednost videli tudi to, da je povzročala manj hrupa. To je bilo pomembno, saj so učne ure potekale v zasebnih domovanjih.³⁷

Za žepne violine ni bilo posebnega repertoarja pesmi. Če je učitelj znal igrati violino, je verjetno lahko zaigral tudi veliko zvrsti violinske glasbe na ta mali inštrument. Tako mislimo, da so na primer ples, ki ga je John Playford objavil leta 1651 v svojem delu *English Dancing Master*, sprva mišljenem za violo da gamba, od tretjega ponatisa (leta 1665) pa tudi za violino, na učnih urah plesa igral tudi na žepno violino. Ta repertoar je potrdil tudi John Hawklins, ki je leta 1776 zapisal: „*Gospod Francis Pemberton, pred kratkim umrli učitelj plesa, je bil tak mojster žepne violine, da mu je uspelo v celoti in uspešno igrati solo pesmi, ki jih je slišal prejšnji dan igrane na violino, prav presenetljivo, saj je bil konkreten možakar.*“³⁸

Poleg plesne glasbe je le malo del, za katera vemo, da je v njih žepna violina. Najbolj znan primer je opera Claudija Monteverdisa *Orfej* (Mantova 1607). Predvideni sta žepni violini, katerih zvok je za oktavo višji, kot je zapisano. Tudi Constantijn Huygens piše o uporabi žepnih violin v družbi (spremljavi) lutenj in harf, ali pa samo z lutnjami, violinami, violami in harfami, kot je bilo slišano na neki poroki leta 1638 v Haagu. Katero zvrst glasbe so tam igrali, pa ni znano.³⁹

Majhen in ozek inštrument s podaljšanim vratom iz Zbirke glasbil Narodnega muzeja Slovenije, ki se pojavi v drugi polovici 16. stol. v Franciji, ima štiri strune ter šibak in rezek ton. Vsi vitalni deli, tudi lak, so originalni. Lok se ni ohranil.⁴⁰ Telo iz javorjevega lesa je izdelano v enem kosu (levja glava, vijačnica, vrat in resonančno telo), pokrov je iz smrekove veje.⁴¹ Pri ubiralki, furnirani z ebenovino, je odprtina v obliki srčka, ki nadomešča rozeto, značilno za nekatera večja godala tistega časa. Na pokrovu sta podolgovati zvočnici v obliki črke C, prav tako značilni za viole starejšega tipa. Ubiralka,

37 Bettina Wackernagel, *Musikinstrumente des 16. bis 18. Jahrhunderts in Bayerischen Nationalmuseum*, München, 1999, str. 85.

38 Wackernagel 1999, str. 85–86.

39 Wackernagel 1999, str. 86.

40 Blaž Demšar pravi, da se njegov stric Vilim spominja loka, ki je pripadal tej žepni violini.

41 Po Vilimu in Blažu Demšarju je zanimivo, da vrh oz. pokrov, ki je iz smreke, ni narejen iz debla, ampak iz veje.

necessary equipment as well as a dancing master. Later, dances were held in *reduta*, the theatre of the provincial estates.³⁶

In 1611 Randle Cotgrave wrote in his English–French dictionary that kit violins would be carried around in suitcases by both dancers and dance teachers visiting their students. Besides being easy to transport, another advantage was the instrument's sound, it was less noisy than that of the violin and so more suitable for lessons that took place in private homes.³⁷

There was no special music written for the kit violin. If a teacher knew how to play a violin, they would most likely be able to play a variety of violin music on this small instrument as well. For example, it is believed that a dance written by John Playford, first published in his music collection *English Dancing Master* in 1651, was written for viola da gamba (in the 1665 third edition it appeared arranged for the violin), but was also played on the kit violin during dance lessons. This was confirmed by John Hawkins, who wrote in 1776 that the recently deceased Francis Pemberton was such a master of the pocket violin that he was able to successfully play entire musical pieces he had heard played on the violin just a day beforehand. This was surprising, according to Hawkins, as Pemberton was a sturdy man.³⁸

Apart from dance music, there are few musical pieces known to involve the pocket violin. The most well-known example is Claudio Monteverdi's opera *L'Orfeo* (Mantova 1607). It includes two kit violins, the sound of which is an octave higher than the written part. Constantijn Huygens also mentions the use of kit violins accompanied by lutes and harps – or used with lutes, harps, violas and violins – as heard at a wedding in The Hague in 1638. What music genre was played at this wedding is unfortunately not known today.³⁹

The small, lean instrument with an elongated neck from the Collection of Musical Instruments at the National Museum of Slovenia is from the second part of the 16th century. It has four strings and a weak, but shrill sound. All the vital parts, including the varnish, are original. However, the bow has not been preserved.⁴⁰ The maple

36 Maja Lozar Štamcar (editor), *Dragocenosti Narodnega muzeja Slovenije*, Ljubljana 2007, p. 118.

37 Bettina Wackernagel, *Musikinstrumente des 16. bis 18. Jahrhunderts in Bayerischen Nationalmuseum*, München, 1999, p. 85.

38 Wackernagel 1999, p. 85–86.

39 Wackernagel 1999, p. 86.

40 Blaž Demšar says his uncle remembers the bow that belonged to this kit violin.

strunik in resonančni pokrov so ob robovih okrašeni z vloženo srebrno žico. Pod zvočnico je vzporedno z avtogramom (*avtorjevo etiketo* – *goslarski strokovni izraz*) napis *Reparirt / Johann Schidan in Laybach / 1835*.⁴² Že prej omenjeni Schidan (Židan) je po mnenju ljubljanskega goslarja in restavratorja Vilima Demšarja svojo obrt zelo dobro obvladal in popravilo dobro opravil. Popravilo žepne violine je namreč delo izkušenega goslarja.⁴³ Vrhnja, sprednja plošča glasbila je po spominu mojstra Vilima iz tise.⁴⁴ Napenjalci so očitno narejeni pozneje, saj so robustni in grobo rezani v primerjavi z drugim inštrumentom.

Med lastniki hiš in obrtniki takratne Ljubljane Židana s tem priimkom ne najdemo, vendar ga upravičeno enačimo z Johannom Schidanom, ki je bil znan kot ljubljanski popravljalec klavirjev. O njem vemo le to, da je deloval v Ljubljani v tridesetih letih 19. stoletja. Med lastniki mestnih hiš ter v imeniku obrtnikov ni zapisan.⁴⁵

Ta podatek, da je inštrument leta 1835 restavriral Janez Židan, dakazuje, da so *pochette* uporabljali, kakor tudi to, da je leta 1989 ponovni restavratorski poseg opravil goslar Vilim Demšar in inštrument usposobil za igranje.

O francoskem goslarju Françoisu Saraillacu (1678–1712) je bilo doslej v strokovni literaturi zbranih le malo podatkov. Z njegovim delom se strokovnjaki še niso temeljiteje ukvarjali. Prav tako je ohranjena dediščina tega imenitnega goslarja zelo skromna, zato je v leksikografski literaturi le nekaj skopih podatkov. Ti ga umeščajo v obdobje med letoma 1670 in 1711.⁴⁶ Viri o muzejski dediščini po svetu omenjajo njegovo žepno violino iz leta 1678, za katero se je sled izgubila, šeststrunsko bas violo iz leta 1711 (ohranil se je le vrat z izrezljano glavico, Musikinstrumenten Museum Berlin), kitaro z letnico 1652 (Smithsonian Institute Washington DC) in trombo marino iz leta 1698, ki jo hrani Musée du Cloitre v Franciji.⁴⁷

Žal so se v evropskih in ameriških muzejih ohranila le redka njihova glasbila. Zato je žepna violina v zbirki Narodnega muzeja Slovenije

42 Listič z vpisom popravila (Zhidan) je po mnenju Blaža Demšarja gotovo originalen, saj so ponarejevalci ponarejali samo etikete izdelovalcev.

43 Arhiv Narodnega muzeja Slovenije, Vilim Demšar, Poročilo o restavriranju pochetta 1989, tipkopis.

44 Po ustnem izročilu Vilima in Blaža Demšarja.

45 Koter 2001, str. 142.

46 Vinko Jalovec, *Encyclopedia of Violin – Makers*, vol. II, London 1968, str. 221; Renne Vannes, *Dictionnaire Universel des Luthiers, Les amis de la Musique*, Bruxelles 1979, str. 315.

47 Koter 2001, str. 148.

wood body was made from one piece (the lion's head, the pegbox, the neck and the resonant body – the back and the sides), while the top is made of a spruce branch.⁴¹ The fingerboard is veneered in ebony and instead of a rosette, typical of larger stringed instruments of the time, it has a heart shaped opening. On the top part, the lid, there are two long sound holes in the form of the letter C, also typical of old violas. The fingerboard, the tailpiece and the resonant lid are decorated on the sides with inserted silver wire. Under the sound hole, parallel to the violin label, there is the inscription *Reparirt / Johann Schidan in Laybach / 1835*.⁴² According to Vilim Demšar, a luthier and restorer from Ljubljana, Johann Schidan (Židan) was very good at his craft and did excellent work repairing the instrument. The repair work of the *pochette* reveals the hand of an experienced luthier.⁴³ The top part of the instrument was, as far as master Vilim remembers, made of yew.⁴⁴ The tuning pegs were obviously made at a later date, as they are robust and the carving looks rough compared to the rest of the instrument.

Among the homeowners and craftsmen of Ljubljana at that time, we do not find the name Janez Židan. However, we can rightly say that this is the same person as Johann Schidan, a well-known repairer of pianos from Ljubljana. All we know about him is that he worked in Ljubljana in the 1830s. He is not mentioned in either the records of homeowners nor in those of artisans.⁴⁵

The fact that the instrument was restored by Janez Židan tells us that the *pochette* was being used. It was again restored in 1989 by luthier Vilim Demšar, who also made it possible for it to be played again.

Not much has been written about the French luthier François Sarailac (1678–1712). Experts have not thoroughly researched his work yet. Furthermore, the preserved heritage of this excellent luthier is rather small, and the existing really literature contains little information. What little data exists places him in the period between 1670 and 1711.⁴⁶ Resources on global museum heritage

41 According to Vilim and Blaž Demšar, the top, so called lid, was made of a spruce branch, not the trunk of a spruce.

42 According to Blaž Demšar, the piece of paper containing information on the repairer (Zhidan) is undoubtedly original. The forgers only forged the makers' labels.

43 Arhiv Narodnega muzeja Slovenije, Vilim Demšar, Poročilo o restavriranju pochetta, 1989, typescript.

44 Vilim and Blaž Demšar oral testimony.

45 Koter 2001, p. 142.

46 Vinko Jalovec, *Encyclopedia of Violin – Makers*, vol. II, London 1968, p. 221; Renne Vannes, *Dictionnaire Universel des Luthiers, Les amis de la Musique*, Bruxelles 1979, p. 315.

še posebej dragocen dokument o delu francoskega goslarja iz druge polovice 17. stoletja in kolikor je danes znano, je kot edino ohranjeno glasbilo te vrste v Sloveniji prava rariteta, sodi pa tudi med najstarejša glasbila domače muzejske dediščine.

Žepna violina je bila, kmalu po restavriranju v delavnici Vilima Demšarja, javno predstavljena na koncertu.⁴⁸ Kakovost in ohranjenost inštrumenta omogočata igranje tudi v sedanjosti. Za morebitno rabo bi bilo treba izbrati primeren lok in poiskati ustreznega izvajalca.

Glasbilo je dobro ohranjeno in je na ogled v posebni klimatizirani vitrini stalne razstave Zgodovinskih in umetnostnih zbirk – Elipse umetnosti + glasbe v Narodnem muzeju Slovenije Metelkova.

Riharjeva violina

Boštjan ali Anton Rihar, Polhov Gradec, prva polovica 19. stoletja, ebenovina, javorjev les, smrekov les, slonovina, violina: d. 59,5 cm, š. 18,5 cm, v. 9 cm, lok: 59,5 cm, inv. št. N 35382/ 1-2, vir: Hinko Hienig, 1913 (41 florintov in 30 kron), restavrirala: Irma Langus Hribar, 2016.

objava: Koter 1994, str. 77, kat. št. 30.

literatura: Močnik 1996; Koter 2001, str. 143-144.

analogija: Spominska soba Giuseppeja Tartinija, Tartinijeva violina, Nicolò Amati iz Bologne, 1715-1725, inv. št. U. k. 896.⁴⁹

Violina polhograjskega izdelovalca godal Riharja je nekoliko grobo izdelan inštrument neobičajnih proporcev z ožjim in precej izbočenim trupom. Imamo vtis, da telo ni bilo do konca oblikovano, površina pa ne zgleda po ustaljenih načelih. Blaž Demšar pravi, da je kot pomanjšana baročna gamba, forma in ubiralka to kažeta, tudi lok je gambin.⁵⁰ Tako imenovani „črni deli“ se zdijo preveliki, nenavadno velik pa je tudi gumb, sicer izdelan iz slonovine, za skromen izdelek pravo razkošje. Violina, pripisana enemu izmed

48 Darja Koter, *Ekspertiza o stanju in možnostih javne prezentacije glasbil v slovenskih muzejih*, Ptuj 2014, str. 23.

49 Pomorski muzej »Sergej Mašera« v Piranu v svoji dislocirani zbirki – Spominski sobi Giuseppeja Tartinija v njegovi rojstni hiši v Piranu hrani izjemno dragocen inštrument, Tartinijevo violino, ki jo je izdelal pater Nicolò Amati (Nicolò Marchioni) iz Bologne v letih 1715-1725. To je edini historični inštrument v Sloveniji, ki je v odlični formi, tako da nanj ob posebnih priložnostih koncertirajo vrhunski virtuozii.

50 Demšar 2017. Ustno izročilo slovenskega goslarja Blaža Demšarja, po strokovnem ogledu glasbila v restavratorski delavnici Narodnega muzeja Slovenije 2017.

do mention a *pochette* made by him in 1678, but since lost, then a 6-string viola d'amore from 1711 (the Musikinstrumentem Museum Berlin keeps the only remaining part, a carved head), a guitar dated 1652 (Smithsonian Institute Washington DC) and a marine trumpet (*tromba marina*) from 1698, kept in the Musée du Cloître in France.⁴⁷

Unfortunately, European and American museums have been able to preserve few instruments from the past. Therefore, the *pochette* from the holdings of the National Museum of Slovenia is an especially precious document of the work of a French luthier from the second part of the 17th century. As far as we know today, this is the only such instrument preserved in Slovenia, and a rarity in itself. It is one of the oldest musical instruments kept in Slovenian museums.

Shortly after being restored by Vilim Demšar, the *pochette* was presented at a public concert.⁴⁸ The quality of the instruments, and the degree to which it has been preserved, make it possible to be used today as well. In order to be used, though, an appropriate bow should be found as well as a musician suitable for this instrument.

The instrument is well preserved, forming part of the History and Arts permanent exhibition, where it can be viewed in a special exhibit case that maintains specific atmospheric conditions.

Rihar's Violin

Boštjan or Anton Rihar, Polhov Gradec, first half of the 19th century, ebony, maple wood, spruce wood, ivory. Violin: l. 59.5 cm, w. 18.5 cm, h. 9 cm; bow: l. 59.5 cm, inv. no. N 35382/ 1–2, source: Hinko Hienig, 1913 (41 florints and 30 crowns), restored by: Irma Langus Hribar, 2016.

Publication: Koter 1994, p. 77, kat. št. 30.

Bibliography: Močnik 1996; Koter 2001, p. 143–144.

Analogies: Giuseppe Tartini's Memorial Room, Tartini's violin, Nicolò Amati from Bologna, 1715–1725, inv. No.: U. k. 896.⁴⁹

47 Koter, 2001, p. 148.

48 Darja Koter, *Ekspertiza o stanju in možnostih javne prezentacije glasbil v slovenskih muzejih*, Ptuj 2014, p. 23.

49 The Sergej Mašera Marine Museum branch – Giuseppe Tartini Memorial Room, in the house where Tartini was born in Piran, holds a precious instrument. This is Tartini's violin made by Father Nicolò Amati (Nicolò Marchioni) from Bologna between 1715 and 1725. This is the only historical musical instrument in Slovenia that has remained in great condition. Many of the best violinists take advantage of this and choose play it on special occasions.

Sl. 4 / Picture 4

Riharjeva violina /

Rihar's Violin

Foto / Photo: Tomaž
Lauko



SI. 5 / Picture 5

Lok Riharjeve violine /
Rihar's Violin Bow
Foto / Photo: Tomaž Lauko

Številka št.	Priloga	Količina	Prostornost	Cena	Opomba
1997	Violina	1		2.20	
1998	Violina	1		2.60	
1999	Violina	1		2.20	
2000	Violina	1		2.20	
2001	Violina	1		2.20	
2002	Violina	1		2.20	
2003	Violina	1		2.20	
2004	Violina	1		2.20	
2005	Violina	1		2.20	
2006	Violina	1		2.20	
2007	Violina	1		2.20	
2008	Violina	1		2.20	
2009	Violina	1		2.20	
2010	Violina	1		2.20	
2011	Violina	1		2.20	
2012	Violina	1		2.20	
2013	Violina	1		2.20	
2014	Violina	1		2.20	
2015	Violina	1		2.20	
2016	Violina	1		2.20	
2017	Violina	1		2.20	
2018	Violina	1		2.20	
2019	Violina	1		2.20	
2020	Violina	1		2.20	
2021	Violina	1		2.20	
2022	Violina	1		2.20	
2023	Violina	1		2.20	
2024	Violina	1		2.20	
2025	Violina	1		2.20	
2026	Violina	1		2.20	
2027	Violina	1		2.20	
2028	Violina	1		2.20	
2029	Violina	1		2.20	
2030	Violina	1		2.20	
2031	Violina	1		2.20	
2032	Violina	1		2.20	
2033	Violina	1		2.20	
2034	Violina	1		2.20	
2035	Violina	1		2.20	
2036	Violina	1		2.20	
2037	Violina	1		2.20	
2038	Violina	1		2.20	
2039	Violina	1		2.20	
2040	Violina	1		2.20	
2041	Violina	1		2.20	
2042	Violina	1		2.20	
2043	Violina	1		2.20	
2044	Violina	1		2.20	
2045	Violina	1		2.20	
2046	Violina	1		2.20	
2047	Violina	1		2.20	
2048	Violina	1		2.20	
2049	Violina	1		2.20	
2050	Violina	1		2.20	

SI. 6 / Picture 6

Izpis iz inventarne knjige Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Inventory Ledger of the Department of History and Applied Arts of the National Museum of Slovenia
Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia

This violin made by Rihar, a luthier from Polhov Gradec, is a somehow imperfectly made instrument of unusual proportions, with a narrower and more bulging body. It seems as if the body was not fully made and as if the surface was not polished as a violin's should be. Blaž Demšar's opinion is that it looks like a shrunken baroque gamba. While the form and the fingerboard do seem to suit this description, the bow is that of a gambin.⁵⁰

⁵⁰ Demšar 2017. Oral tradition of the Slovenian luthier Blaž Demšar, after a professional evaluation of the instrument at the restoration workshop of the National Museum of Slovenia in 2017.

Riharjev, je lakirana z rdečkastim lakom. Ob pogledu na inštrument smo še naprej nekoliko v dilemi, kajti obema, Boštjanu in Antonu Riharju, bi pripisali kvalitetnejše izdelke, saj so ju sodobniki zelo hvalili.⁵¹

Anton Rihar (1819–1894) je bil izdelovalec glasbenih inštrumentov iz Polhovega Gradca. Bil je bolj ali manj samouk in je izdeloval, kakor že njegov oče Boštjan strokovno priznane izdelke, predvsem gosli, base, citre in druge inštrumente za vojaške in zasebne godbenike. Za svoj čedno izdelani, polno doneči kontrabas je na obrtni razstavi v Ljubljani leta 1844 prejel pohvalno pismo.⁵²

Goslarska družina Rihar iz Polhovega Gradca je bila med pomembnimi glasbilarji od konca 18. do konca 19. stoletja. Znanje se je prenašalo iz roda v rod. Najstarejši zaznamek o Riharih najdemo v leksikonu C. Woodcocka iz leta 1965, tam je pod črko „b“ vpisan *Boštjan, Anton Rihar, rojen 1759 v Polhogradcu*. Letnica rojstva gotovo ni točna, kajti najnovejša spoznanja utemeljujejo rojstno leto 1773.⁵³ V petdesetih letih bi lahko bil rojen le njegov oče, ki pa ni bil niti Boštjan niti Anton, temveč Urban.⁵⁴ Slovenskega goslarja je Woodcock torej vpisal pod priimkom *Boštjan*. Označuje ga kot neznanega slovenskega goslarja, čigar edini ohranjeni inštrument kaže, da je iskal vzore pri tirolski goslarski šoli. Žal ne vemo, ali se je ta inštrument ohranil in je zdaj. Morda gre za violino iz Zbirke glasbil Narodnega muzeja Slovenije, vendar v muzeju pri pregledu glasbila nismo našli lističa z napisom, prav tako pa ne kakršne koli dokumentacije, ki bi potrdila signaturo. Ostaja le vpis v muzejsko inventarno knjigo iz leta 1913, v kateri piše, da je violina „polhograjskega izdelovatelja godal Riharja“.⁵⁵ Woodcock navaja vsebino lističa: *Rihar Bostian 1789*.⁵⁶ Riharja najdemo tudi v enciklopedijah Vinka Jalovca in Renéja Vannesa. Prvi je kot signaturo zapisal *Rihar Bostian Polhov–Gradec 1789*,⁵⁷ Vannes pa omenja Riharja še bolj skopo, in sicer samo kot goslarja, delujočega

51 Koter 2001, str. 144.

52 Rihar, Anton, *Slovenska biografija*. Dostopno na: <http://www.slovenska-biografija.si/oseba/sbi507456>, obiskano: 8. februarja 2017.

53 Janez Močnik, *Gregor Rihar I. in II. v: Naši zbori* 48, št. 3–4, 1996, str. 62; Janez Močnik, Gregor Rihar. prenovitelj, v: *Cerkveni glasbenik = Church musician*. 106, št. 6, 2013, str. 15–16.

54 Močnik 1996, str. 62.

55 Inventarna knjiga, Oddelek za zgodovino in uporabno umetnost, Narodni muzej Slovenije.

56 Cyril Woodcock, *Dictionary of contemporary Violin and Bowmakers*, Brighton Sussex England 1965, str. 21.

57 Jalovec 1968, str. 159.

The so called “black parts” seem to be too big. The ivory button, a bit extravagant for such a modest instrument, also seems unusually big. The violin, ascribed to one of the makers from the Rihar family, is varnished in red. The violin is perplexing, as both Boštjan and Anton Rihar were well respected and widely praised luthiers, so we would expect a rather better quality instrument from them.⁵¹

Anton Rihar (1819–1894) was a maker of musical instruments from Polhov Gradec. He was mostly self-taught and, like his father Boštjan before him, made professionally recognized instruments, among them many violins, double basses, zithers and other instruments for private use, or for musicians from the army orchestras. His beautifully made, rich sounding double bass received a letter of commendation at an artisanal exhibition in Ljubljana in 1844.⁵²

The Rihar family of luthiers from Polhov Gradec were among the best makers of musical instruments for almost a century, from the late 18th century to the late 19th century. Knowledge was passed down from one generation to another. The earliest written information about them can be found in the C. Woodcock lexicon from 1965 under the letter “B”: Boštjan Anton Rihar, born in 1759 in Polhogradec. The year of birth is not correct, with the latest findings putting it at 1773.⁵³ His father could have been born in the 1750s. However, his name was not Boštjan nor Anton, but Urban.⁵⁴ Woodcock included a Slovenian luthier under the surname “Boštjan”. He is described as an unknown Slovenian luthier, whose only preserved instrument show he borrowed from the Tirolean school of lutherie. Unfortunately, we do not know whether this instrument has been preserved or where it might be. It might be among the violins of the Collection of Musical Instruments at the National Museum of Slovenia. However, during the examination of the instrument we could not find any kind of label, nor any documentation that could confirm the signature. There is, however, an entry in the museum inventory records from 1913, ascribing the violin to “the maker of stringed instruments from Pohov Gradec, Rihar.”⁵⁵ Woodcock refers to the content of the label: “Rihar Bostjan

51 Koter 2001, p. 144.

52 Rihar, Anton, *Slovenska biografija*. Available at: <http://www.slovenska-biografija.si/oseba/sbi507456/>, accessed on: 8th February, 2017.

53 Janez Močnik, *Gregor Rihar I. and II.* in *Naši zbori* 48, št. 3–4, 1996, p. 62; Janez Močnik, *Gregor Rihar. Restorer vs. church musician*. 106, No. 6, 2013, p. 15–16.

54 Močnik 1996, p. 62.

55 Inventory Ledger of the Department of History and Applied Arts, National Museum of Slovenia.

ob koncu 18. stoletja.⁵⁸ Nikjer pa ni objavljenega listka s signaturo. Nekaj zadreg je tudi ob letnicah, kajti – sodeč po že zapisanih navedbah – naj bi imel Rihar ob izdelavi registrirane violine šele šestnajst let. Pomislekov vredno pa je tudi ime Boštjan Anton. Anton je bil Boštjanov starejši brat, rojen leta 1766,⁵⁹ družinsko ime pa je nadaljeval tudi Boštjanov rod, saj je ta imel sina Antona, rojenega leta 1819, po domače Boštjančka, in ta je prevzel očetovo posestvo pa tudi glasbilarstvo obrt.⁶⁰ Tudi Antona - Boštjančka so poznali daleč naokrog kot goslarja in izdelovalca godbenih glasbil. Močnik pravi, da so bile njegove violine razstavljene še na ljubljanski obrtni razstavi leta 1932.⁶¹ Z Antonom – Boštjančkom je družinska obrt izumrla, kajti nobeden od sinov je ni nadaljeval.⁶² O Riharjih – goslarjih torej ostaja precej vprašanj brez odgovorov. Za zdaj velja, da se je iz njihove delavnice ohranila le tale violina, čeprav na njej ni signature.

Dvojna violina

Mittenwald, Nemčija?, šestdeseta leta 19. stoletja, ebenovina, javorjev les, smrekov les, orehov furnir, biserna matica, plastika, d. 60 cm, š. 20 cm, v. 10 cm, inv. št. N 37239, vir: Amalija Strohal, provenienca: Franc Strohal, Metlika, restavriral: Vilim Demšar, 1990, Irma Langus Hribar, 2016.

analogije: Podobne violine so izjemno redke, ker se izdelovanje takšnih violin ni uveljavilo.

Dvojno violino brez loka in z manjkajočimi strunami je po volji svojega pokojnega očeta Franca Strohala iz Metlike leta 1940 Narodnemu muzeju Slovenije darovala Amalija Strohal iz Metlike.

Po restavriranju⁶³ violine leta 1990 ima vsaka violina po štiri nove črevne strune, na katere še nihče ni igral. Obema violinama manjkata originalni kobilici, zaradi debeline ohišja naslon za brado (bradnik) najbrž ni bil potreben. Igrali so na obe strani, kot kažejo poškodbe v starem laku. Ubiralka je sestavljena iz treh debelih

58 Vannes 1979, str. 38.

59 Močnik 1996, str. 62.

60 Močnik 1996, str. 12.

61 Močnik 1996, str. 12.

62 Koter 2001, str. 144.

63 Arhiv Narodnega muzeja Slovenije, Reverz med Narodnim muzejem in Vilimom Demšarjem o restavriranju dvojne violine, Ljubljana, 3. oktober 1990.

1789.”⁵⁶ Rihar can also be found in two other encyclopaedias, those of Vinko Jalovec and Renee Vannes. Jalovec’s entry says: “Rihar Bostjan Polhov–Gradeč.”⁵⁷ Vannes’ entry is even more modest. He just mentions him as a luthier active at the end of the 18th century.⁵⁸ Still, a label with a signature has not been published anywhere. There are some inconsistencies with the dating of years. According to the entries mentioned above, Rihar would be sixteen years old at the time he made the earliest registered violin. Another issue is also the name Boštjan Anton. Anton is Boštjan’s older brother, born in 1766.⁵⁹ The family name was continued through Boštjan, who had a son Anton, born in 1819, also called Boštjanček. He took over his father’s estate and instrument making craft.⁶⁰ Anton Boštjanček was well known far and wide as a luthier and a maker of brass band instruments. Močnik claims that his violins appeared at the craft exhibition in Ljubljana as late as 1932.⁶¹ Anton – Boštjanček was the last luthier of the Rihar family. None of his two sons continued the family business.⁶² There are still many questions about the Rihar family of luthiers that have remained unanswered. For now, we can say that despite the lack of a label, this violin is the only preserved instrument from their workshop.

Double Violin

Mittenwald, Germany?, 1860s, ebony, maple wood, spruce wood, walnut veneer, mother of pearl, plastic, l. 60 cm, w. 20 cm, h. 10 cm, inv. No. 37239, source: Amalija Strohal, provenance: Franc Strohal, Metlika, restored by: Vilim Demšar, 1990; Irma Langus Hribar, 2016.

Analogies: This is a very rare type of the violin as it was not popular with the makers.

The double violin, which came without its bow and strings, was donated to the National Museum of Slovenia by Amalija Strohal from Metlika, thus granting her late father’s wish.

56 Cyril Woodcock, *Dictionary of Contemporary Violin and Bowmakers*, Brighton Sussex England 1965, p. 21.

57 Jalovec 1968, p. 159.

58 Vannes 1979, p. 38.

59 Močnik 1996, p. 62.

60 Močnik 1996, p. 12.

61 Močnik 1996, p. 12.

62 Koter 2001, p. 144.



furnirjev temnorjavega gostega lesa (ebenovine?), lepljenih na svetlejšo podlago. Strunika sta nova, plastična. Les predelne plošče med violinama ni iglavec. Napenjalci imajo na vrhu glav vložke iz biserne matice.

Po ustnem izročilu Blaža Demšarja je ta violina patentni izdelek. Za to ima nekje v zapuščini strica Vilima Demšarja dokumentacijo, ki jo bo digitaliziral in izročil Narodnemu muzeju Slovenije.

Nenavadno je, da les oboda ni radialno rezan. Eden od bokov je iz orehovega furnirja. Srednja plošča je iz javorjevega lesa. Sedelce je značilno nemško, prav tako forma, ki se po hitrem vzponu vleče v dolgi ravnini. Violina je po obliki zelo podobna violinam iz Mittenwalda, morda celo od tam.⁶⁴

Danes je violina na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.

Sl. 7 / Picture 7

Dvojna violina /
Double Violin
Foto / Photo:
Tomaž Lauko

64 Demšar 2017.



SI. 8 / Picture 8

Reverz o restavriranju dvojne violine / Violin restoration note of receipt

Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia

After the instrument was restored in 1990 each violin got a set of four new, unplayed gut strings.⁶³ Neither of the necks have their respective bridges, and, as the instrument is thick, the chinrest is unlikely to have been needed. Both sides were played on, which can be seen from the damage on the old varnish. The fingerboard consists of three thick veneers of dense, dark wood (ebony?), glued onto a lighter base. The tailpieces are new, made of plastic. The wood plate between the two violins is not made of coniferous wood. The top of fine tuners have insets made of mother of pearl.

According to the oral testimony of Blaž Demšar this violin is a patented product, even coming with pertinent documentation. As soon as he finds it among his uncle Vilim Demšar's inheritance, he intends to make digital copies, which are to be handed over to the National Museum of Slovenia.

The wood of the ribs is not cut radially, which is unusual. One of the ribs is made of walnut veneer, while the middle board is maple wood. The saddle is a typical German one, as well as the form, which levels off after a sharp rise. It is similar to the violin forms from Mittenwald, and it might even come from there.⁶⁴

Today, the violin can be seen as part of the permanent exhibition of the Historical and Art Collection - The Musical Instruments at the National Museum of Slovenia Metelkova.

⁶³ Archive of the National Museum of Slovenia, Acknowledgment of receipt between the National Museum and Vilim Demšar, confirming the restoration of the double violin, Ljubljana, 3rd October, 1990.

⁶⁴ Demšar 2017.

19. stoletje, javorjev les, smrekov les, kovina, biserna matica, kost, strune, violina: d. 59 cm, š. 20 cm, v. 6 cm, lok: 74,5 cm, signatura: * C * F * M *, inv. št. N 36585/1-2, vir: Amalija Strohal, provenienca: Franc Strohal, Metlika, restavriral: Irma Langus Hribar, 2014 in 2016.
objava: Koter 2001, str. 147.

Violino s pripadajočim lokom je po volji svojega pokojnega očeta Franca Strohala iz Metlike leta 1940 Narodnemu muzeju Slovenije darovala Amalija Strohal iz Metlike.

Violina ima vse strune, zgornja in spodnja sta kovinski, dve črevni. Tri strune so strgane. Nič ne kaže, da je imela bradnik, vijaki strun so iz treh različnih skupin. Na violini so vidne poškodbe od igranja. Izpostavljene štrline telesa so obtolčene, dno violine je na spodnjem delu telesa razlepljeno. Ubiralka ni iz ebenovine, je pa lakirana s črnim lakom.

Strunik je okrašen z vložki iz gravirane biserne matice s cvetličnim motivom in vrezano (vtisnjeno) nenavadno signaturo na hrbtni strani (zadnji strani trupa): * C * F * M *.

Gravura je poudarjena z rdečerjavo barvo. Pomen inicialk * C * F * M * še ni pojasnjen.

Na loku pripadajoče violine je žima⁶⁵ odtrgana ali pregriznjena (žuželke).



Sl. 9 / Picture 9
 Violina Franca Strohala / Franc Strohal Violin
 Foto / Photo: Tomaž Lauko

65 Žima je potrošni material. Na lokih violine sta največkrat bela ali črna žima. Bela je po navadi fina oziroma tanka, črna pa je praviloma debelejša. Bela se uporablja za loke manjših godal, črna pa praviloma za loke velikih. Konji, katerih žimo uporabljajo za loke, imajo spete repe (zavozlane v figo), da žime ne poškodujejo pri otepanju. Lok igranega instrumenta mora biti večkrat ožimljen (cca 1 ura dela za menjava).

19th century, maple wood, spruce wood, metal, mother of pearl, bone, strings; violin: l. 59 cm, w. 20 cm, h. 6 cm, bow: l. 74.5 cm; signature: * C * F * M *; inv. No. N 36585/ 1-2; source: Amalija Strohal; provenance: Franc Strohal, Metlika; restored by: Irma Langus Hribar, 2014 and 2016.

Publication: Koter 2001, p. 147.



The violin and the accompanying bow were donated to the National Museum of Slovenia in 1940 by Amalija Strohal from Metlika, according to the will of her late father Franc Strohal from Metlika. The violin has all strings; the upper and the lower are made of metal, the other two are gut strings. Three of the strings are torn. The violin does not seem to have had a chin rest, and the fine tuners are of three different types. Damage from playing is visible on the instruments: the protruding parts are battered, the back of the violin is unglued at the lower part. The fingerboard is not ebony, and it is painted in black varnish.

Sl. 10 / Picture 10

Lok violine Franca Strohal / Franc Strohal Violin's Bow
Foto / Photo: Tomaž Lauko

The tailpiece is decorated with mother of pearl inlays forming a flower. On the back there is an unusual etched (pressed) signature: * C * F * M *. The engraving is highlighted in red. The meaning of the acronym * C * F * M * has not been explained yet.

The horsehair of the bow has been either torn or bitten through (insects).⁶⁵

65 Horsehair is a consumable good. Violin bows usually have white or black horsehair. White horsehair is usually fine and thin, used on bows of smaller string instruments, while black hair is normally thicker and can be found on bows made for large string instruments. Horses whose hair is used for the bows normally have their tails tied in a bun to prevent the damage that occurs when horses swish their tails back and forth. Bows must be restrung with hair over the course of their lifetime (changing takes about an hour).

Violina „Stradivari“

Češka, sredina 19. stoletja, javorjev in smrekov les, kovina, kost, biserna matica, roževina, žima, pernambuk, ebenovina, violina:
 d. 60 cm, š. 20,2 cm, v. 4 cm, lok: d. 67,5 cm, signatura: *Antonius Stradivarius Cremonentis Faciebat Anno 1733*, inv. št. N 37807/ 1-2,
 vir: Stanislav Kocjan, provenienca: Franc Podbrežnik, Stanislav Kocjan starejši in Stanislav Kocjan mlajši; restavriral: Irma Langus Hribar, 2017.



Darovalec Stanislav Kocjan mlajši je violino, lok in dva zvezka not *Violinska šola* prejel v petdesetih letih 20. stoletja kot prvi vnuk od svojega starega očeta po materini strani (Evi Podbrežnik – poročeni Kocjan), torej od (Franciška) Franca Podbrežnika mlajšega (1894–1963) iz Kamnika.

Violina ima v notranjosti nalepko z napisom: *Antonius Stradivarius Cremonentis Faciebat Anno 1733*. Zato so lastniki domnevali, da imajo v lasti pravo stradivarko. Oče darovalca Stanislav Kocjan starejši je okoli leta 1966 po televiziji izvedel, da imajo doma morda

Sl. 11 / Picture 11

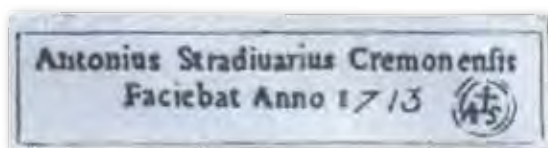
Violina „Stradivari“ /
 “Stradivari” Violin
 Foto / Photo:
 Tomaž Lauko

Bohemia, mid-19th century, maple and spruce wood, metal, bone, mother of pearl, horn, horsehair, pernambuco, ebony; violin: l. 60 cm, w. 20.2 cm, h. 4 cm, bow: l. 67.5 cm; signature: *Antonius Stradivarius Cremonentis Facebiat Anno 1733*, Inv. no. N 37808/ 1-2; source: Stanislav Kocjan; provenance: Franc Podbrežnik, Stanislav Kocjan sr., Stanislav Kocjan Jr.; restored by: Irma Langus Hribar, 2017.

SI. 12 / Picture 12

Listek s signaturo, kakršen se nahaja v notranjosti violine / Violin label on the inside of the Violin

Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia



The donator Stanislav Kocjan Jr. received the violin, its bow, and two notebooks titled *Violinska šola* (Violin School) in the 1950s from his grandfather Franc (Francišek) Podberžnik Jr. (1894–1963) on his mother Eva Kocjan’s (née Podbrežnik) side. Stanislav was Franc’s first grandson and so he inherited the instrument.

On the inside of the violin there is a label inscribed: *Antonius Stradivarius Cremonentis Facebiat Anno 1733*. The owners assumed that they were in the possession of a genuine Stradivari instrument. In 1955 Stanislav Kocjan Sr., the donor’s father, learned from TV that the family might have an original Stradivari at home and could therefore benefit richly from it. He bought a Croatian book on famous violins and learned that in 1733 master Stradivari either did not make any instruments or the original was lost. In 1997 Stanislav Kocjan Jr. took the violin to Vilim Demšar. The luthier established that the violin is an industrial production of Czech origin, according to the tree-rings in the wood it was between 125 and 150 years old. He also established that the instrument was cracked, (the body) which means that the total repairs, taking the instrument apart and then putting it together again, would have cost more than the instrument itself.⁶⁶

The appertaining bow was also unusable and in need of repairs.

⁶⁶ Kocjan 2017. Oral testimony of Stanislav Kocjan Jr. at the time the violin was handed over to the National Museum of Slovenia in 2017.

pravo stradivarko in da bi se z njo dalo obogateti. Kupil je hrvaško knjigo o teh slavnih violinah in ugotovil, da mojster Stradivari leta 1733 ni nič ustvaril oziroma je pravi original tega leta izgubljen. Leta 1997 je Stanislav Kocjan mlajši s svojo violino odšel k znanemu ljubljanskemu goslarju Vilimu Demšarju in ta mu je povedal, da violina ni posebna in je industrijska, češkega izvora, takrat po letnicah notranjega lesa stara od 125 do 150 let, da je počena (trup), zato bi bila potrebna popravila z razdiranjem in ponovno sestavo, to pa bi stalo več, kot je violina vredna.⁶⁶ Prav tako je bil pripadajoči lok neuporaben in potreben popravila.

Antonio Stradivari se je rodil leta 1644 v Cremoni (Italija). Tam je imel delavnico in izdeloval violine in druge inštrumente s strunami. Izboljšal je geometrijo in konstrukcijo violin, zato so postale in ostale številnim generacijam goslarjev standard za kakovost, saj so v rokah virtuozov zvenele čisto, živo in mogočno. V Cremoni so sočasno imeli delavnice tudi Guarnerijevi in Amatijevi, vendar so najbolj cenjene Stradivarijeve violine. Antonievo delo sta po njegovi smrti nadaljevala sinova.

Vsaka Stradivarijeva violina je bila izdelana ročno, skrbno so izbirali vrste lesa in teksturo politur, lakov. V življenju je izdelal približno 1100 inštrumentov, predvidevajo, da se jih je do danes ohranilo od 630 do 650, med njimi 512 violin.⁶⁷ Danes je vrednost vsakega inštrumenta 2–3 milijone dolarjev.

Današnji goslarji poskušajo s pomočjo sodobne znanosti razvozlati skrivnosti Stradivarijeve tehnologije izdelave inštrumentov, da bi izdelali inštrumente podobne kakovosti. Kanadski izdelovalec violin Joseph Curtin in njegov ameriški kolega Gregg Alf sta izdelala natančno kopijo violine, ki jo je Stradivari izdelal leta 1719 in jo poznamo kot Booth Stradivari (po eni od lastnic madame Vilhelm Booth).

Že skoraj dve stoletji goslarji izdelujejo in prodajajo slabše kopije, ki jih opremijo z nalepko "Stradivarius". Zato nalepka *Stradivarius* v violini ne pomeni, da je inštrument pristen.

Po navadi sta na nalepki pravi in ponarejeni latinski napis *Antonius Stradivarius Cremonensis Faciebat Anno* [datum], ki opiše izdelovalca (*Antonio Stradivari*), mesto izdelave (Cremona), leto izdelave

66 Kocjan 2017. Ustno izročilo darovalca Stanislava Kocjana mlajšega ob predaji violine Narodnemu muzeju Slovenije 2017.

67 Grove 3, 2014, str. 459.

Antonio Stradivari was born in 1644 in Cremona, Italy. He set up his workshop in Cremona, where he made violins and other musical instruments and strings. He improved the geometry and the construction of the violin. His instruments have remained the standard of quality for generations of luthiers. In the hands of musical virtuosos his violins sounded clear, energetic, and powerful. Cremona was also the home of other luthiers, the Guarneris and the Amatis. However, the Stradivari violins remain the most precious ones. Antonio Stradivari's sons continued his trade after his death.

Each Stradivari's violin was handmade; the wood was carefully chosen, as well as the texture of polishes and varnishes. In his lifetime Stradivari made approximately 1,100 instruments. It is assumed that between 630 and 650 instruments have been preserved, among them 512 violins.⁶⁷ Today each of his instruments is worth between two and three million US dollars.

Contemporary luthiers are trying to solve the secrets of Stradivari's instrument making technologies in order to make instruments of similar quality. Joseph Curtin, a luthier from Canada, and his American colleague Gregg Alf made a detailed copy of a Stradivari violin made in 1719, which is known as the Booth Stradivari (after one of the owners Madam Vilhelm Booth). For nearly two centuries luthiers have been selling copies of lesser quality, which are outfitted with the "Stradivari" label. Consequently a *Stradivarius* label is not telling and does not confirm that an instrument is a Stradivari original.

Regardless of the authenticity of the "Stradivari" labels, these carry the inscription *Antonius Stradivarius Cremonensis Facebiat Anno [date]*, describing the maker (Antonio Stradivari), city of origin (Cremona), and the year and date of make. The information is printed or handwritten. The label in Latin provided the name "Stradivarius" to the instruments. Later the US demanded that copies carry also the place of their origin and since 1891 some copies include inscriptions like "*Made in Czechoslovakia*" or just "*Germany*."

Since the 19th century over a hundred thousand (millions) such copies have been made in Germany, France, eastern Europe, England, China, and Japan. They are outfitted not only with the counterfeit Stradivari labels but also with those of master makers Vuillaume, Amati, Bergonzi, Guarneri, Gasparo da Salo, Stainer, and others.

67 Grove 3, 2014, p. 459.

in datum. Podatki so natisnjeni ali napisani ročno. Zaradi te nalepke v latinščini violinam rečemo *Stradivarius*. Po letu 1891 so na zahtevo ZDA nekatere kopije opremljene z državo, v kateri je bila violina izdelana, v angleškem jeziku v spodnjem delu nalepke: *Made in Czechoslovakia* ali le *Germany*.

Od sredine 19. stoletja do danes so v Nemčiji, Franciji, vzhodni Evropi, Združenem kraljestvu, na Kitajskem in Japonskem izdelali več sto tisoč (milijonov) takšnih kopij. Opremljene so ne le s ponarejenimi nalepkami Stradivarijev, ampak tudi drugih znanih izdelovalcev, kot so Vuillaume, Amati, Bergonzi, Guarneri, Gasparo da Salo, Stainer.

Prodajalci ponaredke danes prodajajo po cenah med 8 in 27 dolarjev in jih oglašujejo kot kopijo, vendar je že na prvi pogled jasno, da je podobnost z originalom majhna. Nekatere so izdelane ročno, večinoma pa serijsko. Besedo "kopija" so na nekatere nalepke dodali po letu 1957.⁶⁸

Hoyerjeva violina

Wenzel Hoyer, Luby, Češka, konec 19. stoletja, smrekov les, javorjev les, bukov les, kovina, črevo, škatla: d. 77 cm, š. 24 cm, v. 13 cm, violina: d. 61 cm, š. 20,5 cm, v. 4 cm, lok: d. 72,5 cm, signatura: *W. HOYER IN SCHÖNBACH B. EGER*, inv. št. N 37674/ 1-3, vir: Zorka Šubic Ciani in Mladen Šubic, provenienca: Zlata Mrak, restavrirala: Irma Langus Hribar, 2016.

Leta 1935 se je družina Šubic preselila v stanovanje na Rimski 9 v Ljubljani. V stanovanju nad njimi je živela gospa Zlata Mrak in podarila jim je svojo violino z lokom in leseno zaščitno škatlo.

V zaščitni škatli so violina, lok, bradnik, rezervni strunik, rezervne strune in volnena ruta. Violina je bila prekrita z volneno ruto velikosti 57 x 59 cm z vzorci *paisley* v rjavih tonih in z olivno zeleno borduro. Zaščitna škatla je strehasto grajena, v notranjosti je obložena s potiskanim papirjem, deli notranje opreme manjkajo oziroma je škatla nekoliko predelana. Del, ki podpira trup, je obložen z volnenim filcem.

Strune: G kovinska, D, A črevni, E manjka. D in A sta napeti na polža za A in E, najbrž je strune zadnjič napel nekdo, ki violine ni nikoli igral.

⁶⁸ Dostopno na: <https://answers.yahoo.com/question/index?qid=20081106063215AAqIvN1>, obiskano: 1. aprila 2017.

The counterfeit instruments are sold for eight or twenty-seven dollars each and are promoted as copies. However, it is clear just by looking at them that there are few similarities with the originals. Some of these copies are handmade while others are produced serially. The word “copy” was added to some of the labels only after 1957.⁶⁸

Hoyer Violin

Wenzel Hoyer, Luby, Bohemia, end of the 19th century, Bohemia, mid-19th century, spruce wood, maple wood, beech wood, metal, gut.
Case: l. 77 cm, w. 24 cm, h. 13, violin: l. 61 cm, w. 20.5 cm, h. 4 cm, bow: l. 27.5 cm; signature: *W. HOYER IN SCHÖNBACH B. EGER*, inv. No. N 37674/ 1-3, source: Zorka Šubic Ciani and Mladen Šubic; provenance: Zlata Mrak; restored by: Irma Langus Hribar, 2016.

Sl. 13 / Picture 13

Hoyerjeva violina /
Hoyer Violin
Foto / Photo:
Tomaž Lauko



68 Available at: <https://answers.yahoo.com/question/index?qid=20081106063215AAqIvN1>, accessed on: 1st April, 2017.

64 Kobilica z žigom AUBERT je pobrana na delu za struni A in E, pod njo je lak na telesu violine zelo odrgnjen in kaže, da je bilo menjanih več kobilic in da te niso bile vedno nameščene na pravem mestu.

Ključa za struni A in E imata na glavi vložek iz biserovine, G in D sta narejena brez njega.

Polž in vrat sta najbrž iz bukovega lesa. Zgornja plošča resonančnega telesa je iz lesa iglavca, bočnici in hrbtna plošča pa iz simetrično sestavljenega lesa (proge). Ključi, ubiralka, oba strunika, gumb so iz temnega gostega lesa. Bradnik je iz potemnjene lesa z izrazitimi porami. Duša iz bukovine je vlepljena (postrani) ob desni zvočnici f.

Lok je lepo ohranjen, žima je popuščena in se zato ni strgala. Žabica in vijak za nastavitev žime delujeta. Navitje pred žabico je glede na sulfidno patino morda srebrno.

Mostička v škatli ni bilo, na spodnji plošči violine pa ni znamenj, ki bi kazali, da so violino uporabljali brez njega. Podbradnik je priložen, kovinski del pa oblazinjen z odstopajočim usnjem.

Na zadnji strani trupa je vtisnjena signatura *W. HOYER IN SCHÖNBACH B. EGER*.⁶⁹



Sl. 14/ Picture 14

Signatura na zadnji strani trupa /
Signature on the back of the Violin
Foto: Fotodokumentacija Oddelka
za zgodovino in uporabno umetnost
Narodnega muzeja Slovenije / Photo:
Photodocumentation of the Department of
History and Applied Arts of the National
Museum of Slovenia

⁶⁹ Wenzel Hoyer, izdelovalec violin, se je rodil leta 1833, umrl pa leta 1900 v Lubyu, češkem mestu (pred letom 1946 je bilo znano kot Schönbach), ki je slovelo po izdelovanju violin. V času avstro-ogrske monarhije so mu rekli tudi »avstrijska Cremona«.

In 1935 the Šubic family moved to a flat in 9 Rimska street in Ljubljana. The flat above them was occupied by Zlata Mrak, who eventually gave them her violin together with its bow and the protective wooden case.

The case contains the violin, the bow, a chinrest, a spare tailpiece, spare strings, and a woollen kerchief. The 57 x 59 cm paisley kerchief in brown with olive green border covered the instrument. The case is slanted, the inside is covered in patterned paper. Some parts of the case seem to be missing as the case was partly reworked. The part supporting the body of the violin is covered in wool felt.

Strings: G – metal; D, A, – gut; E – missing. The D and A strings are strung on the pegs of the A and E strings, meaning that the strings were last tightened by someone who never played the violin.

The bridge is stamped with the name AUBERT. It is slightly damaged where the A and E strings should be and underneath it the varnish on the instrument's body is badly scratched. This means that the bridge was changed several types and was not always placed correctly.

The fine tuners for the A and E strings have a mother-of-pearl insets, but the G and D were made without them. The top of the body is made of a coniferous type of wood, and the ribs and the back of the instruments are made of symmetrically positioned wood (the lines). The tuning pegs the fingerboard, both tailpieces, and the end button are made of thick dark wood. The wood of the chinrest was darkened and has pronounced pores. The beech sound post was glued (sideways) next to the sound hole on the right hand side.

The bow is well-preserved; the horsehair is slackened, consequently it did not tear. The frog and the screw that adjust the hair are in working order. From the sulphide patina on the winding in front of the frog we assume that it could be silver.

The case did not contain a shoulder rest. However the back of the violin shows no signs that it was used without it. The chinrest was in the case, the metal part is padded with leather which is peeling.

On the back of the body there is an imprint of a signature *W. HOYER IN SCHÖNBACH B. EGER*.⁶⁹

⁶⁹ Wenzel Hoyer was a luthier, born in 1833 and died in 1900 in Luby in Bohemia (known as Schönbach until 1946), known for the craft of making violins. In the period of Austria-Hungary it was called the "Austrian Cremona".

Violina „Amati“

Markneukirchen, Nemčija, dvajseta leta 20. stoletja, smrekov les, javorjev les, bukov les, kovina, črevo, papir, škatla: d. 79 cm, š. 23,5 cm, v. 9,5 cm, violina: d. 60,5 cm, š. 21 cm, v. 4 cm, lok: d. 72 cm, note: d. 33,5 cm, š. 26,5 cm, Amati ?, inv. št. N 37675/1-4, vir: Zorka Šubic Ciani in Mladen Šubic, provenienca: Anica Šubic, restavriral: Irma Langus Hribar, 2016.

SI. 15/ Picture 15

Violina „Amati“ /
“Amati” Violin
Foto / Photo:
Tomaž Lauko



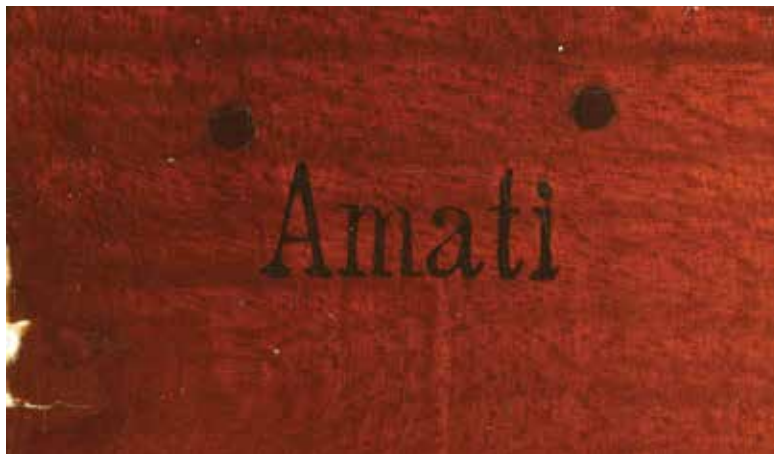
Violina je bila last Anice Šubic, mame darovalcev Zorke Šubic Ciani in Mladena Šubica oziroma žene Mirka Šubica, ki je nanjo tudi igrala. V škatli za violino je violina, ki jo Blaž Demšar datira v čas takoj po 2. svetovni vojni. Po njegovem mnenju gre verjetno za izdelek manufaktur iz Markneukirchna.⁷⁰

⁷⁰ Demšar 2017. Markneukirchen je mesto v gozdnaten delu Nemčije ob češki meji. V njem je veliko goslarskih manufaktur. Okoli leta 1900 so v Markneukirchnu in okolici izdelali okoli 50 odstotkov glasbil ter njihovih sestavnih delov za svetovni trg.

Marneukirchen, Germany, 1920s, spruce wood, maple wood, beech wood, metal, gut, paper; case: l. 79 cm, w. 23.5 cm, h. 9.5 cm; violin: l. 60.5 cm, w. 21 cm, h. 4 cm; bow: l. 72 cm; music sheets: l. 33,5 cm, w. 26,5 cm; Amati: ?; inv. No. N 37675/ 1-4; source: Zorka Šubic Ciani and Mladen Šubic, provenance: Anica Šubic, restored by: Irma Langus Hribar, 2016.

SI. 16/ Picture 16

Signatura na zadnji strani trupa /
Signature on
»Amati« violin
Foto / Photo:
Tomaž Lauko



The violin belonged to Anica Šubic, mother of the donors Zorka Šubic Ciani and Mladen Šubic, and wife of Mirko Šubic. She also used to play the violin. The violin case contains the violin, which, according to Blaž Demšar was made right after World War II. He believes it is likely a product of manufacturers from the Markneukirchen area.⁷⁰

The case contains the violin, the bow, a kerchief, two sets of sheets from the 1920s, an empty paper from the music notebook and spare strings in their original paper packaging, placed in the covered partition in the box. The printed paper envelopes contain G, D and E strings. There is also an empty envelope that should contain an A string. A folded kerchief from wool jacquard/damask, ivory colour yellowed with age, 9 by 71 cm covered the violin.

The box is made of moulded cardboard, on the outside it is plastered with textured black paper (the texture was imprinted). Inside the

⁷⁰ Demšar 2017. Markneukirchen is a wooded area in Germany where many luthier manufacturers can be found. Around 1900 approximately the instruments and instrument parts made in that area covered 50 % of the global market.

V zaščitni škatli so: violina, lok, ruta, dvoje not iz dvajsetih let 20. stoletja, nepopisan list z notnim črtovjem in rezervne strune v originalni papirni embalaži, te so v pokritem predelku zaščitne škatle. V potiskanih ovojih so strune G, D, E, zraven je prazen potiskan ovoj za struno A. Pregarjena ruta iz volnenega žakarda/damasta smetanaste porumenele barve velikosti 69 x 71 cm je prekrivala violino.

Zaščitna škatla je narejena na kalupu oblikovane lepenke, na zunanji strani oblepljene s strukturiranim črno lakiranim papirjem (struktura je vtisnjena). V notranjosti je oblepljena z zeleno-črnim lakiranim papirjem. Del škatle, ki podpira trup, je obložen z zelenim volnenim filcem.

Strune: G kovinska, D črvena, A kovinska, E kovinska. Strune so napete na prave ključe.

Kobilica (neoznačena) je pobrana na delu za struni A in E, pod njo je lak na telesu violine odrgnjen in kaže, da je bila prestavljena.

Ključki so si sorodni, verjetno iz istega seta. So iz temnega gostega lesa z manjšimi odstopanji pri okrasnih profilih na vratu ključev.

Polž in vrat sta najbrž iz javorjevega lesa. Zgornja plošča resonančnega telesa je iz smrekovine, vidne so poškodbe/razpoke v laku na meji med ranim in kasnim lesom. Bočnici in hrbtna plošča so iz javora rebraša (proge). Zadnja plošča je na levi strani ob vratu počena in zakitana. Lak je ob robovih violine odrgnjen, površina sprednje plošče je negovana.

Ključki, ubiralka, strunik, gumb so iz temnega gostega lesa, morda ebenovine. Duša je vstavljena (postrani) ob desni zvočnici f. Lok je zmerno ohranjen, žima je natrgana, pogrizena. Podbradnika in mostička ob violini ni.

Na hrbtni strani (zadnji strani trupa, ki je narejen iz enega kosa) je s črnim tušem ročno napisano *Amati*,⁷¹ vendar ne gre za kopijo violin iz družine slovitih goslarjev iz Cremona, saj je že na prvi pogled jasno, da je podobnost z originalom majhna.

71 Amati je priimek družine italijanskih oblikovalcev violin, ki so živeli v Cremoni od okoli leta 1538 do 1740. Njihov pomen je enak družinam Bergonzi, Guarneri in Stradivari. Danes so violine, ki jih je izdelal Nicolò Amati, ocenjene na okoli 600.000 dolarjev. Zadnji izdelovalec iz družine je bil Nicolov sin Girolamo Amati, znan kot Hieronymus II. (26. februar 1649 – 21. februar 1740). Čeprav je izboljšal krovni del očetovih glasbil, so večinoma slabša in ne dosegajo kakovosti največjega izdelovalca tistega časa, Antonia Stradivarija. (Grove 1, 2014, str. 52–55.)

box is plastered with green-black varnished paper. The part that supports the instrument's body is dressed in woollen felt.

Strings: G – metal, D – gut, A – metal, E – metal. The strings are inserted in the correct tuning pegs.

The bridge (unmarked) is scraped where the A and E strings are. The varnish underneath it is scratched, which means that it was likely moved.

The pegs seem to be from the same set. They are made of the same thick wood with slight variations on the ornamental profiles on the pegs' necks.

The scroll and the neck are probably made of maple wood. The top part, the body, is probably spruce; there is visible damage – cracks in the varnish right where early wood meets late wood. The ribs and the back are made of ribbed maple (hence the lines). The back is cracked and puttied on the left hand side close to the neck. The varnish is scratched on the violin edges, the body is well maintained.

The pegs, the fingerboard, the tailpiece, and the end button are made of thick, dark wood, and the sound post is inserted (sideways) next to the right sound hole. The bow is fairly well preserved; the hair is torn and damaged by insects. The chinrest and shoulder rest were not in the case.

On the back of the instrument (made of one piece) is the name Amati.⁷¹ However, this is not a copy of violins made by the Amatis, the renowned Cremona family of luthiers. It is clear that there are not many similarities to the originals.

71 Amati is the name of the Italian family of luthiers from Cremona, where they lived from around 1538 to 1740. They are as important as the Bergonzi, Guarneri, and the Stradivari families. Today violins made by Nicolò Amati are worth around \$600,000. The last luthier from the Amati family was Nicolò's son Girolamo Amati, known as Hironymus II (26th February, 1649 – 21st February, 1740). Although he improved the body of his father's instruments, his are usually not as good and do not have the quality of the greatest master luthier of the time, Antonio Stradivari. (Grove 1, 2014, p. 52–55.)

VIOLONČELO (ALI ČELO)

Violončelo je strunsko glasbilo iz družine godal. Po obliki in gradnji je dvakrat povečana violina. Zaradi tega je nujno, da violončelo med igranjem držimo med nogami, s posebno nogo pa je uprto v tla. Predhodnik violončela je viola da gamba, glasbilo iz rodu starih viol. Že v 17. stoletju se je violončelo uveljavilo kot solistični instrument, v orkestru pa se pogosto povezuje s kontrabasom. Tako kot violino tudi violončelo izdelujejo v manjših dimenzijah; pomanjšani instrumenti se uporabljajo za poučevanje otrok.⁷²

Violončelo

Po 1888, smrekov les, javorjev les, ebenovina, pušpan, črvo, medenina, žima, čelo:
d. 131,5 cm, š. 43 cm, v. 23,5 cm, lok: d. 71,5 cm,
inv. št. N 37979/1–2, vir: Vesna in Miloš Vesel,
provenienca: Ferdo Vesel, restavriral: Irma
Langus Hribar, 2017.

Čelo s pripadajočim lokom je bilo v lasti slovenskega slikarja Ferda Vesela,⁷³ Narodnemu muzeju Slovenije sta ga podarila njegova vnuka Vesna in Miloš Vesel. Darovalca sta ob čelu podarila še kitaro in dve mandolini, ki sta bili prav tako last znamenitega slikarja.

Violončelu manjka kobilica, vse strune (A, D, G in C) so črevne. Lok je ožimljen.

Na Oddelku za lesarstvo, Biotehniške fakultete Univerze v Ljubljani so na violončelu opravili



Sl. 17/ Picture 17

Violončelo / Ferdo
Vesel Violoncello
Foto / Photo:
Tomaž Lauko

⁷² Grove 3, 2014, str. 805–807.

⁷³ Ferdo Vesel (* 18. maj 1861, Ljubljana, † 28. julij 1946, Ljubljana). Veselova likovna dela so razpeta med realističnim in impresionističnim slogom. Ukvarjal se je s krajinarstvom, portretiranjem in folklornim žanrom. Dostopno na: <http://www.slovenska-biografija.si/oseba/sbi777795/>, obiskano: 5. julija 2017.

VIOLONCELLO (OR CELLO)

Violoncello is classified as a bowed string instrument. Its form and structure corresponds that of the violin, only twice as big. The size determines how this instrument is played, the body is positioned between the player's legs and a special pin (endpin) is fixed on the floor. The cello's predecessor is the viol, or viola da gamba, an instrument that originates from the oldest bowed string instruments from the viola family. In the 17th century cello was already an established solo instrument, while in the orchestra it was often connected to the double bass. Both instruments, the violin and the cello are made in smaller sizes, mostly for the children learning to play the instruments.⁷²

Violoncello (Cello)

After 1888, spruce wood, maple wood, ebony, boxwood, gut, brass, horsehair cello: l. 131.5 cm, w. 43 cm, h. 23.5 cm, bow: l. 71.5 cm, inv. No. N 37979/1-2, source: Vesna and Miloš Vesel, provenance: Ferdo Vesel, restored by: Irma Langus Hribar, 2017.

The cello and the bow belonged to Slovenian painter Ferdo Vesel.⁷³ The instrument was donated to the National Museum of Slovenia by his grandchildren Vesna and Miloš Vesel, who in addition to the cello also donated a guitar and two mandolins that also belonged to the renowned painter Vesel.

The cello came without the bridge, all the strings (A, D, G and E) are made from gut. The bow features horsehair.

The Department of Wood Science and Technology at the Biotechnical Faculty, University of Ljubljana carried out dendrochronological research on the cello in order to determine the origin of wood and the year of manufacture.⁷⁴

⁷² Grove 3, 2014, p. 805–807.

⁷³ Ferdo Vesel (* 18th May, 1861, Ljubljana, † 28th July, 1946, Ljubljana). The work of Ferdo Vesel extends between realism and impressionism. He focused on landscape painting, portraits and folklore genre. Available at: <http://www.slovenska-biografija.si/oseba/sbi777795/>, accessed on: 5th July, 2017.

⁷⁴ Dendrochronology is a scientific method that analyses the tree rings in wood with the aim to reconstruct atmospheric conditions the tree was exposed to during individual years of its growth. It also enables us to determine the age and characteristics of the researched wood.

72 dendrokronološke⁷⁴ raziskave ter potrdili izvor lesa in leto njegove izdelave.

GÚSLE

Gúsle so starodavno ljudsko glasbilo, vrsta enostrunskih godal. Nanje največ igrajo v Dinarskem gorovju. Pri južnih Slovanih gusle niso samostojni inštrument, po navadi so spremljava za glas ljudskega pevca guslarja, ki pripoveduje oziroma poje epsko zgodbo ali legendo. Gúsle imajo le stransko vlogo in se prepletajo z igralčevim petjem.

Največkrat so narejene iz javorjevega pa tudi orehovega ali jesenovega lesa. Kot enostrunsko glasbilo jih najdemo v Srbiji, Črni gori, Bosni in Hercegovini in Dalmaciji. Gúsle iz Like in Bosanske Krajine so večinoma dvostrunske.

Strune gusel so izdelane iz tridesetih prepredenih konjskih dlak, kot pri drugih godalih. Lok se uporablja tako, da se poteguje po zategnjenih strunah, pri tem pa nastane oster in dinamičen zvok, ki je izjemno ekspresiven.

Ljudsko glasbilo gusle sodijo v družino godal in sodijo med glasbila, za katera je potrebna velika spretnost pri igranju.⁷⁵

Gúsle

Hercegovina, šestdeseta leta 20. stoletja, javorjev les, usnje, vrv, d. 75 cm, š. 21 cm, g. 15 cm, inv. št. N 37241, restavriral(a): Irma Langus Hribar, 2016.

analogija: Muzej grada Splita, MGST 7219/ 1-2.

Inštrument, ki mu manjka pripadajoči lok, je narejen iz enega kosa lesa, in sicer javorjevega, in usnja.

Na sprednjem delu vratu je s kovinskimi puncami vtolčen napis (vsaka črka tolčena posebej): *SPOMEN OD HERCEGOVCA*.

Gúsle z glavo v obliki kozje glave imajo vrat, ki je v preseku kvadraten se nadaljuje v telo godala in repek, prek katerega je napeta koža. Inštrumentu manjka struna.

74 Dendrokronologija je veda, ki se je zapisala znanstvenemu preučevanju branik v lesu. Na njihovi podlagi lahko rekonstruiramo klimatske pogoje, ki jim je bilo deblo izpostavljeno v posameznih letih svoje rasti. Z dendrokronologijo iz letnic lesa razberemo starost in lastnosti lesa.

75 Groove 3, 2014, str. 111–112.

GÚSLE

Gúsle, one of the oldest instruments, are a single-string folk music instrument. They are mostly played on the Balkan Peninsula and the Dinaric Alps. South Slavs used *gúsle* as an accompaniment instrument, usually with vocals, accompanying a folk singer *guslar*, who tells and/or sings an epic story or a legend. *Gúsle* have a supporting role and intertwine with the player's singing.

They are usually made of maple wood, though walnut or ash could also be used. As a single-string instrument, they can be found in Serbia, Montenegro, Bosnia and Herzegovina, and Dalmatia. *Gúsle* from Lika and Bosanska Krajina are mostly double-stringed.

The strings of *gúsle* are made of thirty entwined horse hairs, just as those of other string instruments. The bow is used by pulling it over the string, which creates a sharp, dynamic sound, which is remarkably expressive.

Gúsle is a folk musical instrument from the family of string instruments and is an instrument that requires a great deal of skill.⁷⁵

Gúsle

Herzegovina, 1960s, maple wood, leather, rope; l. 75 cm, w. 21 cm, h. 15 cm; inv. No. N 37241, restored by: Irma Langus Hribar, 2016.

Analogies: Muzej grada Splita, MGST 7219/ 1–2.

The instrument, without the corresponding bow, is made of one piece of wood, i.e. maple wood, and leather.

The front of the neck carries an inscription engraved with a metal tool, a graver (each letter was individually engraved), namely: *SPOMEN OD HERCEGOVCA*.

The head of *gúsle* has a shape of a goat's head. The cross section of the neck is square. The neck flows into the tail and the body with the skin tightened across it. There is no string.

The skin membrane, made of split sheep leather, is kept in place by tacks. It has seven sound holes made with a leather punch tool (three holes are 6 mm in diameter, another three are 5 mm in diameter, and one is 4 mm in diameter).

75 Groove 3, 2014, p. 111–112.

74 Opna, ki je napeta z žeblički prek telesa, je iz tanke ovčje cepljene kože, za zvočnice ima 7 lukenj, narejenih s prebijačem (3 s premerom 6 mm, 3 s premerom 5 mm in 1 s premerom 4 mm).

Pod kozjo glavo je napenjalo strune, narejeno iz neokrašene vejice, raščene pod kotom 90 stopinj. Okrog napenjala je navita okrasna vrv za obešanje.

Sl. 18/ Picture 18

Gúsle / Gúsle

Foto / Photo:

Tomaž Lauko



Under the goat's head there is an offshoot grown at an angle of 90 degrees, plain, without decoration, which functions as a string peg. A decorative clothes line rope.

SI. 19/ Picture 19

Napis na
sprednjem delu
vratu gusel /
Inscription on the
neck front of Gúsle
Foto / Photo:
Tomaž Lauko





GLASBILA S TIPKAMI

Glasbila s tipkami so tista, ki imajo klaviaturo, po kateri glasbenik igra s pritiski prstov. V kategorizacijah glasbil so najbolj nekonsistentna skupina, saj jih ne povezujejo skupne akustične značilnosti. Za primer: klavir je kordofoni inštrument (zvenijo strune), orgle so aerofoni inštrument (zvočilo so piščali), *čelesta* pa je idiofoni inštrument (zveni kovina).

Vrste glasbenih inštrumentov s tipkami:

- orgle
- klavikord
- čembalo
- klavir
- pianino
- harmonika
- diatonična harmonika
- klavirska harmonika
- kromatična harmonika
- harmonij
- sintetizator



KEYBOARD MUSICAL INSTRUMENTS

Keyboard instruments are played by pressing fingers down on a row of levers on a keyboard. This is the least consistent category of musical instruments as they have no common acoustic features. For example, the piano is a chordophone (sound is produced by strings), the organ is an aerophone (sound is produced by the pipes), the celesta is an idiophone (sound is produced by metal).

Types of keyboard instruments:

- Pipe organ
- Clavichord
- Harpsichord
- Piano
- Upright piano
- Accordion
- Diatonic accordion
- Piano accordion
- Chromatic accordion
- Pump organ
- Synthesizer

Orgle so najzgodnejše glasbilo s tipkami in lahko ustvarijo bolj raznovrstne zvoke kot katerikoli drug inštrument. Stoletja so jih uporabljali v cerkvah, vendar so priljubljene tudi kot koncertni inštrument v klasični in popularni glasbi.

Orgle so glasbilo s tipkami, ki deluje podobno kot pihala ali trobila: zrak, ki ga poganja meh, piha skozi votlo cev in ustvarja zvok. Orgle so sestavljene iz treh glavnih delov: piščali, meha in igralne mize. Piščali so različnih velikosti in oblik ter ustvarjajo različne zvoke.⁷⁶

Fallerjeve orgle

Janez Faller, Slovenija, 1699, inv. št. N 23652, predvidoma iz enega slovenskih kapucinskih samostanov, restavriral: Brane Košir, Franc Košir, Drago Košir, Ivan Smisl, Ivan Pavlinc, Hubertus von Kerssenbrock, 1985.

objava: Vesel Mušič 2003, str. 123–126.

literatura: Bizjak in Škulj 1985; Vesel Mušič 2003, str. 123–125.

analogija: Orgle iz cerkve sv. Primoža nad Kamnikom.

Orgle, ki zdaj stojijo na koru podružnične cerkve sv. Marka v Zapotoku, je leta 1699 izdelal ljubljanski meščan in orglarski mojster Janez Faller.

Preden so orgle leta 1986 pripeljali v župnijsko cerkev v Sodražici, so bile v enem od kapucinskih samostanov, verjetno v enem od tistih, ki jih je ukinil cesar Jožef II. leta 1784 oziroma 1785. Takrat naj bi orgle premestili v Mengeš, pozneje na Homec, nato v Radomlje, tam pa so leta 1887 dobili nove. Takrat oziroma leto prej so prenesli orgle v Kresniške Poljane, od tam pa so jih, po nasvetu umetnostnega zgodovinarja Viktorja Steske, 9. julija 1934 poslali Deželnemu muzeju (danes Narodni muzej Slovenije).

Leta 1985 je Narodni muzej Slovenije Fallerjeve orgle na reverz⁷⁷ predal župniji Sodražica. Orgle so se v Sodražici umaknile novim trimanualnim orglam župnijske cerkve. Prestavljene so na kor podružnične cerkve sv. Marka v Zapotoku in tam stojijo še danes.

Že na prvi pogled je vidno, da so orgle zelo razgibano baročno glasbilo. Pročelne piščali stojijo na treh poljih. Srednje je višje in je

⁷⁶ Zyl, van 2015, str. 98.

⁷⁷ Arhiv Narodnega muzeja Slovenije, Reverz Sodražica, 31. januar 2003.

ORGAN

The organ is the earliest musical instrument featuring a keyboard. It can produce a richer variety of sounds than any other instrument. Although it has been used in churches for centuries, today it is an attractive concert instrument both in classical and popular music.

It is a keyboard instrument that works on a similar principle as woodwind or brass instruments: the air, pushed by bellows, moves through pipes, producing sound. There are three main parts of the instrument: the pipes, the bellows, and the manual organ console. The pipes are of several shapes and sizes to create various sounds.⁷⁶

Faller's Organ

Janez Faller, Slovenia, 1699, inv. No. N 23652, Capuchin monastery, restored by: Brane Košir, Drago Košir, Ivan Smisl, Ivan Pavlinc, Hubertus von Kerssenbrock, 1985.

Publication: Vesel Musšič 2003, p. 123–125.

Bibliography: Bizjak and Škulj 1985, Vesel Mušič 2003, p. 123–125.

Analogies: Organ from the church of St Primož nad Kamnikom.

Organ which can now be found in the choir loft of the subsidiary church of St Mark in Sodražica, was made in 1699 by organ master Janez Faller from Ljubljana.

Before the organ found its way to Sodražica in 1986 it was in one of the Capuchin monasteries, most likely in one of the monasteries that were abolished by the emperor Joseph II between 1784 and 1785. At that time the organ was transferred first to Mengeš, then to Homec, and later to Radomlje, which got its own, new organ in 1887. Consequently the organ was taken to Kresniške Poljane in 1886, from where it was transferred to the County Museum (today the National Museum of Slovenia) on 9th July, 1934, following the recommendation of art historian Viktor Steske.

In 1985 the National Museum of Slovenia issued a note of receipt to the Sodražica parish,⁷⁷ thereby loaning the organ for an indefinite period of time. Later the Faller organ made place for a new organ with three manuals in the main parish church and was transferred

⁷⁶ Zyl, van 2015, p. 98.

⁷⁷ Archive of the National Museum of Slovenia, Receipt note Sodražica, 31st January, 2003.



polkrožno izbočeno ter ima sedem najvišjih piščali, stranski polji pa imata devetdesetstopinjsko vzboklino in vsaka po devet piščali. Polnila nad piščalmi so izrezljana in pozlačena. Pod pročeljem sta izrezljana in pozlačena spremljevalca večine baročnih orgel, kralj David s harfo in Cecilija s portativom. Klaviatura je na hrbtni strani pročelja, kar nakazuje, da so bile orgle od vsega začetka namenjene na korno ograjo, v nasprotnem primeru imajo orgle tako pročelje kot

Sl. 20/ Picture 20
Fallerjeve orgle /
Faller's Organ
Foto / Photo: Tomaž
Lauko

Sl. 21/ Picture 21

Reverz o trajni izposoji Fallerjevih orgel med Narodnim muzejem Slovenije in župnijo Sodražica / Note of receipt confirming the permanent loan of the Faller Organ between the Sodražica parish and the National Museum of Slovenia

Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia

ŽUPNIJA SODRAŽICA
 Podgorška c.
 1317 Sodražica
 31.01.2003

8.2.03
8/2-03


NARODNI MUZEJ LJUBLJANA
 Prešernova c. 20
 1000 Ljubljana

Zadeva: Fallerjeve baročne orgle

Na osnovi reverza št. 06-8/2-86, Ljubljana 17.1.1986, je Narodni muzej v Ljubljani predal župni cerkvi v Sodražici v obliki dolgoročnega posojila nepopotne baročne orgle, dela Ivana Fallerja iz leta 1699. Prevzemnik - Župnija Sodražica - je orgle usposobil za uporabo in jih strokovno restaviral, da so kot dragocen zgodovinski instrument dostopne slovenski in širši javnosti. Orgle so v uporabi pri bogoslužju, služijo pa tudi za koncertno dejavnost, posebej za baročne glasbo. Na cegliah vsako leto gostujejo ugledni organisti iz domovine in tujine. Orgle so postavljene v korni ograji župnijske cerkve in si na koru delijo mesto z velikimi pnevmatskimi orgulami iz leta 1956. Ker so pnevmatske orgle v slabem stanju, se je župnija Sodražica odločila, da jih bo v letu 2004 zamenjala z novimi mehanskimi. Nove orgle so že naročene in v delu. Ob zamenjavi orgel načrtujemo, da bomo preuredili tudi pevski kor. Ob tem bi Fallerjeve orgle prenesli s kora župnijske cerkve na drugo lokacijo. Po številnih posvetovanjih smo prišli do sklepa, da je najprimernejša - lokacija v okviru župnije, podružna cerkev svetega Marka v Zapotoku. Pevski kor te starodavne cerkve, ki je bila v zadnjih letih v celoti prenovljena, je zaznavno idealna za ta baročni instrument. Orgle bodo služile pri bogoslužju (cerkev ima tudi pokopališče), hkrati pa še naprej dopoljevale bogato ribniško orgelsko pokrajino, ki ima nadpovprečno število zgodovinsko vrednih starih mehanskih orgel in je pravi muzej slovenskega orglarstva. Prestavitev orgel bomo zaupali ugledni Skofljaki orglarski delavnici iz Hoč pri Mariboru. S prestavitvijo orgel v cerkev svetega Marka, soglajala tudi Občina Sodražica, ki se zavezuje njihove vrednosti in že od ustanovitve podpira tudi koncerte na teh zgodovinskih orglah.

V skladu z medsebojnim dogovorom, ki ga predstavlja podpisani reverz, Vas prosimo za Vaše soglasje k načrtovani prestavitvi Fallerjevih baročnih orgel. Prosim, da nam posredujete tudi morebitne kulturno zgodovinske ali druge opombe, ki naj se ob tem upoštevajo.

V pričakovanju Vašega soglasja in odgovora Vas lepo pozdravljamo.


 Župnija Sodražica
 Franc Božjak, župnik
 O.K.

L. Kovač

to the choir loft of the subsidiary church of St Mark in Zapotok, where it had remained.

Looking at this organ it is clear that this is a dynamic baroque instrument. The façade pipes stand in three separate parts. The middle part stands higher, on a semi-circular protrusion and includes the seven highest pipes. The lateral parts protrude at nine degrees, each featuring nine pipes. The wood filling the spaces above the pipes is carved and gold plated. Below the façade there are the companions of most of the baroque organs, King David with a harp and St Cecilia with a portative. Both figures are carved and gold plated. The manual is at the back of the organ, indicating that the organ was originally meant to belong on the choir loft, unlike the manual of the chamber organ, which is at the front. To the sides of the keyboard are the organ stops; three to the left and four to the right. Inside, the space is well used. The registers follow from

igralnik na isti strani, imenujemo jih salonske orgle. Na vsaki strani klaviature so registrski manubriji ali ročice za odpiranje registrov: trije na levi, in na desni strani štirje. V notranjosti je prostor zelo dobro izkoriščen. Vrsten red registrov od pročelja proti igralniku je: principal 4, copula 8, flavto 4, quinta maior $2 \frac{2}{3}$, octava 2, quinta minor $1 \frac{1}{3}$ in superoctava 1. Pedalne piščali so ob stranskih stenah, štiri na levi strani in pet na desni. Pri piščalnih deskah je opazna Fallerjeva značilnost v tem, da teh ne podaljša kot na primer Eisel ali Janeček, temveč jih „zlomi“. Tako stoji prvih pet piščali flavte vzporedno z desno stransko steno, prvih pet piščali copule pa z levo stransko steno. Sapnica ima 45 kancel ali prekatov, poleg tega pa še devet pedalnih kancel, in sicer na levi strani štiri, na desni pa pet. Desne piščali so vedno odprte, leve pa se odprejo v copulo. Pedalne zveze ni. Klaviatura ima 45 tipk z obsegom treh oktav s kratko prvo oktavo. Ker dosedanja ni bila izvirna, je nova narejena po vzorcu iz cerkve sv. Primoža nad Kamnikom. Pedalna klaviatura je narejena po italijanskem vzorcu in ima le eno oktavo obsega.

Orgle so bile obnovljene po načelu: kar ne služi več, nadomestimo z enakim delom iz enakega materiala v enakih merah. Za obnovo vseh lesenih delov sta se zavzela sodraški organist inženir Brane Košir in njegov oče Franc Košir. Delala sta več mesecev. Omara je bila po mnogih selitvah od fare do fare in nato v muzeju od depoja do depoja v precej slabem stanju. Na novo sta naredila spodnji del omare, ker dosednji ni bil več izviren in je bil v slabem stanju. Nato sta dopolnila manjkajoče dele v razgibanem pročelju. Sledili so nov meh, nato nova manualna in nova pedalna klaviatura. Ne nazadnje pa delo, ki je zahtevalo največ napora: nove piščalne deske in nove lesene piščali, 45 za copulo, 45 za flavto, 9 za pedal, skupno 99 piščali. Največja ima 40 cm, najmanjša pa 7 cm. Nove piščali imajo enake mere in so iz enakega lesa kot stare. Ob prevzemu je bila omara rjava, vendar je že prvo sondiranje pokazalo, da je prvotna barva bela brez marmoriranja. Omaro je strokovno pobarval Ivan Smisl, pozlatil in izrezljal manjkajoče dele pri polnilih nad piščalmi pa Ivan Pavlinc. Sv. Davida in Cecilijo ter okvir pri klaviaturi je izrezljal Drago Košir. Pet kovinskih registrov je izdelal Hubertus von Kerssenbrock iz Münchna, in sicer pročelne piščali po merah na opornikih, preostale pa po Eislovih menzurah. Mojster Kerssenbrock je orgle tudi intoniral in uglasil. Od pročelnih piščali je bila vsaka druga okrašena z geometrijskimi reliefnimi motivi. Na teh mestih so piščali ob preseljevanju počile, tako da je bil vsak poizkus restavriranja neuspešen. Piščali so imele ustnice pozlačene,

the front to the manual in the order: 4' Principal, 8' Copula, 2 2/2' Quinta Maior, 2' Octave, 1 1/3' Quinta Minor, 1' Super Octave. The pedal pipes are to the sides, four to the left and five to the right. The pedalboard is distinctly Faller's – he "broke" the pedals instead of prolonging them, the way Eisel and Janeček did. The first five flute pipes stand flush with the lateral wall on the right hand side and the first five copula pipes are flush with the left. The windchest has 45 grooves and an additional nine pedal grooves, four to the left and five to the right. The right hand side pipes are always open while the pipes on the left open into the copula. The pedal coupler is missing. The keyboard features 45 keys in the range of three octaves with a short first octave. As it was not original it was replaced by a new one, modelled on the organ from the church of St Primož nad Kaminkom. The pedalboard follows the Italian model and features only one octave. The organ was restored according to the principle "whatever does not function anymore is to be replaced by the same part from the same material in equal measurements". All the wooden parts were restored by organist and engineer Brane Košir from Sodražica and his father Franc Košir, who worked on them for several months. After being moved from parish to parish, then from one museum depot to another, the wooden casing of the organ was in fairly bad shape. They replaced a ruined, unoriginal lower part of the casing, and they added the missing parts on the front, the new bellows, two new manuals, and a new pedalboard. Finally, the most strenuous work was done on the new toe boards and new wooden pipes, namely 45 for the copula, 45 flute pipes, 9 for the pedal, all in all 99 pipes. The biggest pipe is 40 cm tall, while the smallest measures 7 cm. The new pipes have the same measurements and are made from the same type of wood as the old ones. When the casing was brought in for repairs, it was brown. However, initial tests showed that the original colour was white, with no signs of faux marbling. The wood was then professionally painted by Ivan Smisl, while Ivan Planinc carved and gold plated the missing parts of the decorations above the pipes. St David and St Cecilia were carved by Drago Košir, who also made the frame of the manuals. Hubertus von Kerksenbrock from Munich made five metal registers, i.e. the front pipes according to the measurements on the supports and the rest following Eisel's measures. Master Kerksenbrock also tuned and regulated the instrument. Originally, every second pipe on the front was decorated with geometric relief design, which cracked during the numerous transports. This made

zgornja je bila v obliki oslovskega hrbta. Poleg tega sta dve pročelni piščali manjkali.

Dispozicija je taka: MANUAL: 1. copula 8, 2. flauto 4, 3. principal 4, 4. quinta maior 2 2/3, 5. octava 2, 6. quinta minor 1 1/3, 7. superoctava 1; PEDAL: octavbas 8. Fallerjeve orgle imajo zvok z jasnostjo posameznih leg in registrov, s svetlostjo zgornjih in plemenito osnovo spodnjih registrov, ki čudovito napolnijo podružnično cerkev.⁷⁸

Baročne sobne orgle

Ljubljanska delavnica (Marko Göbl ali Janez Jurij Eisl), Ljubljana, sredina 18. stoletja, kost, češnjev les, hruškov les, lipov les, macesnov les, orehov les, smrekov les, ebenovina, ovčje usnje, kositer, mere: spodnji del: 87 x 43 cm, zgornji del: 76 cm x 27 cm, v.: 158 cm, inv. št. N 23143, vir: Milko Bizjak, 2004 (9.000.000,00 SIT), restavriral: Boštjan Černe.

objava: Lozar Štamcar 2011, str. 55.

literatura: Bizjak in Škulj 1985.

analogija: Medobčinski muzej Kamnik.

Te orgle so edini primerek baročnih sobnih orgel, ki so se ohranile na območju Slovenije. Hkrati so to najmanjše orgle na Slovenskem iz obdobja baroka, saj imajo le dva registra. Vgrajene so v kos starejšega pohištva, dvodelni predalnik iz druge polovice 17. stoletja, ki je imel v spodnjem delu štiri predale, v zgornjem delu pa 2 x 3 predale. Vsak del je bil prej ločen in ima na bočnem delu po dva ročaja, namenjena prenašanju. V 18. stoletju je orglarski mojster (za katerega sklepamo, da izhaja iz ljubljanske delavnice) oba dela pohištva fiksno združil. Spodnji del je v globino razširil za približno 6 cm in v tlorisu zgornjega dela izžagal zgornji pokrov spodnjega dela tako, da je pridobil povezano enotno prostornino, v katero je lahko vgradil orgle z mehovjem vred. Pri tem je seveda požagal vse štiri spodnje predale, od katerih je ohranil le sprednjo masko. Vidni so še spoji lesenih zob, ki so vezali predalno škatlo. Od zgornjih dveh kompletov 2 x 3 predalov je prav tako ohranil sprednjo masko. Tu je po tri predalne maske združil v dve krili, ki sedaj s pomikom levo–desno zapirajo prospekt sprednjih kovinskih piščali. S to predelavo je odstranil vseh 10 ključavnic,

⁷⁸ Polona Vesel Mušič, *Magdalena, fara naša. Predstavitev, zgodovina in življenje župnije Sodražica*, Ljubljana 2003, str. 123–126.

the restoration of the original pipes impossible. The lips of the pipes were gold plated, with the upper one shaped like a donkey's back. Two front pipes were missing.

The disposition is as follows:

MANUAL: 1. 8' Copula 2. 4' Flauto 3. 4' Principal 4. 2 2/3' Quinta Maior 5. 2' Octave 6. 1 1/3' Quinta Minor 7. 1' Super Octave.

PEDAL: Octave Bass

The sound of the Faller organ has a true baroque quality to it, distinct individual heights and registers, clear upper registers, and rich bass of the lower registers, which beautifully fill the parish church with sound.⁷⁸

Baroque Chamber Organ

Workshop in Ljubljana (Marko Göbl or Janez Jurij Eis), Ljubljana, mid-18th century, bone, cherry wood, pear tree wood, lime tree wood, larch wood, walnut wood, spruce wood, ebony, sheepskin, tin. Measurements: lower part: 87 x 43 cm; upper part: 76 cm x 27 cm; h. 158 cm, inv. No. N 23143, source: Mirko Bizjak, 2004 (9,000,000 SIT), restored by: Boštjan Černe.

Publication: Lozar Štamcar 2011, p. 55.

Bibliography: Bizjak and Škulj 1985.

Analogies: Intermunicipal Museum of Kamnik.

This is the only preserved baroque chamber organ in Slovenia. It is also the smallest baroque organ in Slovenia, with only two registers. The organ itself is built into a piece of older furniture, a chest-on-chest type of cabinet from the second half of the 17th century, which had four drawers in the lower chest and 2 x 3 drawers in the upper chest. The parts had existed separately, each has a set of handles on the sides intended for the transport. In the 18th century the organ builder (it is presumed the he worked in one of the workshops in Ljubljana) affixed one part on top of the other. The depth of the lower part was extended by 6 cm while the bottom of the upper part was cut out, allowing for the organ and the bellows to be inserted into the created space. All four drawers of the lower part were cut out and only the front was preserved.

⁷⁸ Polona Vesel Mušič, *Magdaledna, fara naša. Predstavitev, zgodovina in življenje župnije Sodražica*, Ljubljana 2003, p. 123–126.



SI. 22/ Picture 22

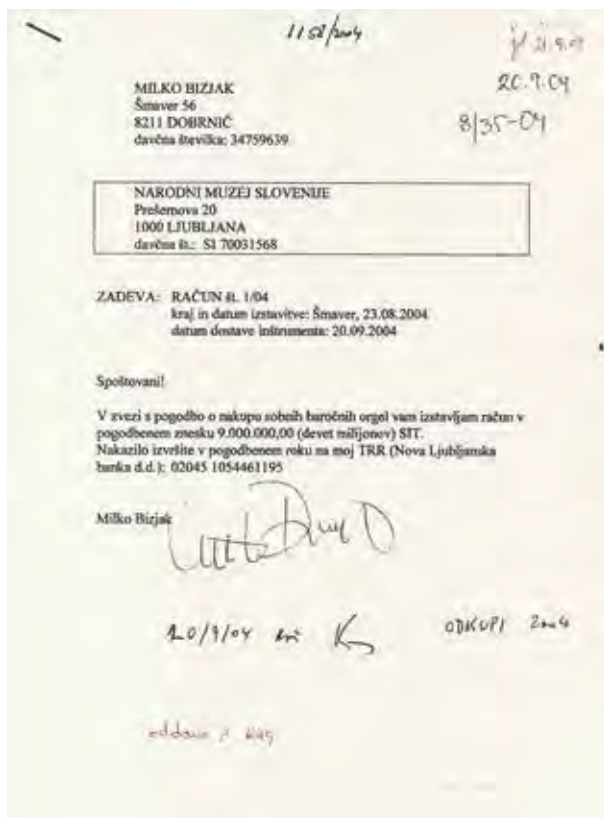
Baročne sobne
orgle / Baroque
Chamber Organ
Foto / Photo:
Tomaž Lauko

ki so zaklepale posamezne predale, vendar je ohranil dekorativno okovje. V spodnjem delu predalnika je na bočni desni strani izžagal še odprtino, iz katere sega vzvod za poganjanje mehovja. Tudi v zgornjem delu spodnjega dela (prav tako na bočni desni strani) je izžagal dve odprtini, skozi kateri sta izpeljani registrski letvi, ki sta namenjeni neposrednemu odpiranju registrov.

Tehnična rešitev vgradnje orgel v obstoječi del pohištva upošteva klasično konstrukcijo orgelskega pozitivja. V spodnjem delu je nameščeno mehovje. Zračni kanal iz mehovja vodi v orgelsko sapnico nad mehovjem. Sapnica je zasnovana kot pri manjših pozitivih. Vsi deli so preprosto snemljivi in se natančno prilegajo v okvirje orgelske omare ter so montirani brez vijakov ali žebeljev. Ventili so na sprednjem spodnjem delu sapnice, klaviatura pa nad sprednjim delom sapnice. Vzmeti pod ventili so iz železa, ventili

Sl. 23/ Picture 23

Račun za odkup baročnih sobnih orgel / Receipt for the purchase of the Baroque Chamber Organ
Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia



The grooves used to bind the drawer box are still visible. The front of the upper two sets of three drawers was also preserved, with the fronts of the drawers joined so as to create two sliding doors, which move left and right respectively, to close the front rank of the metal pipes. The reconstruction eliminated all ten keyholes that locked the drawers, but preserved the decorative metal fittings. On the right hand side flank of the lower part the builder created a hole for the pumping pedal that activates the bellows. The upper part of the lower segment (again on the right flank) has two holes through which two stop-lever bars were installed, which directly open the registers. The technical solution of building an organ into an existing part of furniture is based on the classic construction of a positive organ. The lower part of the cabinet holds the bellows. The air chamber leads to the organ windchest that is placed above the bellows. The windchest action is typical of the smaller positive organs. All the parts are easily removed and fit perfectly into the framework of the organ cabinet without the use of screws or nails. The valves are situated on the front in the lower part of the wind

pa so prelepljeni z ovčjim usnjem. Preprosta mehanika omogoča odpiranje ventilov s pritiskom na tipko prek lesene paličice (orehov les), v katero je na spodnjem delu vstavljena kovinska (medeninasta) igla. Ta igla skozi tesno odprtino na zgornjem delu sapnice sega do zgornjega dela ventila in s pritiskom na tipko odpre ventil.

Na sapnico sta s šestimi železnimi vijaki (to so edini kovinski vijaki v celotnem inštrumentu!) pritrjeni ločeni piščalni deski, vsaka za svoj register. Obe imata s spodnje strani zarezane lesene zareze, ki imajo vlogo odvodnih kanalov v primeru izhajanja zraka iz sosednjega kanala. Vsaka od piščalnih desk je zlepljena iz treh delov in ima razpeljane notranje kanale za basovski del piščalja tako, da je piščalje kar najbolj prostorsko racionalno razporejeno v majhnem prostoru. Še posebej zahtevna je razpeljava kanalov prospektnega (vidnega) registra, katerega piščali iz sredine prospektnega polja po višini „padajo“ iz sredine levo–desno. Zato je ta piščalna deska pod prospektom tudi dvignjena v višino, saj sicer ne bi bilo dovolj prostora za kanale v njeni notrajnosti.

Orgle imajo, kot smo že omenili, dva regista: leseno copulo 4' in kovinsko flavto 2', katere del piščali je viden v prospektu in od katere je pet spodnjih piščali prav tako lesenih in zaradi stiske s prostorom pokritih. Poimenovanje prospektnega registra s „flavto“ in ne „principalom“ se zdi smiselno zaradi izjemno široke menzure piščali pa tudi zato, ker je spodnjih pet piščali lesenih, pokritih in tudi intoniranih kot flavta. Vseh piščali je torej 90 (2 x 45), se pravi, da imajo orgle tako imenovano „kratko“ oktavo v obsegu tipk C/E – c3. Orglarski mojster, ki se je lotil tako zahtevnega opravila, se je v resnici bojeval za vsak centimeter prostora. Večje piščali copule 4' so izdelane s kolenskim prelomom. Ves basovski del piščalja se prilaga na milimeter natančno. Posebno pozornost pa je namenil tudi izjemno natančni izdelavi klaviature in preciznim filigranskih okraskom. Velike tipke imajo kritino iz kravje kosti, okrašeno z zarezami, na čelu pa nalepljen precizen ornament iz prešanega papirja. Male tipke so iz ebenovine.

Pred restavratorskim posegom, ki ga je izvedel Boštjan Černe, je bil inštrument v klavrnem stanju. Manjkal je velik del piščali copule 4' v diskantu in del kovinskih piščali flavte 2'. Sapnica z ventili, piščalne deske in mehovje so bili v odličnem stanju, klaviatura pa ohranjena le v fragmentih. Prav tako sta bili izgubljeni dve od štirih predalnih mask iz spodnjega dela orgelske omare. Manjkal je tudi pokrov sapnice, na katerem je bil gotovo podpis izdelovalca

chest, while the keyboard is above the front part of the wind chest. The springs under the valves are made of iron and the valves are covered in lambskin. Due to the simple mechanics the valves can be opened by pressing a key by way of a small wooden stick (walnut). There is a metal (brass) needle inserted into the lower end of the stick, which stretches through a narrow opening on the top of the windchest all the way to the upper part of the valve. By pressing the key, the needle opens the valve.

Six iron screws (the only metal screws in the entire instrument) fix two separate toe boards to the windchest, each for its respective register. On the bottom of both toe boards there are wooden notches serving as air outlets, in case air escapes from the neighbouring air chamber. Each of the toe boards is glued together from three wooden pieces; the inner channels for the bass pipes are set in a way that best utilises the constraints of the small space. The setting of the prospect (visible) registers' channels is especially intricate. The pipes "drop" from the highest point in the middle to the left and right, making it necessary for the toe board to be set higher as well, otherwise there would be no space left for the channels inside.

As mentioned before, the organ has two registers: a wooden 4' copula and a metal 2' Flute. A part of the flute pipe can be seen in the prospect. Five of its lower pipes are also wooden, but due to space constraints they are not visible. Naming the faced register "flute" instead of "principal" seems appropriate not only because of the fairly wide measures but also because the lower five pipes are wooden, are invisible, and have the pitch of the flute. All in all there are 90 pipes (2 x 45), which means that the organ has a so called "short" octave, the range of keys being C/E – c3. The organ builder who created this instrument had to be very resourceful to make use of every inch of space available. The larger pipes of 4' copula were made using elbows and the entire bass segment of pipes fits down to a millimetre. Special attention was also paid to the making of the keyboard and the detailed filigree decorations. The large keys are covered in cow bone and decorated in carvings. A detailed papier mache ornament is glued to the front of the keys. The small keys are made of ebony.

Before the restoration, carried out by Boštjan Černe, the instrument was in poor shape. A large part of the 4' copula pipe in the treble was missing as well as a part of metal pipes of 2' flute. Although the wind chest with the valves, the toe board, and the bellows were

inštrumenta. Po čiščenju in plinjenju^o lesenih delov je bil inštrument rekonstruiran in dopolnjen z manjkajočimi elementi na podlagi študij in bogatih izkušenj, ki jih je restavrator dobil s poprejšnjim restavriranjem baročnih pozitivov ljubljanske in celjske baročne delavnice. Prav na podlagi primerjave menzur piščali, njihove izdelave in detajlov obdelave ta inštrument pripisujemo ljubljanski orglarski delavnici, katere tradicija izhaja od Marcusa Göbla (umrl 1752) prek njegovega naslednika Janeza Jurija Eisla. Inštrument ima veliko skupnih potez s 3–registrskim Göblovim portativom iz leta 1743, ki ga hrani Medobčinski muzej Kamnik. Prav na zapriškem inštrumentu je na mehovju podpis Eisla, v orgelski sapnici pa Göbla. Letnice nastanka sobnih orgel iz Zbirke glasbil Narodnega muzeja Slovenije ne moremo natančno opredeliti, vendar če sklepamo po leseni rezbariji, ki zapolnjuje praznino nad prospektnimi piščalmi, inštrument lahko datiramo v petdeseta leta 18. stoletja. To trditev dodatno podkrepljuje tudi fragment papirja, ki ga je mojster ob izdelavi inštrumenta uporabil kot dilatantni material med sapnico in piščalno desko. Na dveh razrezanih koščkih papirja, ki so nalepljeni na zgornjem delu sapnice, lahko razberemo letnico 17–55. Ob restavriranju sobnih orgel, ki so jih pred prihodom v zbirko Narodnega muzeja Slovenije uporabljali tudi kot koncertno glasbilo v Domu glasbene dediščine v Globodolu, je bil (kot zunanji element) orglam dodan tudi elektromotor (ventola), ki nadomešča neenakomerno nožno poganjanje mehovja in omogoča optimalno enakomerno igro. S tem je bila omogočena zelo natančna določitev zračnega pritiska v sapnici, to pa daje tudi najmanjšim piščalim optimalno količino zraka in s tem žlahtno srebno zvočno barvo pri igri z obema registroma naenkrat. Čeprav inštrument nima 8–čveljskega registra, po zaslugi široke menzure 2–čveljskega registra v plenu zveni presenetljivo polno.⁷⁹

Danes so orgle na ogled na stalni razstavi Zgodovinske in umetnostne zbirke – Elipse umetnosti + glasbe (slike in glasbeni inštrumenti) v Narodnem muzeju Slovenije Metelkova.

79 Arhiv Narodnega muzeja Slovenije, Milko Bizjak, Poročilo o baročnih sobnih orglah, ki ga je priložil prodajni pogodbi, 23. avgust 2004.

in excellent condition, the keyboard was only partly preserved. Furthermore, two of the four drawer fronts of the bottom cabinet were missing, as well as the lid of the windchest that must have carried the signature of the organ builder. After the instrument was cleaned and the wooden parts were fumigated, it was reconstructed and the missing elements were added, based on studies and the rich experience the restorer had obtained during previous restoration work on the baroque positive organs from the Ljubljana and Celje organ workshops. It is the comparison of the measures of the pipes, their make, and the details of production that we were able to attribute this instrument to the Ljubljana organ workshop. The tradition of this workshop derives from Marcus Gobl (died in 1752) and his successor Janez Jurij Eisl. The organ has many similarities with the 3-register portative by Gobl from 1743, which is held in the Intermunicipal Museum of Kamnik. On the bellows of the instrument from Zaprice we can find Eisl's signature and the wind chest bears Gobl's signature. We cannot define the year of production of the organ in the Collection of Musical Instruments at the National Museum of Slovenia. However, the wooden carving that fills the empty space above the façade pipes can place the instrument in the 1750s. A paper fragment the builder used as dilating material between the windchest and toe board further supports this assessment. Two cut up pieces of paper, glued to the upper part of the windchest, show the year 1755. During the restoration work on the chamber organ, which served as a concert instrument in the Musical Heritage House in Globodol, an external electric organ blower (ventola) was added to it. The ventola replaces the uneven manual propulsion and enables optimally even playing. It also precisely determines the air pressure in the wind chest, which allows the smallest pipes to receive the optimal amount of air. Consequently, the organ produces a rich silver sound when both registers are played together. Although the instrument does not have an 8-foot register, the wide measure of the 2-foot register makes for a surprisingly rich *plein jeu*.⁷⁹

Today, the organ can be seen as part of the permanent exhibition of the Historical and Art Collection – The Elypsis of Art + Music (paintings and Musical Instruments) at the National Museum of Slovenia Metelkova.

79 Archive of the National Museum of Slovenia. Milko Bizjak, Report on the baroque chamber organ as enclosed to the Sales Agreement, 23rd August, 2004.

Klavikordi so se pojavili v zgodnjem 15. stoletju.⁸⁰

Na strune klavikorda niso trzali, ampak udarjali, ton pa je trajal, dokler so na tipka pritiskali, zato je bil izraznejši kot pri čembalu.

Klavikord je s tehničnega vidika najmanj zapleteno izdelan inštrument s tipkami, zato sklepamo, da je tudi eden starejših. Razvil se je iz monokorda, ki je naprava kvadraste oblike. Bil je prvi med inštrumenti, ki so jim dodajali strune, in zato dodatno vrsto tipk, kot lahko to zdaj vidimo pri orglah.

Dosedanje raziskave se, razen izjemoma, še niso ukvarjale z zgodovino lokalnega izdelovanja inštrumentov s tipkami, kot so klavikord, čembalo, njegovi različici špinet in virginal, različne oblike klavirja in harmonija. Zato precej bolje poznamo izdelovalce takih glasbil od drugod, posebej tiste, katerih inštrumenti so se ohranili v slovenskih muzejih, saj smo jim namenili več strokovne pozornosti. Med ohranjenimi in registriranimi inštrumenti je razmeroma veliko takih, ki so po trgovskih poteh ali družinskih vezeh prišli k nam iz drugih dežel, bolj malo pa je izdelkov domačih delavnic. Te smo v muzejskih zbirkah in pri zasebnikih začeli odkrivati šele v zadnjih letih.⁸¹

Klavikord je bil v srednjeevropskih deželah zelo priljubljeno glasbilo za domačo uporabo. V primerjavi s čembalom ali špinetom je bil tudi cenejši in zato dostopnejši. Prav zato nas čudi, da arhivsko gradivo – razen v enem primeru – klavikordov ne omenja. Na podlagi virov pa vendarle ugotavljamo, da so bili glasbeni inštrumenti v našem okolju na splošno v vseh dobah podobno razširjeni kot drugod po Evropi. Klavikordi in njim sorodni inštrumenti so pri nas zagotovo imeli svoje mesto. Predvsem so bili hišna glasbila plemičev in bogatejših meščanov in prav to okolje je z glasbenega vidika še slabo raziskano.⁸²

Najtrdnjši dokaz o pojavu klavikordov pri nas so ohranjeni primerki v muzejih. Trije so v Narodnem muzeju Slovenije,⁸³ četrti pa v Pokrajinskem muzeju Ptuj Ormož.⁸⁴ Starejša inštrumenta iz Narodnega muzeja Slovenije, oba datirana v sredo 18. stoletja, sta

80 Grove 1, 2014, str. 415–419.

81 Koter 2001, str. 114.

82 Koter 2001, str. 115.

83 Narodni muzej Slovenije, Oddelek za zgodovino in uporabno umetnost, inv. št. N 16092, N 16093 in N 16094.

84 Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 2 S.

CLAVICHORD

We can trace clavichords from the early 15th century on.⁸⁰

Clavichord strings were not strung. The sound was produced by striking the strings and it lasted as long as the key was being held down. This made the sound more expressive than that of a harpsichord.

Technically, the clavichord is not as complicated to make as other keyboard instruments. Therefore we assume that the clavichord is the oldest among this type of musical instrument. It developed from the monochord. It was the first instrument to be added strings and consequently a row of keys, as can be now seen on contemporary organs.

Apart from rare exceptions research has not yet touched upon the making of keyboard instruments, such as the clavichord, the harpsichord, or their smaller versions the spinet and the virginal, various types of the piano and the harmonium, in Slovenia. We are better acquainted with the makers of such instruments from abroad, especially with those, whose instruments have been preserved in Slovenian museums, having attracted more professional attention. Among the preserved and registered instruments there are many that came to us from other countries by way of trade routes or family connections. Few can be found that were made in local workshops. We have only started uncovering these in the last few years, finding them in Slovenian museum inventories and in privately owned collections.⁸¹

In the neighbouring countries that Slovenians have often imitated the clavichord was a very popular musical instrument for home use. Compared to the harpsichord or the spinet, the clavichord was cheaper and so more accessible. It is rather surprising that, except in one case, the clavichords are not mentioned. Our sources have shown that musical instruments in what is now Slovenia have always been just as popular as elsewhere in Europe. Clavichords and similar instruments certainly found their place here. At first they were the instrument of choice for the aristocracy and the rich burgers. From musical perspective this environment has not yet been well researched.⁸²

80 Grove 1, 2014, p. 415–419.

81 Koter 2001, p. 114

82 Koter 2001, p. 115

94 še posebej zanimiva. Ne le, da sta bila strokovni javnosti neznana, raziskave so odkrile njunega izdelovalca.

Tudi klavikord iz Pokrajinskega muzeja Ptuj Ormož je brez signature. Po dosedanjih raziskavah pripada „graški šoli“ iz obdobja med letoma 1730 in 1750.⁸⁵

Ker so klavikordi v drugi polovici 18. stoletja tako kot glasbila z mehaniko s peresci izgubljali pomen, se je sled za njimi zabrisala, kajti že na začetku 19. stoletja so jih nadomestili klavirji. Odsluženi inštrumenti so romali na podstrešja in tam propadali, nekateri pa so bržkone našli prostor v tujih antikvariatih in zasebnih zbirkah. Doba klavikordov se je iztekla ob koncu 18. stoletja, zato tudi ni pričakovati mlajših glasbil in ne zapisov o njihovi izdelavi ali uporabi. V skladu s sodobnimi trendi v zadnjih dvajsetih letih ponovno oživlja tudi izdelovanje klavikordov.⁸⁶

Klavikord

Janez Jurij Eisl, 1757, smrekov les, medenina, železo, d. 110 cm, š. 32 cm, v. 11 cm, signatura: *Joannes Georgius Eisl / Orgelm zu Lăbach / 1757*, inv. št. N 16093, provenienca: Uršulinski samostan v Ljubljani, restavriral: Irma Langus Hribar, 2013,

objava: Koter 2001, str. 115–116.

literatura: Russel 1973; Boalch 1995.

analogiji: Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 2 S; Narodni muzej Slovenije, inv. št. N 16092.

V klavikordu je ročno izpisan listek s signaturo Janeza Jurija Eisla, ljubljanskega orglarja. Tako smo dobili dokaz, da so tudi na Kranjskem delujoči orglarji izdelovali različne inštrumente s tipkami, kakor je bilo to v navadi drugod. Ker je nalepka s signaturo v zgornjem delu precej poškodovana, je napis težko čitljiv.

Tak tip inštrumenta se pojavlja od začetka 16. do začetka 18. stoletja. Ohišje klavikorda je izdelano v stilu, kakršen je bil uveljavljen v prvi polovici 18. stoletja v celotnem avstrijsko–nemškem prostoru. Na listku, prilepljenem v notranjosti leve stranice ohišja, je ročno, s črnilom izpisana signatura: *Joannes Georgius Eisl / Orgelm. zu (Ly) bach / 1757*. Klaviatura obsega štiri oktave (C/E – c3).

85 Koter 2001, str. 117.

86 Koter 2001, str. 117.

The best proof of clavichords in Slovenian lands comes from the examples preserved as museum artefacts. Three of them are held in the National Museum of Slovenia, while the fourth one can be found in the Ptuj – Ormož Regional Museum.^{83,84}

The two older instruments from the National Museum of Slovenia, both from the mid-18th century, are especially interesting. They have been unknown to the expert public. However further research led to the recognition of their maker.

The clavichord from the Ptuj – Ormož Regional Museum has no signature. Research so far has found that it belongs from the “Graz school” from the period between 1730 and 1750.⁸⁵

In the second part of the 18th century the clavichord, as well as instruments featuring mechanics with feathers, gradually lost its role and we lost trace of the instrument. At the beginning of the next century the clavichord was replaced by the piano. The unwanted clavichords were banished to attics, where they slowly fell into disrepair. Most likely some of them found their way to antique shops abroad and to private collections. The clavichord period ended by the end of the 18th century, meaning we cannot expect to find smaller instruments or any records of their production or use. Interestingly, in line with contemporary trends, there has been a renewed interest in the making of clavichords in the last twenty years.⁸⁶

Clavichord

Janez Jurij Eisl, 1757, spruce wood, brass, iron,
l. 110 cm, w. 32 cm, h. 11 cm, signature: *Joannes Georgius Eisl /*
Orglem zu Läbach / 1757, inv. No. N 16093, provenance: Ursuline
monastery in Ljubljana, restored by; Irma Langus Hribar, 2013.

Publication: Koter 2001, p. 115–116.

Bibliography: Russel 1973; Boalch 1995.

Analogies: Ptuj – Ormož Regional Museum, Cultural History
Department, inv. No. GL 2 S; National Museum of Slovenia, inv. No.
N 16092.

83 National Museum of Slovenia, Department of History and Applied Arts, inv. No. N 16092, N 16093 and N 16094.

84 Ptuj – Ormož Regional Museum, Cultural History Department, inv. No. GL 2 S.

85 Koter 2001, p. 117.

86 Koter 2001, p. 117.



Spodnja je skrajšana, značilnost baročnih glasbil, in je bila povsem običajna še dolgo v drugi polovici 18. stoletja. Vse tipke so temno lužene, diatonične so temnejše, kromatične svetlejše. Slonovine za prekrivanje tipk Eisl ni uporabil. Naročnice so bile očitno zadovoljne s klaviaturo preprostejše izdelave. Lična stran tipk je prekrita z ornamentirano tapeto v baročnem stilu, v drugi polovici 18. stoletja pa so te dele tipk največkrat intarzirali. Inštrument sodi med tako imenovane vezane klavikorde, saj sta na določenih mestih na eno struno vezani dve tangenti. Tipke in nosilci tangent so zelo poškodovani in nepopolni. Ugláševalni vijaki so poravnani, mostič je nekoliko usločen, na koncih pa značilno spodvihan.⁸⁷

Resonančni pokrov je iz smrekovega lesa, napenjala strun so iz železa, 28 strun je iz medenine, vseh 45 tipk je kompletnih.

Klavikord ljubljanskega orglarja Janeza Jurija Eisla je redki primerek, saj sta se iz delavnic, delujočih na Slovenskem, ohranila le dva, oba Eislova (oba v Narodnem muzeju Slovenije). Po provenienci sta

Sl. 24/ Picture 24

Klavikord /
Clavichord
Foto / Photo:
Boris Farič

⁸⁷ Koter, 2001, str. 115–116.

SI. 25/ Picture 25

Erwerbungen des Rudolfinum
(akcesijska knjiga), 23. december
1895 (št. 58) / Erwerbungen des
Rudolfinum, 23rd December, 1895
(No. 58)

Foto: Fotodokumentacija Oddelka
za zgodovino in uporabno umetnost
Narodnega muzeja Slovenije / Photo:
Photodocumentation of the Department of
History and Applied Arts of the National
Museum of Slovenia

Inv. Nr.	Datum	Friedrichs Beschreibung der Erwerbung	Preis in Kr.	Opisna Zametka
		im groß. Saalgebäude d. Hof- Lautensatz auf dem Rudolfinum Lautensatz - Nr. 1. J. 23. 11. 18. 75.		
53	27	Orgelbauwerk von 1757 mit Besondere Orgelbauwerk Lautensatz im Saalgebäude von H. Lautensatz d. Hofgebäude des Rudolfinum d. Hofgebäude mit Besondere Orgelbauwerk Lautensatz im Saalgebäude von H. Lautensatz d. Hofgebäude		
54	29	Orgelbauwerk	1 20	
55	28	Orgelbauwerk mit Besondere Orgelbauwerk Lautensatz im Saalgebäude von H. Lautensatz d. Hofgebäude des Rudolfinum d. Hofgebäude		
56	6	December H. Lautensatz d. Hofgebäude im Saalgebäude von H. Lautensatz d. Hofgebäude des Rudolfinum d. Hofgebäude		
57	7	Orgelbauwerk mit Besondere Orgelbauwerk Lautensatz im Saalgebäude von H. Lautensatz d. Hofgebäude des Rudolfinum d. Hofgebäude		
58	20	im Saalgebäude d. Hofgebäude Lautensatz im Saalgebäude von H. Lautensatz d. Hofgebäude des Rudolfinum d. Hofgebäude		

The clavichord features a piece of paper with handwritten signature of *Janez Jurij Eisl*, an organ builder from Ljubljana. This proves that organ builders working in lands covered by modern-day Slovenia also made other keyboard instruments, just as organ builders from abroad did. The upper part of the label with the signature is fairly damaged, making the inscription difficult to read.

This type of instrument was popular between the early 16th and early 18th century. The style of the instrument's casing is from the first half of the 1800s, typical of the whole Austrian and German territories. The label inside the left hand side flank of the casing carries a handwritten signature in black ink: *Joannes Georgius Eisl / Orgelm. Zu (Ly)bach / 1757*. The keyboard spans across four octaves (C/E – C³). The lower octave is short, which is typical of baroque instruments and was common well into the late 1800s. All the keys

iz ljubljanskega uršulinskega samostana.⁸⁸ To ne preseneča, saj so sestre intenzivno gojile glasbeno vzgojo in poustvarjalnost.

Danes je klavikord na ogled na stalni razstavi Pokrajinskega muzeja Ptuj Ormož.

Klavikord

Janez Jurij Eisl, sredina 18. stoletja, smrekov les, medenina, železo, d. 112 cm, š. 34 cm, v. 12 cm, inv. št. N 16094, provenienca: Uršulinski samostan v Ljubljani, restavriral: Irma Langus Hribar, 2016.

objava: Koter 2001, str. 116.

literatura: Russel 1973; Boalch 1995.

analogiji: Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 2 S; Narodni muzej Slovenije, inv. št. N 16093.

Glasbilo zaradi njegove oblike in mehanike pripisujemo isti delavnici kot klavikord z inv. št. N 16093. Inventarna knjiga nam je razkrila provenienco obeh starejših inštrumentov. Iz vpisa razberemo, da sta bila „klavirju podobna instrumenta s strunami“ nekoč v lasti ljubljanskega samostana uršulink.⁸⁹ Ta podatek prav tako ne preseneča, kajti ženski samostani so bili še posebej naklonjeni glasbi.

Ta klavikord je za razliko od prejšnjega brez signaturnega listka, zob časa, predvsem pa vlaga sta ga najbrž razkrojila, vendar je prvemu tako soroden, da ga pripisujemo isti delavnici. Skladna sta tudi v dataciji. Tako menimo, da sta prišla k uršulinkam hkrati ali vsaj v kratkem časovnem razmaku.⁹⁰

Klavirkord ima vse značilnosti tako imenovanih vezanih klavikordov, obseg štirih oktav s tako imenovano baročno kratko oktavo, mehaniko s tangentami, ki omogoča blago niansiranje tona,

88 V inventarni knjigi Narodnega muzeja Slovenije je vpis: Klavirju podobno glasbilo s strunami in klaviaturo (*Klavirartiges Sieteninstrument mit Klaviatur*), Uršulinke v Ljubljani (*Ursulinen in Laibach*); Zapis v Erwerbungen des Rudolfinum 23. december 1895 (št. 58): Vom Ehrwürd Convent der f. f. Ursulirinnen 2 klavierartige Saiteninstrumente (Spinette?) von Georg Eisl Orgelbauer in Laibach 1757.

89 Enak vpis, v inventarni knjigi Narodnega muzeja Slovenije kot pri prejšnjem klavikordu: Klavirju podobno glasbilo s strunami in klaviaturo (*Klavirartiges Sieteninstrument mit Klaviatur*), Uršulinke v Ljubljani (*Ursulinen in Laibach*). Zapis v Verzeichniss der Erwerbungen des Rudolfinum 23. december 1895 (št. 58): Vom Ehrwürd Convent der f. f. Ursulirinnen 2 klavierartige Saiteninstrumente (Spinette?) von Georg Eisl Orgelbauer in Laibach 1757.

90 Koter 2001, str. 116.

are dark stained, the diatonic keys are darker, while the chromatic are stained lighter. Eisl did not use ebony to cover the keys. The clients who ordered the instrument must have been satisfied with the simpler version of the keyboard. The keys' fronts are covered in an ornamented baroque tapestry material, although this part of the keys was usually inlaid after the 1850s. This is a fretted clavichord, as in some place two tangents were assigned to the same string. The keys and the tangents' feet are badly damaged and incomplete. The tuning pins are in a straight line and the bridge is slightly warped and typically slightly turned inside.⁸⁷

The soundboard is made of spruce wood; the hitch pins are iron. The 28 strings are brass and the set of 45 keys is complete.

The clavichord made by Janez Jurij Eisl, an organ builder from Ljubljana, is a rare example, as only two such instruments have been preserved from the workshops in Slovenian lands. Both of them were made by Eisl (both are held in the National Museum of Slovenia). The consensus on the provenance of both is the Ursuline monastery in Ljubljana.⁸⁸ It is not unusual, as the nuns keenly nurtured musical education and creativity.

Today, the clavichord can be seen as part of the permanent exhibition in the Ptuj – Ormož Regional Museum.

Clavichord

Janez Jurij Eisl, mid-18th century, spruce wood, brass, iron, l. 112 cm, w. 34 cm, inv. No. N 16094, provenance: Ursuline monastery in Ljubljana, restored by: Irma Langus Hribar, 2016.

Publication: Koter 2001, p. 116.

Bibliography: Russel 1973; Boalch 1995.

Analogies: Ptuj – Ormož Regional Museum, Cultural History Department, inv. No. GL 2 S; National Museum of Slovenia, inv. No. N 16093.

⁸⁷ Koter 2001, p. 115–116.

⁸⁸ An entry in the National Museum of Slovenia Inventory Ledger reads: A piano-like instrument with strings and keyboard, (*Klaviartiges Sieteninstrument mit Klaviatur*), Ursuline nuns from Ljubljana (*Ursulinen in Laibach*); Entry in *Erwerbungen des Rudolfinum* 23rd December, 1895 (No. 58): Vom Ehrwürd Convent der f. f. Ursulirinnen 2 klavierartige Saiteninstrumente (Spinette?) von Gerog Eisl in Laibach 1757.



in preprosto pravokotno ohišje. Tipke in mehanika so precej poškodovani.

Ker sta klavikorda inv. št. N 16093 in inv. št. N 16094 po obliki popolnoma identična, je restavrator Boris Horvat predlagal, da bi iz obeh skompletirali enega, drugega pa samo konzervirali.⁹¹

Sl. 26/ Picture 26

Klavikord /
Clavichord
Foto / Photo:
Tomaž Lauko

⁹¹ Arhiv Narodnega muzeja Slovenije, Boris Horvat, Prošnja za preučitev klavikordov iz Narodnega muzeja, Ljubljana, 2. marec 1991.

Sl. 27/ Picture 27

Izpis iz stare inventarne knjige
Oddelka za zgodovino in uporabno
umetnost Narodnega muzeja
Slovenije / Inventory Ledger of the
Department of History and Applied
Arts of the National Museum of
Slovenia
Foto: Fotodokumentacija Oddelka
za zgodovino in uporabno umetnost
Narodnega muzeja Slovenije / Photo:
Photodocumentation of the Department of
History and Applied Arts of the National
Museum of Slovenia

Inventar nr.	Produkt	Preis	Früherer Besitzer	Zeit	Ort
2577	Klavierartiges Saiteninstrument	1			Ljubljana
2578	Spinett	1			Ljubljana
2579	Spinett	1			Ljubljana
2580	Spinett	1			Ljubljana
2581	Spinett	1			Ljubljana
2582	Spinett	1			Ljubljana
2583	Spinett	1			Ljubljana
2584	Spinett	1			Ljubljana
2585	Spinett	1			Ljubljana
2586	Spinett	1			Ljubljana
2587	Spinett	1			Ljubljana
2588	Spinett	1			Ljubljana
2589	Spinett	1			Ljubljana
2590	Spinett	1			Ljubljana

Due to the clavichord's shape and mechanics the instrument is assigned to the same workshop as the clavichord inv. No. 16083. The inventory ledger provides the provenance of both these instruments. The entry reveals that the "piano like string instrument" used to be owned by the Ursuline monastery in Ljubljana.⁸⁹ Again, this is not surprising as nunneries were known to be dedicated to the study of music.

Unlike the previous clavichord, this one comes without a label. Time and mostly humidity must have contributed to the disintegration of

⁸⁹ The same entry in the Inventory Ledger of the National Museum of Slovenia as the one referring to the previous clavichord: A piano-like instrument with strings and keyboard, (*Klaviartiges Saiteninstrument mit Klaviatur*), Ursuline nuns from Ljubljana (*Ursulinen in Laibach*); Entry in *Erwerbungen des Rudolfinum 23rd December, 1895 (No. 58): Vom Ehrürd Convent der f. f. Ursulirinnen 2 klavierartige Saiteninstrumente (Spinette?) von Gerog Eisl in Laibach 1757.*

Avstrija?, druga polovica 18. stoletja, les, medenina, jeklo, kost, d. 136,8 cm, š. 40,5 cm v, 13,2 cm, inv. št. N 16092, restavrirala: Boris Horvat, 1988, Irma Langus Hribar, 2013 in 2016.

objava: Koter, 2001, str. 116–117.

literatura: Russel 1973; Boalch 1995; Wackernagel 1999, str. 93; Koter 1994, str. 26 in str. 95, kat. št. 7.

analogija: Bayerischen Nationalmuseum München, inv. št. 72.



Tretji klavikord iz Zbirke glasbil Narodnega muzeja Slovenije inv. št. N 16092 je delo neznanega mojstra. Ker še ni podrobneje raziskan, navajamo le nekaj osnovnih značilnosti. Uvrščamo ga med izdelke avstrijske šole iz časa okrog leta 1780, ko so takšna glasbila že počasi opuščali, saj se je začinjala doba mehanike klavirjev s kladivci. Klaviatura obsega pet oktav, mehanika pa kaže na tako imenovano dvojno vezani klavikord in na dobro izurjenega mojstra, verjetno graške šole.

Sl. 28/ Picture 28

Klavikord /
Clavichord
Foto / Photo:
Tomaž Lauko

paper. However, this instrument is so similar to the first clavichord that it has been assigned to the same workshop. Additionally, it can be dated to the same period, as we believe that both instruments arrived at the Ursuline monastery at the same time or at least within a short time one after another.⁹⁰

The clavichord has all the features of a fretted clavichord, a span of four octaves with the baroque short octave, tangent action that gives slight nuance to the sound, and finally a simple square casing. The keys and the action are fairly damaged.

The shape of the clavichords inv. No. N 16093 and inv. No. N 16094 is nearly identical. Therefore restorer Boris Horvat suggested that the two should be used to complete the restoration of one instrument, while the second would be merely conserved.⁹¹

Clavichord

Austria?, second half of the 18th century, wood, brass, steel, bone, l. 136.8 cm, w. 40.5 cm, h. 13.2 cm, inv. No. N 16092, restored by: Boris Horvat, 1988, Irma Langus Hribar, 2013 and 2016.

Publication: Koter, 2001, p. 116–117.

Bibliography: Russel 1973; Boalch 1995; Wackernagels 1999, p. 93; Koter 1994, p. 26 and p. 95. Cat. No. 7.

Analogies: Bayerischen Nationalmuseum München, inv. No. 72.

The maker of the third clavichord from the National Museum of Slovenia collection inv. No. N 16092 is not known. As the instrument has not been thoroughly researched yet, we will provide only the general characteristics. It is placed among the instruments of the Austrian school, dated around 1789, when such instruments were slowly going out of favour due to the new mechanics of pianos with hammers. The keyboard spans through five octaves and the action shows that this fretted instrument was made by a skilled master, probably from the Graz school.

The provenance information is lost. The casing, the five octaves (FF – f4), and the action (fretted) show that this is a larger clavichord, typical of the late 18th century. This type of instruments was the

⁹⁰ Koter 2001, p. 116.

⁹¹ Archive of the National Museum of Slovenia, Boris Horvat, Prošnja za preučitev klavikordov iz Narodnega muzeja, Ljubljana, 2nd March, 1991.

104 Podatki o provenienci so izgubljeni. Po ohišju, obsegu petih oktav (FF – f4) in mehaniki (vezani tip mehanike) je uvrščen med večje klavikorde, kakršni so zaznamovali zadnjo tretjino 18. stoletja. Takšni inštrumenti so zadnji v razvoju teh glasbil, ki se je končal na koncu 18. stoletja.⁹²

Klavikord s petimi oktavami ima 63 tipk (FF – f3) inverzne barve (diatonične temne, kromatične bele). Tipke imajo na nasprotnem koncu medeninaste ploščice (tangente), s katerimi udarjajo po 43 parih strun, vseh strun je 86. Tipk je torej več kot strunskih parov, to pomeni, da isti strunski par uporabljata dve tipki. Temu rečemo dvojno vezani klavikord. Prvih 17 tipk in vsi a–ji in d–ji imajo svoj par strun, druge tipke si strunski par delijo s sosedanjimi toni. Dolžina strune pri C2 je 25,5 cm. To je običajna vrednost za takšen inštrument in pomeni, da so bile strune medeninaste (čeprav je bilo nekaj jeklenih, ki pa gotovo niso originalne).⁹³ Tipke so zelo lepo izdelane, manjkajo le ena obloga (koščena) in vsa vodila mehanike.

Resonančna omara je lesena, strune so medeninaste in jeklene, obloge tipk so koščene.

Inštrument je bil leta 1988 obnovljen z namenom, da bi ga ponovno usposobili za igranje.⁹⁴

92 Koter 2001, str. 116–117.

93 Grove 1, 2014, str. 423.

94 Klavikord je restavriral Boris Horvat iz Ljubljane.

latest in the development of clavichords that concluded at the end of the 18th century.⁹²

The five octave clavichord has 63 keys (FF – f3), the colours are inverted (diatonic keys are dark and the chromatic ones are white). The brass plates (tangents) strike 43 pairs of strings, and all in all there are 86 strings. There are more keys than the pairs of strings, which means that two keys use the same pair of strings – a feature of double-fretted clavichord. The first 17 keys and all A-keys and D-keys have their own pair of strings, while the rest share the string pair with their neighbours. The string length of C2 is 25.5 cm, a common length for this type of instrument, pointing to brass strings (even though there were some steel strings, they were certainly not original).⁹³ The keys are beautifully made, though one covering is missing (bone), as well as all the guides in the action.

The soundboard is wooden, the strings are brass and steel, and the keys are covered in bone. The instrument was restored in 1988 with the purpose to make it fit for playing.⁹⁴

92 Koter 2001, p. 116–117.

93 Grove 1, 2014, p. 423.

94 The clavichord was restored by Boris Horvat from Ljubljana.

Klavir je postal najznačilnejši simbol zahodne glasbe, hkrati pa tudi pomemben statusni simbol, saj je bil simbol ugleda in premožnosti.⁹⁵ Manjši klavir, pri katerem so strune obrnjene vertikalno, se imenuje pianino.

ANDREJ BITENC (ANDREAS WITTENZ), LJUBLJANSKI IZDELOVALEC KLAVIRJEV

V popisu prebivalstva Ljubljane iz leta 1830 je pri zapisu *Andreas Wittenz*, pod rubriko poklic zapisan *Instrumentenmacher* in *befug(en)*.⁹⁶ Darja Koter si to razaga kot izdelovalec inštrumentov z obrtnim dovoljenjem.⁹⁷ Njegovi ohranjeni klavirji sodijo med redka ohranjena in prepoznana glasbila slovenskih izdelovalcev.

Andreja Bitenca, ljubljanskega izdelovalca klavirjev (1802–1874), čigar ime je vedno omenjeno v nemški različici, danes pa ga slovenimo, sta v strokovni literaturi doslej označevala dva do danes ohranjena klavirja. Prvega hrani Narodni muzej Slovenije,⁹⁸ drugega pa Pokrajinski muzej Ptuj Ormož.⁹⁹ V Narodnem muzeju Slovenije sta bila pred kratkim v Zbirki glasbil prepoznana še dva Bitenčeva klavirja. Prvi¹⁰⁰ je z gotovostjo prepoznan kot njegov, pri drugem¹⁰¹ ostajamo zgolj pri domnevi, da bi glede na značilnosti prav tako lahko bil njegov. Zakaj so ju dosedanja kustosi in raziskovalci po identiteti prezrli, ni znano, saj sta po navedbi inventarne knjige v Narodnem muzeju Slovenije že od leta 1918.

Za prvega ni nobenega dvoma, da ga je izdelal Bitenc, saj je na njem signatura. Domnevo, da gre za tretji Bitenčev klavir v zbirki Narodnega muzeja Slovenije in četrti na Slovenskem, bomo lahko potrdili ali ovrgli po primerjavah med že potrjenimi / dokazanimi Bitenčevimi inštrumenti in izdelki, za katere domnevamo, da so bili narejeni v njegovi delavnici. Z naravoslovnimi preiskavami nameravamo primerjati originalne materiale na vseh inštrumentih,

95 Zyl, van 2015, str. 142.

96 Zgodovinski arhiv Ljubljana, *Conscriptions ... von* N. 1–100, šk. 29 (1).

97 Koter 2001, str. 130.

98 Narodni muzej Slovenije, Oddelek za zgodovino in uporabno umetnost, inv. št. N 23114.

99 Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 105 s.

100 Narodni muzej Slovenije, Oddelek za zgodovino in uporabno umetnost, inv. št. N 23115.

101 Narodni muzej Slovenije, Oddelek za zgodovino in uporabno umetnost, inv. št. N 37272.

PIANO

The piano has become the most representative symbol of Western music as well as a status symbol, implying reputation and wealth.⁹⁵ The smaller type of piano that features vertically standing strings is called the upright piano.

ANDREJ BITENC (ANDREAS WITTENZ), PIANO MAKER FROM LJUBLJANA

In the 1830th census of the city of Ljubljana, the profession stated next to “Andreas Wittenz” is that of an “Instrumentenmacher” and “befug(en)”⁹⁶ which can be understood as licenced musical instrument maker.⁹⁷ His pianos that have been preserved until the present day are some of the rare preserved instruments made by Slovenian makers.

Andrej Bitenc (1802–1874), a piano maker from Ljubljana has been so far known and mentioned in the professional literature only due to two preserved pianos. The first one is kept in the National Museum of Slovenia (NMS),⁹⁸ while the second one is in the Ptuj – Ormož Regional Museum (PMPO).⁹⁹ However, recently another two pianos have been discovered in the National Museum of Slovenia collections that were made by Bitenc. One is certainly Bitenc’s,¹⁰⁰ while the other was only believed to be his.¹⁰¹ It is not known why these two pianos have been overlooked by the previous curators since they have been registered as National Museum of Slovenia inventory already in 1918.

The origin of the first piano undoubtedly belongs to Bitenc as it has his signature. The assumption that the third piano in the National Museum of Slovenia collection (and the fourth in Slovenia) was also made by Bitenc can only be proven to be right or wrong after the piano has been compared to the instruments proved to have been

95 Zyl, van, 2015, p. 142.

96 ZAL, *Conscriptions ... von* N. 1–100, box 29 (1).

97 Koter 2001, p. 130.

98 National Museum of Slovenia, Department of History and Applied Arts, inv. No. N 23114.

99 Ptuj – Ormož Regional Museum, Culture and History Department, inv. No. GL 105 S.

100 National Museum of Slovenia, Department of History and Applied Arts, inv. No. N 23115.

101 National Museum of Slovenia, Department of History and Applied Arts, inv. No. N 37272.

Številka	Predmet Opis predmeta	Št. delov	Priloge v zbirki Številka	Črna Številka K. K.	Št. delov Številka
9288	Tablica K. B. postavljenih delov	2	100		
9289	L. K. K.	2	100		
9290	Figurice	2	100		
9291	K. B. z. K. K.	2	100		
9292	L. K. K.	2	100		
9293	pan. K. K.	2	100		
9294	L. K. K.	2	100		
9295	L. K. K.	2	100		
9296	L. K. K.	2	100		
9297	pan. K. K.	2	100		
9298	L. K. K.	2	100		
9299	L. K. K.	2	100		
9300	L. K. K.	2	100		
9301	L. K. K.	2	100		
9302	L. K. K.	2	100		
9303	L. K. K.	2	100		
9304	L. K. K.	2	100		
9305	L. K. K.	2	100		
9306	L. K. K.	2	100		
9307	L. K. K.	2	100		
9308	L. K. K.	2	100		
9309	L. K. K.	2	100		
9310	L. K. K.	2	100		
9311	L. K. K.	2	100		
9312	L. K. K.	2	100		
9313	L. K. K.	2	100		
9314	L. K. K.	2	100		
9315	L. K. K.	2	100		
9316	L. K. K.	2	100		
9317	L. K. K.	2	100		
9318	L. K. K.	2	100		
9319	L. K. K.	2	100		
9320	L. K. K.	2	100		
9321	L. K. K.	2	100		
9322	L. K. K.	2	100		
9323	L. K. K.	2	100		
9324	L. K. K.	2	100		
9325	L. K. K.	2	100		
9326	L. K. K.	2	100		
9327	L. K. K.	2	100		
9328	L. K. K.	2	100		
9329	L. K. K.	2	100		
9330	L. K. K.	2	100		
9331	L. K. K.	2	100		
9332	L. K. K.	2	100		
9333	L. K. K.	2	100		
9334	L. K. K.	2	100		
9335	L. K. K.	2	100		
9336	L. K. K.	2	100		
9337	L. K. K.	2	100		
9338	L. K. K.	2	100		
9339	L. K. K.	2	100		
9340	L. K. K.	2	100		
9341	L. K. K.	2	100		
9342	L. K. K.	2	100		
9343	L. K. K.	2	100		
9344	L. K. K.	2	100		
9345	L. K. K.	2	100		
9346	L. K. K.	2	100		
9347	L. K. K.	2	100		
9348	L. K. K.	2	100		
9349	L. K. K.	2	100		
9350	L. K. K.	2	100		

SI. 29/ Picture 29

Inventarna knjiga Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije z vpisom Bitenčevega klavirja / Inventory Ledger of the Department of History and Applied Arts of the National Museum of Slovenia with the record of the Bitenc's piano. Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia

iskali bomo posebnosti pri izvedbi mehanike in značilne sledi uporabljenih orodij. Izsledke bomo objavili v strokovni literaturi.

Andrej Bitenc se je rodil 15. novembra 1802 v Št. Vidu pri Ljubljani. Poročil se je pozno, pri štiridesetih, s Terezijo, rojeno Treffenschledl, iz Gradca, hčerjo tedanjega oskrbnika Ljubljanskega gradu.¹⁰²

O Bitenčevi mladosti ne vemo veliko. V zapisu ob stoletnici njegovega rojstva¹⁰³ in zborniku ob stoletnici šentviške osnovne šole¹⁰⁴ v njegovem portretu piše, da je užival v brezskrbnem življenju

102 Janko Žirovnik, *Letno poročilo štirirazredne ljudske šole in z njo združene obrtno – nadaljevalne šole v Št. Vidu pri Ljubljani*, šolsko leto 1902/03, Ljubljana 1903, str. 6.

103 Žirovnik 1903, str. 3–4.

104 Aleksandra Kociper Vodeb (urednica), *Sto let, sto generacij, stotine spominov: 1911–2011 / OŠ Franca Rozmana Staneta Ljubljana*, Ljubljana 2011, str. 8–9.



Sl. 30/ Picture 30

Andrej Bitenc

Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia

made by Bitenc and with the products, we believe were made in his workshop. We plan to compare the original materials of all instruments using scientific methods. We will look for specifics in the execution of the mechanics and for the typical patterns which the tools used in making of the piano left behind. The findings will be published in professional literature.

Andrej Bitenc was born on the 15th November in 1802 in Št. Vid near Ljubljana. He got married late, when he was 40 years old, to Terezija, née Treffenschedl, from Graz, who was the daughter of the manager of the Ljubljana castle.¹⁰²

We know very little of Bitenc's early years. The notes made on his centenary¹⁰³ and in the booklet issued on the centenary of the primary school Šentvid,¹⁰⁴ which includes his portrait, describe him as a carefree young boy until he was 13 years old. Then his father sent him to Kranj, where he was to learn carpentry with master Tepkovec. Later he honed his carpentry skills in Graz but within six months he went to Vienna to work with a master piano maker. In Vienna, Bitenc worked as a regular carpenter. However, he would carefully observe how the

pianos were made and tuned. Although Bitenc spent several years in Vienna, we unfortunately do not know the name of the master he worked with. Some believed he must have learned with one of the better Viennese masters. Certain features can be compared

¹⁰² Janko Žirovnik, *Letno poročilo štirirazredne ljudske šole in z njo združene obrtno – nadaljevalne šole v Št. Vidu pri Ljubljani, šolsko leto 1902/03*, Ljubljana 1903, p. 3–4.

¹⁰³ Žirovnik 1903, p. 3–4.

¹⁰⁴ Aleksandra Kociper Vodeb (editor), *Sto let, sto generacij, stotine spominov: 1911–2011 (A hundred years, a Hundred Generations and Hundreds of Memories. 1911–2011) / Primary School Franc Rozmana Stane Ljubljana*, Ljubljana 2011, p. 8–9.

110 do trinajstega leta, ko ga je oče Mihael dal v Kranj k Tepkovcu v uk za mizarja. Nato je svoje mizarско znanje izpopolnjeval v Gradcu, od tam pa se je že čez pol leta odpravil na Dunaj k mojstru, ki je izdeloval klavirje. Bitenc je v delavnici na Dunaju sicer opravljal mizarška dela, a je ob tem skrbno opazoval, kako se klavirji izdelujejo in uglašujejo. Čeprav je Bitenc na Dunaju preživel nekaj let, žal imena mojstra in njegove delavnice, v kateri se je Bitenc izpopolnjeval, ne poznamo. Nekateri poznavalci menijo, da se je Andrej Bitenc izdelovanja klavirjev izučil pri enem izmed boljših dunajskih mojstrov. Določene poteze spominjajo celo na slog delavnice slovitega Ignaza Bosendorferja.¹⁰⁵ Vsekakor verjamemo, da se je Bitenc izučil in pridobil vsa potrebna znanja in dokazila v delavnici na Dunaju. V Ljubljano se je vrnil z visokimi merili, kar zadeva umetno obrt. O njegovem mojstrstvu se prepričamo ob natančnem pregledu njegovih glasbil in ob primerjavah njegovih klavirjev, ohranjenih v slovenskih muzejih.

Na Dunaju je najverjetneje spoznal, da je izdelovanje klavirjev dobra poslovna priložnost, zato se je po vrnitvi v Ljubljano, kjer domnevno takrat ni bilo nobene takšne delavnice, pri svojih tridesetih letih začel ukvarjati s tem delom. Pri ljubljanskem prijatelju iz mladosti Holzerju si je za ta namen sposodil zagonski denar.¹⁰⁶

Za obrtno dovoljenje je Bitenc zaprosil leta 1835, vendar je občinski odbor, pristojen za dodeljevanje meščanskih obrtnih pravic, presodil, da njegova uveljavitev ljubljanskemu meščanstvu ne bi bila v korist.¹⁰⁷ Darja Koter takšno odločitev pojasnjuje, češ da mesto ni potrebovalo izdelovalca klavirjev, ker je pravice za to nekdo že imel ali pa so bile potrebe trga zadovoljene kako drugače.¹⁰⁸ Nekaj pomembnih podatkov o njem je objavil časopis *Laibacher Zeitung*; piše, da je Bitenc ob izdelovanju lastnih klavirjev prodajal tudi dunajske klavirje,¹⁰⁹ ukvarjal pa se je tudi z izposojjo,¹¹⁰ uglaševanjem in popraviljanjem inštrumentov. Žirovnik piše, da je Bitenc hodil popravljat klavirje tudi na deželo.¹¹¹

105 Pregled glasbila in njegovo stanje je ocenil restavrator g. Aleksander Langer iz Celovca. (Koter 2001, str. 132.)

106 Žirovnik 1903, str. 4.

107 Ivan Slokar, Zgodovina rokodelstva v Ljubljani od leta 1732 do leta 1860, v: *Ljubljanska obrt od začetka 18. stoletja do srede 19. stoletja*, Razprave MAL, zvezek 4, Ljubljana 1977, str. 67.

108 Koter 2001, str. 130.

109 *Intelligenzblatt zur Laibacher Zeitung*, 13. december 1836, str. 948.

110 *Intelligenzblatt zur Laibacher Zeitung*, 16. junij 1838, str. 485.

111 Žirovnik 1903, str. 4.

to those of the renowned workshop of Ignaz Bosendorfer.¹⁰⁵ It is certain, though, that Bitenc learned and gained all his skills and certifications in a workshop in Vienna, from where he brought the high standards of his craft to Ljubljana. His mastery can be seen from his pianos preserved in the Slovenian museums. While still in Vienna, he most likely must have seen a business opportunity in the making of pianos. So, when he returned to Ljubljana, where there were no piano workshops at the time, he started making pianos, he was then in his thirties. He borrowed the starting capital from his old friend Holzer.¹⁰⁶

Bitenc applied for a trade licence in 1835. However, the municipal committee responsible for granting trade licences in the city considered that his business would not benefit the citizens of Ljubljana.¹⁰⁷ In Koter's opinion, this decision means that there was no need for a piano maker in the city, either because there had already been a maker with these rights in the city or because the needs for pianos were met in a different way.¹⁰⁸ Some important information about Bitenc can be found in the newspaper *Laibacher Zeitung*, which states that besides making instruments, he also sold pianos from Vienna,¹⁰⁹ and he rented out,¹¹⁰ tuned, and repaired the instruments as well. Žerovnik writes that Bitenc would also repair the instruments outside Ljubljana, in the countryside.¹¹¹

At the second exhibition of crafts and industry in Graz Bitenc received an honorary diploma and a silver medal for his product. This diploma is undoubtedly a testimony of his excellence; it shows that his good name reached outside the city limits of Ljubljana.¹¹² Three years later, in 1844, Andrej Bitenc took part at the third exhibition of crafts and industry in Ljubljana that hosted 284 exhibitors, more than ever before. There was only one other maker of instruments

105 The instrument and its condition were assessed by Aleksander Langer, a restorer from Klagenfurt. (Koter 2001, p. 132.)

106 Žirovnik 1903, p. 4.

107 Ivan Slokar, *Zgodovina rokodelstva v Ljubljani od leta 1732 do leta 1860: in: Ljubljanska obrt od začetka 18. stoletja do srede 19. stoletja*, *Razprave MAL*, book 4, Ljubljana 1977, p. 67.

108 Koter 2001, p. 130.

109 *Intelligenzblatt zur Laibacher Zeitung*, 13th December, 1836, p. 948.

110 *Intelligenzblatt zur Laibacher Zeitung*, 16th June, 1838, p. 485.

111 Žirovnik 1903, p. 4.

112 Graz was the centre of the inner-Austrian countries, which also included Slovenian territories. In the 1930s an inner-Austrian Assosiation of Crafts and Industry was set up, which among others organised exhibitions. In 1838 an exhibition took place in Klagenfurt, three years later there was an exhibition in Graz and finally in 1844 there was an exhibition in Ljubljana.

112 Da je dober glas o Bitenčevih klavirjih segal zunaj Ljubljane, dokazuje dejstvo, da je leta 1841 na drugi obrtno–industrijski razstavi, v Gradcu, za svoj izdelek prejel častno diplomo in srebrno odličje,¹¹² brez dvoma dokaz dobrega mojstrstva. Tri leta pozneje, leta 1844, je Andrej Bitenc kot izdelovalec klavirjev sodeloval tudi na tretji obrtno–industrijski razstavi, v Ljubljani. Sodelovalo je 284 razstavljalcev, več kot na prejšnjih razstavah. Ob njem je sodeloval na razstavi le še en ljubljanski obrtnik, ki je izdeloval glasbila, in sicer Simon Unglerth, strugar, ki je izdeloval lesena pihala.¹¹³ V poročilu o razstavi iz leta 1844 je na pol strani omenjena izjemna kakovost Bitenčevih izdelkov.¹¹⁴

Na prihodnjih obrtno–industrijski razstavah v avstrijskih deželah Bitenca ne zasledimo več, čeprav vemo, da je še deloval, saj o tem poroča Žirovnik, ki piše, da je s svojimi delavci pametno ravnal in od njih zahteval točnost in vestno delo, a dajal jim je tudi dobro hrano in pošteno plačilo.¹¹⁵

Ker z ženo Terezijo, ki je umrla dve leti pred njim, nista imela otrok, je v oporoki svoje premoženje (okroglih 190 tisoč kron) zapustil šentviški šoli (danes Osnovna šola Franc Rozman Stane Ljubljana Šentvid – Ljudska šola v Šentvidu nad Ljubljano). Ustanovljen je bil Bitenčev šolski sklad in iz njega je bila financirana tudi gradnja novega šolskega poslopja leta 1911. Del premoženja je zapustil tudi (petim) otrokom svojega brata Mihaela.¹¹⁶ Vse to kaže, da bil uspešen, saj je s takšnim premoženjem sodil med premožnejše Ljubljančane. Kako zelo je bil spoštovan v svojem okolju, priča tudi to, da se je njegovega pogreba udeležilo veliko ljubljanske gospode in vsa domača fara. Nagrobnici sta mu pela Čitalnični zbor ljubljanski in Filharmonično društvo.¹¹⁷

Vse kaže, da v Ljubljani po Bitencu ni bilo aktivnega izdelovalca klavirjev vsaj naslednjih dvajset let. K temu sta gotovo pripomogla

112 V tridesetih letih 19. stoletja je bilo v Gradcu kot središču notranjeavstrijskih dežel, ki so obsegale tudi večino današnjega ozemlja Slovenije, ustanovljeno notranjeavstrijsko obrtno–industrijsko združenje, ki je med drugim prirajalo razstave. Leta 1838 v Celovcu, tri leta zatem v Gradcu, nazadnje pa leta 1844 v Ljubljani.

113 Koter 2001, str. 130. Prim. Ivan Slokar, *Zgodovina rokodelstva v Ljubljani od leta 1732 do leta 1860*, povzeto po dokumentih v ZAL, Reg. I, fascikel 292 folija 1286, slika.

114 Arhiv Narodnega muzeja Slovenije, Boris Horvat, Mnenje o klavirju Andreja Bitenca, 26. september 1990; Arhiv Narodnega muzeja Slovenije, Jasna Horvat, Vloga za odkup gradiva, 9. oktober 1990.

115 Žirovnik 1903, str. 5–6.

116 Žirovnik 1903, str. 7.

117 Žirovnik. 1903, str. 6–7.

from Ljubljana at the exhibition, Simon Unglerth, a turner who made wooden wind instruments.¹¹³ The report from the 1844 exhibition includes a praise of the excellent quality of Bitenc's products.¹¹⁴

We cannot find Andrej Bitenc in the registers of the future exhibitions, although we know he remained active. Žirovnik reports that he treated his workers well; he demanded punctuality and diligence, but also fed them well and paid them fairly.¹¹⁵

Bitenc and his wife Terezija, who died two years before him, did not have any children; therefore, he bequeathed his assets (190,000 krone) to the school in Št. Vid. (currently Primary School Franc Rozman Stane – Primary school Šentvid above Ljubljana). Consequently, a Bitenc school fund was set up, which financed a new school building in 1911. He also left part of his property to the five children of his brother Mihael.¹¹⁶ All this shows that Bitenc was a successful man, as the wealth that he was able to bequeath after his death puts him among the more affluent people of Ljubljana.

That he was a respected man can also be understood from the fact that his funeral was attended by many members of the Ljubljana bourgeoisie as well as the entire local parish. The choirs of the Ljubljana Reading Room and the Philharmonic Society sang at his funeral.¹¹⁷

It seems that after Bitenc there was no other piano maker active in Ljubljana for the next twenty years. The reason for that must have been the development of trade and vibrant trade routes. The preserved musical instruments in Slovenia show that the big and respected workshops from Vienna and Graz and some German cities had no problems covering the Slovenian market. The next piano maker from Ljubljana was Rudolf Warbinek, as evident from the documents from 1895. His company *Germania* was registered in Trieste in 1894,¹¹⁸ which artefact is also in the National Museum of Slovenia collection.¹¹⁹ (cf. p. 146–148).

113 Koter 2001, p. 130. Prim. Ivan Slokar, *Zgodovina rokodelstva v Ljubljani od leta 1732 do leta 1860*, summarised from the documentation in ZAL, Reg. I, file 292 folio 1286 picture.

114 Archive of the National Museum of Slovenia, Jasna Horvat, Request for the purchase of material, 9th October, 1990.

115 Žirovnik 1903, p. 5–6.

116 Žirovnik 1903, p. 7.

117 Žirovnik 1903, p. 6–7.

118 Koter 2001, p. 133.

119 National Museum of Slovenia, Department of History and Applied Arts, inv. No. N 37502.

114 razvoj trgovine in živahnost prometnih poti, saj so velike in pomembne delavnice z Dunaja, iz Gradca in nekaterih nemških mest, kakor je razvidno iz ohranjenih glasbil na Slovenskem, z lahkoto oskrbovale tudi kranjsko tržišče. Naslednji dokazani ljubljanski izdelovalec klavirjev je bil Rudolf Warbinek, dokumentiran v letu 1895. Njegovo podjetje je imelo pred tem sedež v Trstu. Tam je leto poprej začelo delovati podjetje *Germania*,¹¹⁸ katerega primerek hranimo tudi v Zbirki glasbil Narodnega muzeja Slovenije (glej str. 146–148).¹¹⁹

BITENČEVI KLAVIRJI

Bitenčevi klavirji gotovo niso pionirski v glasbilarsko zgodovinskem pomenu, saj so narejeni po vsaj deset let starih dunajskih predlogah. Kljub temu o Bitenčevem znanju in sposobnostih največ izvemo prav po zaslugi njegovih ohranjenih klavirjev, ki so med skromno dediščino domačih izdelkov po svojih značilnostih v marsičem izjemni. So dragocen dokaz o aktivnosti in kakovosti domačega mojstra iz sredine 19. stoletja, ki je s svojim znanjem in veščinami ustvarjal slovensko glasbilarsko dediščino.

Klavir Andreja Bitenca št. 1

Andrej Bitenc, Ljubljana, od 1835 do 1845, les, medenina, slonovina, ebenovina, lito železo, železo, d. 237,5 cm, š. 129,5 cm, v. 89,5 cm, signatura: A. WITTENZ / IN / LAIBACH, inv. št. N 23114, vir: Janez Meglič, provenienca: družina Meglič, restavrirali: Boris Horvat, 1990; Damjan Jesenovec in Irma Langus Hribar, 2016.

objava: Koter 2001, str. 130–132.

literatura: Knez 2016, str. 132–141.

analogiji: Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 105 s; Narodni muzej Slovenije, inv. št. N 23115.

Prvi doslej znani Bitenčev klavir, ki ga hrani Oddelek za zgodovino in uporabno umetnost Narodnega muzeja Slovenije (inv. št. N 23114), je datiran v čas okrog leta 1835. Leta 1990 ga je Narodnemu muzeju Slovenije za 25.000 dinarjev prodal zadnji lastnik, doma

118 Koter 2001, str. 133.

119 Narodni muzej Slovenije, Oddelek za zgodovino in uporabno umetnost, inv. št. N 37502.

THE PIANOS OF ANDREJ BITENC

From the point of view of the history of musical instruments, Bitenc's pianos are not innovative by any measure as they were made following Viennese designs that had been at least ten years old by the time he made his instruments. Still, his skills and knowledge are obvious when we look at his preserved pianos. They are in many ways exceptional if compared to the modest heritage of Slovenian products. These pianos are an invaluable proof of the activities and the quality of the Slovenian master from the mid-19th century and whose skills and knowledge contributed to the creation of the Slovenian heritage of musical instruments.

Andrej Bitenc's Piano No. 1

Andrej Bitenc, Ljubljana, from 1835 to 1845, wood, brass, ivory, ebony, cast iron, iron, l. 237.5 cm, w. 129.5 cm, h. 89.5 cm, signature: *A. WITENZ / IN / LAIBACH*, inv. No. N 23114, source: Janez Meglič, provenance: the Meglič family, restored by: Boris Horvat, 1990; Damjan Jesenovec and Irma Langus Hribar, 2016.

Publication: Koter 2001, p. 130–132.

Bibliography: Knez 2016, p. 132–141.

Analogies: Ptuj – Ormož Regional Museum, Cultural History Department, inv. No. GL 105 s; National Museum of Slovenia, inv. No. N 23115.

The first piano known to be made by Andrej Bitenc dates back roughly to the year 1835. In 1990 it was sold for the price of 25,000 dinars to the National Museum of Slovenia by its last owner from Križe in Tržič in Gorenjska.¹²⁰ Above the keyboard, the piano boasts a veneered insignia, decorated in golden ornaments, with the inscription *A. WITENZ / IN / LAIBACH*. The preserved piano features a Biedermeier case with a beautifully rendered lid and artfully made octagonal legs that thin towards their lower part. Such legs were made by few masters. It is a classic Viennese form (fortepiano) but of an exceptional length (l. 237.5 cm, w. 129.5 cm, h. 89.5 cm). Its construction is entirely made of wood, and all the strings are parallel. The keyboard range is six and a half octaves (CC – g⁴), the keys (80) are narrower than those of the comparable

¹²⁰ National Museum of Slovenia, Access and inventory ledger of the Department of History and Applied Arts.



SI. 31/ Picture 31

Klavir Andreja
Bitenca št. 1 /
Andrej Bitenc's
Piano No. 1
Foto / Photo:
Tomaž Lauko

iz Križ v občini Trzič na Gorenjskem.¹²⁰ Klavir ima nad klaviaturo furnirano in z zlatimi ornamenti okrašeno značko z napisom: *A. WITTENZ / IN / LAIBACH*. Ohranjeni klavir ima bidermajersko ohišje s posebno lepo zaključenim pokrovom in tremi umetno izdelanimi osemkotnimi nogami, ki se navzdol zožujejo in kakršne je izdelovalo le malo mojstrov. Gre za klasično dunajsko obliko klavirja (fortepiano), vendar izjemne dolžine. Klavir ima popolnoma leseno konstrukcijo in vse strune vzporedno napeljane. Klaviatura obsega

¹²⁰ Narodni muzej Slovenije, Akcesijska in inventarna knjiga Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije.

concurrent instruments, while the mechanics do not differ from the Viennese tradition typical of the 1830s. In line with this tradition, the pedal lyre has two pedals; one serves as a muffler while the other prolongs the sound. The casing is polished in black, which is probably due to one of the past renovations. The original veneer is nicely visible under the quickly applied and wrinkled polish, which was not polished so well as to hide the wooden pores. Black was a very popular piano varnish in the 19th century.

In 1990 a keyboard instruments restorer Boris Horvat restored the piano and made it fit to be used for concerts. After the restoration, the musicians, as well as the music lovers, have been finally able to enjoy in the exceptional sonority of the instrument.¹²¹

Today, this piano is part of the permanent exhibition in the History and Arts Collection – Ellipses of Arts + Music (paintings and musical instruments) and can be seen in the National Museum of Slovenia Metelkova.

Sl. 32/ Picture 32

Značka nad klaviaturo
Bitenčevega klavirja iz Križ
na Gorenjskem, z napisom: A.
WITTENZ / IN / LAIBACH /
Badge above the keyboard of
the Bitenc's Piano from Križe
in Upper Carniola with the
inscription: A. WITTENZ / IN /
LAIBACH

Foto / Photo: Tomaž Lauko



Each of the three known pianos by Andrey Bitenc feature a different badge above individual keyboards. That tells us that he most likely made a different badge for each of his instruments.

121 Archive of the National Museum of Slovenia, Boris Horvat, Mnenje o klavirju Andreja Bitenca, 26th September, 1990.

118 šest oktav in pol (CC – g⁴), tipke (80) so v primerjavi s podobnimi glasbili iz tega časa ožje, mehanika pa ne odstopa od običajne dunajske, značilne za trideseta leta 19. stoletja. V skladu z njo je tudi nožni pedal v obliki lire z dvema vzvodoma, eden povezuje mehanizem za tišji zvok, drugi pa podaljšuje zvenenje strun. Zunanost ohišja je črno politirana, verjetno posledica ene od prenov. Pod hitro nanešenim, zgrbančenim lakom, ki ni tako politiran, da bi skrnil lesne pore, se lepo vidi originalen furnir. Proti koncu 19. in na začetku 20. stoletja je bilo modno lakiranje klavirjev v črno barvo.

Klavir je leta 1990 restavriral in usposobil za koncertno življenje restavrator glasbenih inštrumentov s tipkami Boris Horvat.¹²¹ Po prenovi imajo poustvarjalci in poslušalci priložnost končno spoznati tudi njegove glasbene odlike, saj ima inštrument izjemno zvočnost.

Danes je klavir na ogled na stalni razstavi Zgodovinske in umetnostne zbirke – Elipse umetnosti + glasbe (slike in glasbeni inštrumenti) v Narodnem muzeju Slovenije Metelkova.

Na vseh treh znanih bitenčevih klavirjih je nad klaviaturo drugačna značka s signaturo, zato lahko sklepamo, da je za vsak svoj izdelek naredil svojo značko.

Klavir Andreja Bitenca št. 2

Andrej Bitenc, okoli 1830, smrekov les, orehov furnir, medenina, slonovina, lito železo, železo, d. 243 cm, š. 130 cm, signatura: *ANDREAS - WITTENZ IN LAIBACH*, inv. št. N 37272, vir: Deželni odbor Kranjski, provenienca: družina Trebuhovič z gradu Mala Loka, restavriral: Irma Langus Hribar, 2016,

objava: Knez 2016, str. 132–141.

analogiji: Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 105 s; Narodni muzej Slovenije, inv. št. N 23114.

Drugi Bitenčev klavir,¹²² iz Zbirke glasbil Narodnega muzeja Slovenije (inv. št. N 23115), doslej javnosti neznan, iz graščine Mala Loka

121 Arhiv Narodnega muzeja Slovenije, Boris Horvat, Mnenje o klavirju Andreja Bitenca, Ljubljana, 26. september 1990; Boris Horvat, Predlog za popis klavirjev iz 19. stoletja na Slovenskem, Ljubljana, 1. februar 1991; Boris Horvat, Pismo Jasni Horvat (kustodinji Narodnega muzeja Slovenije), Ljubljana, 2. marec 1991; Boris Horvat, Pismo Robertu A. Brownu (restavrator iz Salzburga), Ljubljana, 10. oktober 1990.

122 Narodni muzej Slovenije, Oddelek za zgodovino in uporabno umetnost, inv. št. N 23115.

Andrej Bitenc, around 1830, spruce wood, walnut veneer, brass, ivory, cast iron, iron, l. 243 cm, w. 130 cm, signature: *ANDREAS ~ WITTENZ IN LAIBACH*, inv. No. N 37272, source: Deželni odbor Kranjski, provenance: the Trebuhovič family from the Mala Loka manor, restored by: Irma Langus Hribar, 2016.

Publication: Knez 2016, p. 132-141.

Analogies: Ptuj – Ormož Regional Museum, Cultural History Department, inv. No. GL 105 s; National Museum of Slovenia, inv. No. N 23114.

The second piano from the Collection of Musical Instruments of the National Museum of Slovenia (inv. No. N 23115) made by Bitenc has not been known to the public,¹²² until now. It came from the Mala Loka manor in Dolenjska¹²³ and was in 1918 gifted to the Regional Museum of Karniola Rudolfinum (today this is the National Museum of Slovenia) by the Regional Board of the Duchy of Carniola.¹²⁴ The legs are made from turned wood and from their form we can deduce that the instrument was made around 1830, making this is the oldest piano proved to be made by Bitenc.

The instrument has six octaves with an added quint; it has walnut veneer and an insignia above the keyboard. The inscription, framed in a brass frame, *ANDREAS ~ WITTENZ IN LAIBACH* is written in black ink on white paper next to an eagle. This indicates that Bitenc most probably did not have the trade rights as an instrument maker,¹²⁵ otherwise he would have added *Instrumentenmacher* or *Klaviermacher* to his name.¹²⁶ Occasionally, some masters did apply for a trade licence several times, either to make sure the number

122 National Museum of Slovenia, Department of History and Applied Arts, inv. No. N 23115.

123 According to Janez Vajkard Valvasor the manor in Mala Loka was owned by the aristocratic Gallo family. Later it changed hands and among the owners were Ernest Zupančič, Jurij Lukančič and the Widerkhern family, which had its roots in Switzerland. In 1853 the manor changed hands yet again when Marko Terbuhovič married the heiress Justina Widerkhern. After his wife's death Terbuhovič married Justina's cousin Marija. Marija lived in the manor until her age and she died there in the care of the nuns of St Francis as Marko's son Evgen Terbuhovič sold the estate with the manor to the county committed before the end of World War I. Today the building is privately owned.

124 Archive of the National Museum of Slovenia, Act 461/1918, dated 19th September, 1918, No. 9444.

125 The same applies for the inscription on the Bitenc's piano No. 1.

126 Koter 2001, p. 131.

SI. 33/ Picture 33

Doslej neznani Bitenčev klavir iz graščine Mala Loka na Dolenjskem, danes v Zbirki glasbil Narodnega muzeja Slovenije / Andrej Bitenc's Piano that has been discovered only recently, from Mala Loka manor in Lower Carniola. Today it is part of Collection of Musical Instruments of the National Museum of Slovenia
Foto / Photo: Tomaž Lauko



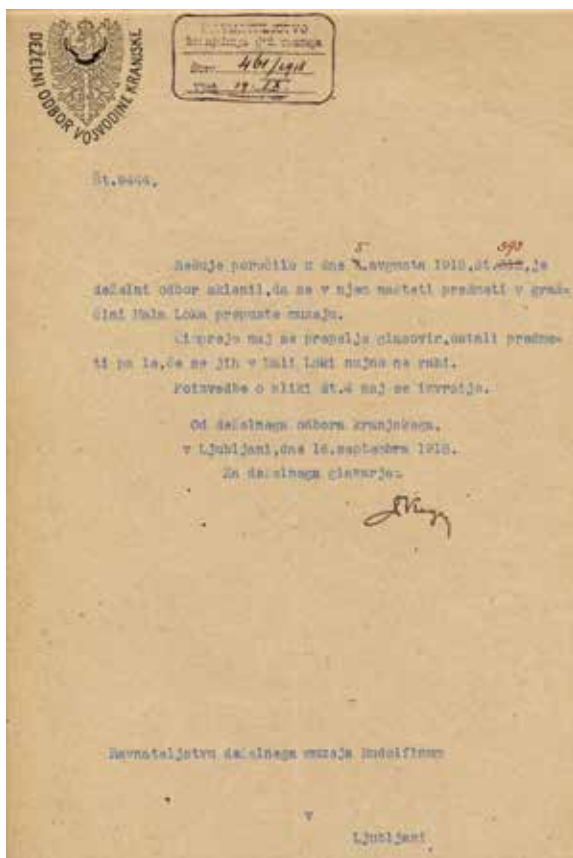
na Dolenjskem,¹²³ je Deželnemu muzeju za Kranjsko Rudolfinumu (danes Narodnemu muzeju Slovenije) leta 1918 podaril Deželni odbor vojvodine Kranjske.¹²⁴ Glede na obliko struženih nog in

123 Grad Mala Loka je bil po Valvazorju prvotno v lasti baronov Gallov, med poznejšimi lastniki pa so bili Ernest Zupančič, Jurij Lukančič in rodbina Widerkhern s koreninami v Švici. Leta 1853 je po ženitvi z dedinjo Justino Widerkhern grad pripadel Marku Terbuhoviču. Pozneje, po ženini smrti, se je drugič poročil, in sicer z njeno sestrično Marijo. Ta je na gradu umrla v visoki starosti kot oskrbovanka sester svetega Frančiška. Markov sin Evgen Terbuhovič je namreč pred koncem prve svetovne vojne grad s posestvom prodal deželnemu odboru. Danes je v zasebni lasti.

124 Arhiv Narodnega muzeja Slovenije, akt 461/1918 z dne 19. september 1918, št. 9444.

SI. 34/ Picture 34

Dopis Deželnega odbora vojvodine Kranjske / Letter from the Regional Committee of the Duke of Carniola
Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja Slovenije / Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia



of applicants was exceeded, or the rules limited trade licences to several years, after which the licences needed to be renewed or prolonged.

Above the signatures in a brass frame is an impressed inscription: *WITTENZ'S 17. WERK*. We can assume that it denotes the 17th product made in the Bitenc's workshop. Still, we have not found any similar inscriptions on the pianos known to be made by Bitenc.

The preserved piano, like Bitenc's piano inv. No. N 23114, features a Biedermeier case with beautifully finished lid and three artfully made legs that few master used to do and could be mostly found in Vienna. The brass endings (wheels) on the legs are the same as on the piano No. 1. In the same way, the keys are narrower on both pianos (No. 1 and No. 2), while the mechanics does not differ from the standard Viennese mechanics, typical of the 1830s. The pedal lyre has three pedals: the left, *una corda* or *piano* (the hammer hits just one string and not two or three, therefore the sound is quieter), the right *forte*

122 številne detajle ohišja, ki kažejo na določen čas, ga lahko datiramo okrog leta 1830, to pomeni, da gre za najzgodnejši doslej potrjeni Bitenčev klavir.

Inštrument ima šest oktav z dodano kvinto in je furniran z orehovino. V medeninastem okvirju nad klaviaturo je na belem papirju okrog podobe orla s črnim tušem napis: *ANDREAS ~ WITTENZ IN LAIBACH*. Ta podatek nam pove,¹²⁵ da Bitenc najverjetneje ni imel obrtnih pravic kot izdelovalec klavirjev, sicer bi se podpisal kot *Instrumentenmacher* ali *Klaviermacher*.¹²⁶ Dogajalo se je sicer, da so nekateri mojstri za obrtne pravice zaprosili večkrat; včasih preprosto zato, ker je bilo kandidatov za določeno obrt preveč, ali pa so pravila pridobljeno obrtno pravico omejevala na nekaj let, potem pa jo je bilo treba obnoviti in podaljšati.

Nad signaturi v medeninastim okvirju je vtisnjena okrašena značka z napisom: *WITTENZ'S 17. WERK*. Sklepamo lahko, da gre za sedemnajsti izdelek iz Bitenčeve delavnice, čeprav na drugih, vseh poznejših znanih Bitenčevih klavirjih takšnih značk doslej nismo odkrili.

Ohranjeni klavir, kot v primeru Bitenčevega klavirja z inv. št. N23114, ima bidermajersko ohišje s posebno lepo zaključenim pokrovom in tremi umetelno izdelanimi nogami, kakršne je izdelovalo le malo mojstrov, vzore pa najdemo na Dunaju. Medeninasti zaključki (kolesčki) na nogah so popolnoma enaki kot v primeru Bitenčevega klavirja številka 1. Prav tako so tipke v obeh primerih (Bitenčevega klavirja številka 1 in 2) v primerjavi s podobnimi glasbili ožje, mehanika pa ne odstopa od običajne dunajske, značilne za trideseta leta 19. stoletja. V skladu z njo je tudi nosilec za pedale v obliki lire s tremi pedali: levim, *una corda* oz. *piano* (kladivce udarja samo po eni struni, ne po dveh ali treh, zato tišji zvok), desnim *forte* (z njim se s strun dvignejo vsi dušilci) in srednjim (kadar so trije) prolongacijskim (*sostenuto*). Bele tipke so prevlečene s slonovino, črne so lesene in pobarvane s črnim lakom.

Glede na to, da so se podobni inštrumenti na Dunaju pojavljali v dvajsetih letih 19. stoletja, in upošteva običajni časovni zamik pri prenosu znanj in slogovnih sprememb na slovensko ozemlje lahko ta klavir datiramo v trideseta leta ali celo štirideseta leta 19. stoletja, čeprav so takrat na Dunaju inštrumenti že precej drugačni.

125 Enako velja za napis pri Bitenčevem klavirju številka 1.

126 Koter 2001, str. 131.

Sl. 35/ Picture 35

Značilna bidermajerska značka na belem papirju, nad klaviaturo Bitenčevega klavirja iz graščine Mala Loka na Dolenjskem, z napisom: *ANDREAS WITTENZ / IN LAIBACH* / A typical Biedermeier badge on white paper above the keyboard, Andrej Bitenc's Piano from the Mala Loka manor in Lower Carniola. Inscription: *ANDREAS WITTENZ / IN LAIBACH*
Foto / Photo: Tomaž Lauko

**Sl. 36/ Picture 36**

Vtisnjen napis *WITTENZ 17. WERK* nad tipkovnico, si lahko razlagamo kot sedemnajsti Bitenčev izdelek. / The stamped inscription *WITTENZ 17. WERK* above the keyboard can denote the 17th product made by Andrej Bitenc.
Foto / Photo: Tomaž Lauko



(all muffers are lifted from the strings) and the third (when there are three) prolonging – *sostenuto*. The white keys are coated in ivory, the black keys are made of wood and painted in black lacquer.

Similar instruments were produced in Vienna in the 1820s and considering the usual time lag during which knowledge and changes in style were slowly adopted in Slovenia, we can date this piano in the 1830s or even 1840s, although at that time pianos in Vienna were already considerably different.

The veneer, the polished case, and the metal parts still need further conservation and restoration work; however, the mechanism of this instrument will not be restored as we wish to keep it as a document of its time and the last condition in which the piano was still being played.

Today, the piano can be seen as part of the permanent exhibition of the Historical and Art Collection - The Musical Instruments at the National Museum of Slovenia Metelkova.

124 Furnirano in politirano ohišje ter kovinski deli še čakajo na nadaljnje konservatorsko–restavratorske posege, mehanizma pa na tem glasbilu v tem primeru ne bomo restavrirali, saj bi ga radi ohranili kot dokument časa in zadnje stanje še igranega instrumenta, čeprav pravilna prenova glasbilu ne škodi, saj ga je nato mogoče igrati in mu s tem podaljšati trajanje.

Danes je klavir na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.

Domnevni klavir Andreja Bitenca št. 3

Andrej Bitenc?, konec tridesetih ali začetek štiridesetih let 19. stoletja, smrekov les, mahagonij, medenina, slonovina, lito železo, železo, d. 128 cm, š. 102 cm, inv. št. N 23115, vir: Deželni odbor Kranjski, restavriral: Irma Langus Hribar in Damjan Jesenovec, 2016.

objava: Knez 2016, str. 132–141.

analogije: Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 105 s; Narodni muzej Slovenije, inv. št. N 23114; Narodni muzej Slovenije, št. N 37272.

Najstarejši klavir iz zbirke glasbil Narodnega muzeja Slovenije ali tudi tretji,¹²⁷ doslej javnosti neznan domnevno Bitenčev klavir ima, kot prva dva, 6 oktav z dodano kvinto in značilno dunajsko mehaniko, ki se sicer med mojstri in v desetletjih lahko precej razlikuje. Vsi deli mehanike so leseni, ohišje je furnirano s furnirjem iz orehove korenine. Glasbilo je le delno ohranjeno, noge, lira s pedali in pokrov ohišja so uničeni ali izgubljeni.

Na podlagi primerjave domnevamo, da je bil (četudi se bo morebiti pokazalo, da to ni slovenski izdelovalec klavirjev Andrej Bitenc iz Ljubljane) inštrument izdelan ob koncu tridesetih ali na začetku štiridesetih let 19. stoletja.

Klavir nad klaviaturo nima signature z napisom oziroma izdelovalčevega podpisa. Domnevo, da gre za še en, doslej neznan Bitenčev klavir in torej razlog za njegovo raziskavo je sprožila precej stara nalepka na spodnjem delu trupa. Na zbledeli nalepki je bilo z roko in črnim tušem napisano *Wittenz*. Na podlagi hitre analize in primerjave z dosedanji znanimi Bitenčevimi klavirji glede

¹²⁷ Narodni muzej Slovenije, Oddelek za zgodovino in uporabno umetnost, inv. št. N 37272.

Andrej Bitenc?, end of 1840s or early 1850s, spruce wood, mahogany, brass, ivory, cast iron, iron, l. 128 cm, w. 102 cm, inv. No. N 23115, source: Deželni odbor Kranjski, restored by: Irma Langus Hribar and Damjan Jesenovec, 2016.

Publication: Knez 2016, p. 132–141.

Aanalogies: Ptuj – Ormož Regional Museum, Cultural History Department, inv. No. GL 105 s; National Museum of Slovenia, inv. No. N 23114; National Museum of Slovenia, inv. No. N 37272.



Sl. 37/ Picture 37
Domnevni
Bitenčev klavir
v Zbirki glasbil
Narodnega muzeja
Slovenije / Piano,
possibly by Andrej
Bitenc, Collection
of Musical
Instruments of the
National Museum
of Slovenia
Foto / Photo:
Tomaž Lauko

This is the oldest piano from the Collection of Musical Instruments of the National Museum of Slovenia and possibly the third piano by Andrej Bitenc,¹²⁷ until recently unknown to the public, also has 6 octaves with the additional quint and the typical Viennese mechanics. All mechanical parts are wooden; the case is veneered in the walnut root veneer. The piano is missing its legs, the pedal lyre and the lid.

Based on the comparison, we assume that the instrument was made in the late 1830s or early 1840s (even if it turns out that the piano was not made by Andrej Bitenc from Ljubljana).

¹²⁷ National Museum of Slovenia, Department of History and Applied Arts, inv. No. N 37272.

126 izdelave tipk, spojk, delov mehanike in materialov sklepamo, da vendarle gre za še en Bitenčev klavir, čeprav bomo to domnevo z gotovostjo lahko potrdili šele po opravljenih verodostojnih strokovnih in znanstvenih analizah.

Nepojasnjena nalepka na njem pa ima lahko tudi povsem drugačen pomen in je možno, da gre za klavir, ki je bil v njegovi lasti a ga ni izdelal osebno.

Vsekakor bodo za ta klavir, ki je v zelo slabem stanju, potrebni tudi obsežni posegi ob restavriranju ohišja in notranjščine z mehaniko, strunami in resonančnim dnom.

Odslej Bitenčeve klavirske dediščine nikakor ne moremo soditi samo po doslej znanih dveh klavirjih, ampak bo treba ob na novo odkritem oziroma ob domnevno še drugem znanem izdelku prevrednotiti celotno njegovo dediščino, počakati na analize in nova strokovna mnenja. Šele tako bomo dobili natančnejši prikaz pomena in dela tega slovenskega izdelovalca klavirjev.

Klavir Rudolf Windhofer

Rudolf Windhofer, Dunaj, Avstrija, po 1880, smrekov les, ebenovina, orehov furnir, medenina, slonovina, lito železo, železo, d. 180 cm, š. 143 cm, signatura: *Rudolf Windhofer in Wien*, inv. št. N 19444, vir: Marta Klemenc,¹²⁸ restavriral: Irma Langus Hribar, Damjan Jesenovec, 2016.

Klavirju manjkajo pedala in noge niso originalne, najbrž so bile naknadno zamenjane. Pokrov na klavirju ni pritrjen. V notranjosti klavirja pod strunami je vtisnjen napis: *Rudolf Windhofer, Wien, N° 1108*. Nad klaviaturo manjka čelna plošča, na kateri je bil napis *Rudolf Windhofer IN WIEN*, levo od tega napisa sta bili znački z napisom *PREIS MEDAILE* in letnicama 1862 in 1863, desno od napisa značka z napisom *AUSSTELLUNG WIEN* ter značka z letnico 1880.¹²⁹ To pomeni, da je bil Windhoferjev klavir v teh letih dobitnik medalj na obrtno-industrijski razstavi na Dunaju.

128 Arhiv Narodnega muzeja Slovenije, Zahvalno pismo z dne 12. februarja 2003 dr. Jasne Horvat, kustodinje Zbirke glasbil Narodnega muzeja Slovenije.

129 Po primerjavi s sorodnim klavirjem iz zasebne zbirke v Zagrebu.

There are no inscribed insignia nor the maker's signature above the keyboard. Our suspicion that this might be a piano by Bitenc and therefore belief there is a cause for research were generated by a rather old label found on the bottom part of the case. The faded label contains a handwritten inscription *Wittenz*, written in black ink. A quick analysis and comparison of keys, clamps, parts of the mechanics, and the materials with the Bitenc's known pianos have made us believe that this could very well be another piano by Andrej Bitenc. Still, we will be able to confirm our suspicions only after conclusive expert and scientific analyses have been done. The unexplained label, however, can have a completely different meaning and the piano could just as well be an instrument Andrej Bitenc owned, but did not make.

The piano is in a fairly bad condition. Therefore it will need extensive restoration works on the casing and the interior with the mechanics, on the strings and the soundboard.

It is clear, though, that from now on Bitenc's heritage cannot be judged only on the basis of the two preserved pianos. Both the newly discovered instrument and the fourth piano likely made by Bitenc present us with an opportunity to reassess his entire legacy, evaluate the new analyses and the expert's opinions. Only then will we be able to better understand the work and the importance of this Slovenian master piano maker.

Rudolf Windhofer Piano

Rudolf Windhofer, Vienna, Austria, after 1880, spruce wood, ebony, walnut veneer, brass, ivory, cast iron, iron, l. 180 cm, w. 143 cm, signature: *Rudolf Windhofer in Wien*, inv. No. N 19444, Source: Marta Klemenc,¹²⁸ restored by: Irma Langus Hribar, Damjan Jesenovec, 2016.

The pedals are missing and the legs are not original, most likely having been replaced at a later date. The lid is not attached. Inside there is a stamped inscription under the strings: *Rudolf Windhofer, Wien, N° 1108*. The front board above the keyboard, which carried the inscription *Rudolf Windhofer IN WIEN*, is also missing. To the

128 Archive of the National Museum of Slovenia, Thank You letter of 12th December, 2003 by Jasna Horvat, PhD, curator of the Collection of Musical Instruments of the National Museum of Slovenia.



SI. 38/ Picture 38

Klavir Rudolf
Windhofer /
Rudolf Windhofer
Piano
Foto / Photo:
Tomaž Lauko

Klavir Martin Vessely

Martin Vessely (Piano) Fabrik, Dunaj, Avstrija, konec 19. stoletja, smrekov les, slonovina, ebenovina, medenina, orehov furnir, lito železo, železo, d. 190 cm, š. 140 cm, g. 45 cm, signatura: *M. VESSELY, FABRIK WIEN*, inv. št. N 37155, vir: Pavla Toni Žveglič, provenienca: družina Žveglič, restavrirala: Irma Langus Hribar, 2015, Damjan Jesenovc, 2016.
literatura: Wackernegel 1999, str. 104.

Takšen polkoncertni klavir je na dunajski svetovni razstavi od 1. maja do 2. novembra 1873 dobil medaljo, kot dokazuje napis (medenina, vložena v furnir) na čelni plošči nad klaviaturo: *K. K. auschl.* (vmes je grb avstro-ogrške monarhije – cesarski dvoglavi orel) *Privilegium / M. VESSELY, FABRIK WIEN.* med napisom. Na vsaki strani napisa je medalja z napisoma: na prvi znački piše *VERDIENST MEDAILLE*, na drugi pa *WELTAUSSTELLUNG WIEN 1873.*

Sl. 39/ Picture 39

Signatura v notranjosti klavirja
 Rudolf Windhofef / Signature on
 Rudolf Windhofer Piano
 Foto / Photo: Tomaž Lauko



left of the stamp there were two badges inscribed with *PREISS MEDAILE* and the years 1862 and 1863. To the right there was one badge inscribed *AUSTELLUNG WIEN* and another with the year 1880.¹²⁹ The badges show that in the years on the badges the Windhofer pianos received medals at the industrial exhibition in Vienna.

Martin Vessely Piano

Martin Vessely (Piano) Fabrik, Vienna, Austria, end of the 19th century, spruce wood, ivory, brass, walnut veneer, cast iron, iron, l. 190 cm, d. 45 cm, signature: *M VESSELY, FABRIK WIEN*, inv. No. N 37155, source: Pavla Toni Žveglič, provenance: the Žveglič family, restored by: Irma Langus Hribar, 2015, Damjan Jesenovec, 2016.

Bibliography: Wackernegel 1999, p. 104.

This type of a semiconcert or ballroom piano received a medal at the world fair Wiener Weltausstellung held in Vienna between 1st May and 2nd November, 1873, as indicated by the inscription (brass inlay in veneer) on the front board above the keyboard: *K.K. auschl. Privilegium / M. VESSELY, FABRIK WIEN*. The inscription is broken into two halves by the Austro-Hungarian coat of arms – the double-headed eagle. There are medals on both sides of

¹²⁹ After comparisons were made with a similar piano from a private collection in Zagreb.



Sl. 40/ Picture 40

Klavir Martin
Vessely / Martin
Vessely Piano
Foto / Photo:
Tomaž Lauko

Klavir so darovalci kupili svoji sedemletni hčeri. Ta je nanj igrala 30 let, dokler ga niso podarili Narodnemu muzeju Slovenije.

V notranjosti klavirja je na resonančni plošči vtisnjen napis: *Kais. kön.* (vmes je grb avstro-ogrske monarhije – cesarski dvoglavi orel) *privileg. PIANOFORTE FABRIK des Martin Wesseli Wien, 5.Bz. Bachergasse No 201. Opus. 988* (številka napisana s čopičem).

Klavir ima okrasno nogo z dvema pedaloma z vzvojno palico, *una corda* in *forte*.¹³⁰ Na bokih klavirja in na pokrovu so vstavljeni v furnir okrasni trakovi/kotni ornamenti iz *špjatra*.¹³¹

130 Pomemben del vsakega klavirja so tudi pedali. Z držali so nameščeni pravokotno pod tipkovnico povsem pri tleh. S posebnim mehanizmom so povezani s strunami. Navadno imajo klavirji od dva do tri pedale. Najbolj levi je piano pedal ali *una corda*. Ko ga pritisnemo, zamakne kladivca tako, da udarjajo le na dve ali eno struno. Zvok postane tako precej tišji oz. zadušen. Najbolj desni pedal imenujemo *forte*. Ob pritisku nanj odmakne vse dušilce od strun, tako da te zvenijo polnejše in dlje. Po navadi ga uporabljamo pri zadrževanju akordov ali povezovanju tonov. Pri uporabi pa moramo biti precej previdni, da harmonij ne mešamo med sabo. Srednji ali zadrževalni pedal se navadno pojavlja le pri koncertnih klavirjih. Deluje podobno kot pedal *forte*. Ko pritisnemo na tipko, lahko s tem pedalom ton obdržimo, ne da bi se mešal z drugimi toni. Pedal namreč zadrži le dušilce že pritisnjenih tipk.

131 *Špjater* je zlitina cinka in aluminija. V 19. stoletju so špjater uporabljali za odlivanje cenjenih odlitkov.



Sl. 41/ Picture 41

Signatura na
čelni plošči nad
klaviaturo na
klavirju Martin
Vessely /
Signature on
Martin Vessely
Piano
Foto / Photo:
Tomaž Lauko

the inscription, and the first medal is inscribed: *VERDIENST MEDAILLE*. The second says: *WELTAUSSTELLUNG WIEN 1873*.

The piano was bought by the donors for their seven year old daughter, who played it for the next 30 years, until it was donated to the National Museum of Slovenia.

The soundboard inside the piano also has a stamped inscription: *Kais. kön. (inserted the Austro-Hungarian double-headed eagle) privilege. PIANOFORTE FABRIK des Martin Vesseli, Wien, 5.Bz. Bachergasse No 201. Opus 988* (the number is written out with a brush).

The piano features a decorative leg with two pedals with a torsion rod and *una corda* and *forte* (the soft pedal).¹³⁰ Decorative strips and corner ornaments made of *špjater* (a zinc-aluminium alloy) are inlaid in the veneer on the sides and on the lid of the piano.¹³¹

130 The pedals are an important part of every piano. Holders keep pedals in place perpendicularly under the keyboard, close to the floor. A special mechanism connects them to the strings. Pianos usually have two to three pedals. The left one is the piano pedal, so called *una corda*. When pushed down, it moves the hammers so they hit only two strings or one, making the sound quieter, muted. The far right pedal is called the *forte* pedal. When pressed it moves away all the mufflers from the strings, prolonging the sound and making it richer. Usually it is used to hold the chord or to connect or glide individual sounds. It should be used cautiously so as not to overwhelm the harmonies. The middle pedal or the *sostenuto* pedal usually appears only with the concert piano. Its function is similar to that of the *forte* pedal. When the pedal is pushed down the tone is kept clear, without being mixed with other tones. The pedal only holds the mufflers on the played strings.

131 *Špjater* is a zinc-aluminium alloy. It was used in the 19th century to make cheap casts.

132 Klavir Laubeger & Gloss

Laubeger & Gloss, Dunaj, Avstrija, od 1910 do 1915, smrekov les, črn lakiran furnir, medenina, slonovina, ebenovina, lito železo, železo, d. 166 cm, š. 150 cm, v. 97 cm, signatura: *LAUBERGER & GLOSS / WIEN*, inv. št. N 23980, vir: Polona Lah Skerget,¹³² provenienca: Viktor Šonc, restavriral: Irma Langus Hribar, 2016.



Sl. 42 / Picture 42

Klavir Laubeger & Gloss / Laubeger & Gloss Piano
Foto / Photo:
Tomaž Lauko

Salonski črno lakirani klavir z dunajskim mehanizmom ima tri noge in tri pedale, levi in srednji nimata žičnih vodil, na enem pedalu piše 8473. *Wien = Hof – Lieferanten = London*. Na čelni plošči nad klaviaturo je napis: *LAUBERGER & GLOSS / WIEN = HOF – LIEFERANTEN = LONDON*.

132 Arhiv Narodnega muzeja Slovenije, Zahvalno pismo z dne. 9. septembra 2005 dr. Jasne Horvat, kustodinje Zbirke glasbil Narodnega muzeja Slovenije.

Lauberger & Gloss, Vienna, Austria, 1910 to 1915, spruce wood, lacquered veneer, brass, ivory, cast iron, iron, l. 166 cm, w. 150 cm, signature: *LAUBERGER & GLOSS / WIEN*, inv. No. N 23980, source: Polona Lah Skreget,¹³² provenance: Viktor Šonc, restored by: Irma Langus Hribar, 2016.

Sl. 43 / Picture 43

Signatura na
čelni plošči nad
klaviaturo na
klavirju Lauberger
& Gloss /
Signature on
Lauberger & Gloss
Piano
Foto / Photo:
Tomaž Lauko



Black varnished parlour piano with Viennese action has three legs and three pedals, the left and the middle pedals are without the pedal rods. One pedal has an inscription *8473. Wien = Hof – Lieferanten = London*. On the front board above the keyboard there is another inscription: *LAUBERGER & GLOSS / WIEN = HOF – LIEFERANTEN = LONDON*.

Under the lid there are two inscribed badges. The first one says: *kgl. Serb. Hoflieferanten Lauberger & Gloss Pianoforte Fabrik WIEN*. To the left of the inscription there are four medals with years 1902 and 1909 and above them an inscription *GOLDENE MEDAILLEN*. Above the medals there is a coat of arms of the Kingdom of Serbia and below it an inscription *K.K. STAATSPREIOSE*. On the second badge there is also the coat of arms of the Kingdom of Serbia and the inscription *KONIGLICHE HÖFLIEFERANTEN*, which means they were the official supplier of pianos for the Kingdom of Serbia.

¹³² Archive of the National Museum of Slovenia, Thank You letter of 9th September, 2005, by Jasna Horvat, PhD, curator of the Collection of Musical Instruments of the National Museum of Slovenia.

134 Pod pokrovom sta dve znački z napisi. Na prvi piše: *kgf. Serb. Hoflieferanten Lauberger & Gloss Pianoforte Fabrik WIEN*. Levo od napisa so štiri medalje z letnicama 1902 in 1909 in napisom nad njimi *GOLDENE MEDAILLEN*, nad medaljami je grb kraljevine Srbije in pod njim napis *K. K. STAATSPREISE*. Na drugi znački je grb kraljevine Srbije in napis *KONIGLICHE HÖFLIEFERANTEN*, se pravi, da so bili uradni dobavitelji klavirjev v kraljevini Srbiji.

Podjetje Lauberger & Gloss z Dunaja je začelo delovati leta 1881.¹³³

Klavir je uporabljal Viktor Šonc¹³⁴ (Tomaj, 29. oktober 1877 – Ljubljana, 1. september 1964), pedagog, zborovodja in skladatelj. Študiral je kompozicijo in dirigiranje na praškem konservatoriju (1901–1904) ter solo petje v zasebni šoli (1903–1909); izpopolnjeval se je pri Vitězslavu Novaku. Med drugim je bil ravnatelj Glasbene matice v Trstu (1911–1927), kjer je tudi poučeval, vodil pevske ansamble in pisal kritike za *Edinost*. Zapisoval in prirejal je slovenske ljudske pesmi, komponiral zborovska in komorna dela ter ustvaril nekaj obsežnejših skladb (simfonična slika *Pokop pusta*, kantata *Ubežni kralj* za soliste, mešani zbor in orkester).

Klavir brez signature

Začetek 19. stoletja, smrekov les, orehov furnir, medenina, slonovina, ebenovina, lito železo, železo, d. 174 cm, š. 125 cm, inv. št. N 37273, restavrirala: Irma Langus Hribar, 2016.

Klavir je bil skrajšan;¹³⁵ to ob koncu 19. stoletja ni bilo nič nenavadnega. Prevlečen je z orehovim furnirjem. Na čelni plošči nad tipkovnico je urezana vdolbina za značko izdelovalca, ki pa je prazna. Klavir ima bidermajersko okrasno nogo z dvema pedaloma z vzvojno palico, *una corda* in *forte*. Manjkata dve nogi, a tudi tretja je sekundarnega izvora. O klavirju ni ohranjene dokumentacije.

V notranjosti klavirja je bilo tudi klavirsko stojalo za note, inv. št. N 37677, a tudi o njem nimamo podatkov. Stojalo za note s konca

133 *The Virtual pianoshop*. Dostopno na: <http://www.pianoshop.co.uk/info/pianos/1/lauberger.php>, obiskano: 11. marca 2017.

134 Viktor Šonc, *Slovenska biografija*. Dostopno na: <http://www.slovenska-biografija.si/oseba/sbi661855/>, obiskano: 11. marca 2017.

135 Koncertni klavir je najbrž najbolj znana oblika klavirja. Klavirje delimo gledena dolžino. Pravi koncertni klavir je dolg 290 cm, salonski klavir do 250 cm, najmanjši oziroma kratki ali polkoncertni klavir pa okoli 180 cm. Take klavirje se navadno uporablja za koncerte in v snemalnih studiih, saj imajo vsi toni zelo kakovosten zvok.

The Viennese company Lauberger and Gloss was established in 1881.¹³³

The piano was played by Viktor Šonc (Tomaj, 29th October, 1877 – Ljubljana, 1st September, 1964),¹³⁴ a teacher, choir master, and composer. He studied composition and conducting at the Pargue Conservatory (1901–1904) and took singing lessons at a private school (1903–1904), later he studied with Vitěszlav Novak. He was a headmaster of *Glasbena matica* in Trieste (1911–1927), where he also taught music, led vocal groups, and wrote reviews for the newspaper *Edinost*. During his prolific career he also transcribed and arranged Slovenian folk songs, composed choir, and chamber music and created several longer compositions (a symphonic picture *The Burial of the Pust*, *The Runaway King* – a cantata for solo voices, mixed choir and orchestra).

Piano without Signature

Early 19th century, spruce wood, walnut veneer, brass, ivory, ebony, cast iron, iron, l. 174 cm, w. 125 cm, inv. No. N 37273, restored by: Irma Langus Hribar, 2016.

The piano was shortened,¹³⁵ which is not unusual for the period at the end of the 19th century. It is coated in walnut veneer, on the front board above the keyboard there is a carved indentation where the maker's badge should be. The piano has a decorative Biedermeier leg with two pedals and a pedal rod, *una corda* and *forte*. Two legs are missing and the third leg is of secondary origin. None of the documentation has been preserved for this piano.

Inside the piano there is a music rack, inv. No. N 37677. There is no data on this item either. It dates back to the end of the 19th century, l. 34.5 cm, w. 28.5 cm. It is made of wood and brass and it is not an original part of the piano.

133 *The Virtual pianoshop*. Available at: <http://www.pianoshop.co.uk/info/pianos/l/lauberger.php>, accessed on: 11th March, 2017.

134 Viktor Šonc, *Slovenska biografija*. Available at: <http://www.slovenska-biografija.si/oseba/sbi661855/>, accessed on: 11th March, 2017.

135 The concert grand piano is probably the best known type of piano. The piano is classified according to its length. The concert grand piano is 290 cm long, the ballroom piano is up to 250 cm long, and the smallest pianos are around 180 cm long. Such pianos are usually used for concerts and in recording studios, as all produce a high quality sound.



SI. 44 / Picture 44

Klavir brez
signature / Piano
without Signature
Foto / Photo:
Tomaž Lauko

19. stoletja, d. 34,5 cm, š. 28,5 cm, v. 4,5 cm, je narejeno iz lesa in medenine in ni originalno.

Pianino Stingl

Gebrüder Stingl, Dunaj, Avstrija, od 1900 do 1904, smrekov furniran, rezljan in stružen les, črno lakiran furnir, medenina, porcelan, slonovina, ebenovina, lito železo, železo, v. 149 (127 + 22) cm, š. 150 cm, g. 66 cm, signatura: *Gebrüder Stingl Wien*, inv. št. N 15018, vir: Marija Elizabeta in Marijan Mozetič, 1996,¹³⁶ provenienca: družina Mosettig oziroma Mozetič iz Ljubljane, restavriral: Irma Langus Hribar, 2016.

analogija: Pokrajinski muzej Ptuj Ormož, Kulturnozgodovinski oddelek, inv. št. GL 99 S.

136 Arhiv Narodnega muzeja Slovenije, račun z dne 28. november 1996.

Sl. 45 / Picture 45

Stojalo za
note, ki je bilo
klavirju priloženo
naknadno / Music
rack that was
added to the piano
at a later date
Foto / Photo:
Tomaž Lauko



Stingl Upright Piano

Gebrüder Stingl, Vienna, Austria, 1900 to 1904, spruce veneered, carved and turned wood, lacquered veneer, brass, porcelain, ivory, ebony, cast iron, iron, h. 149 (127 + 22) cm, w. 150 cm, d. 66 cm, signature: *Gebrüder Stingl Wien*, inv. No. N 15018, source: Marija Elizabeta in Marijan Mozetič, 1996,¹³⁶ provenance: the Mosettig or Mozetič family from Ljubljana, restored by: Irma Langus Hribar, 2016.

Analogies: Ptuj – Ormož Regional Museum, Cultural History Department, inv. No. GL 99 S.

The upright piano was bought by Pietro Mosettig on 22nd December, 1904 in the store of A. Pleskovich in Trieste.¹³⁷ The receipt states the company that made the instrument as “Gebr. Stingl de Vienna op. 11847, Cr. 700”. On the inside of the fallboard there is an inscription *Gebrüder Stingl Wien K. u. K. Hof Clavier – Fabrikanten*.

The piano has two pedals. To the left of the keyboard there is a porcelain button with golden trim and inscription *Moderator*. Both of the big front boards feature a decorative floral engraving. On the upper front board there is an inlay of a poppy with leaf border. On

¹³⁶ Archive of the National Museum of Slovenia, Receipt of 28th November, 1996.

¹³⁷ The receipt is kept by Ms. Mozetič.



Pianino je kupil Pietro Mosettig dne 20. decembra 1904 v trgovini A. Pleskovicha v Trstu.¹³⁷ Na računu je kot izdelovalec pianina navedeno podjetje *Gebr. Stingl di Vienna op. 11847, Cr. 700*. Na notranji strani pokrova klaviature je tudi napis *Gebrüder Stingl Wien K.u.K Hof Clavier – Fabrikanten*.

Pianino ima dva pedala. Na levi strani klaviature je porcelanast gumb z žgano zlato obrobo, z napisom *Moderator*. Obe veliki čelni plošči imata dekorativno rastlinsko gravuro. V zgornji čelnici je intarzija, mak z listno obrobo. Na vsaki strani je montiran dvojni medeninasti svečnik. Na vsakem boku je montiran medeninasti ročaj za premikanje pianina.

Podjetje Stingl / Gebrüder Stingl je bilo ustanovljeno leta 1885 na Dunaju. Leta 1935 ga je prevzelo podjetje Lauberger & Gloss¹³⁸ in z

137 Račun hrani ga. Mozetič.

138 Dunajsko podjetje Lauberger & Gloss je začelo delovati leta 1881.

Sl. 47 / Picture 47

Napis na notranji strani pokrova klaviature / Inscription on the inside
Foto / Photo: Tomaž Lauko



each of the sides a brass handle is fitted to enable transport of the instrument.

The Stigl / Gebrüder Stigl company from Vienna, Austria was established in 1885. In 1935 it was acquired by the company Lauberger & Gloss¹³⁸ and continued to operate under the name Stigl – Original. Today it operates under the brand name Ehrbar in Vienna.¹³⁹

The register number on the upright piano, inscribed as *opus* or *op.* tells us that the instrument was made between 1900 (op. 7610) and 1910 (op. 19570), as we are able to calculate almost the exact year of production from it. In 1890 the company already had the opus number 2135, in 1895 – op. 3820, in 1900 – op. 7610, in 1910 – op. 19570, in 1920 – op. 27920 and so on. The upright piano was bought in 1904, therefore we can limit the year of production to the period between 1900 and 1904.

The instrument came with the piano stool from turned wood and textile, 46 cm high, inv. No. N 15019.

Today, the piano can be seen as part of the permanent exhibition of the Historical and Art Collection - The Musical Instruments at the National Museum of Slovenia Metelkova.

138 Lauberger & Gloss from Vienna was founded in 1881.

139 Ehrbar from Vienna was established in 1801, from 1985 it merged with several workshops, i.e. Rudolf Stelzhammer, G. Stigl, and Josef Baumbach into one brand called Ehrbar.

140 imenom *Stingl – Original* delovalo naprej. Zdaj deluje kot podjetje Ehrbar¹³⁹ na Dunaju.

Po registrski številki, ki je napisana na inštrumentu kot opus ali op., lahko ugotovimo, da je bil pianino izdelan med letoma 1900 (op. 7610) in 1910 (op. 19570), saj po registrskih številkah lahko izračunamo skorajda natančno letnico izdelave. Leta 1890 je to podjetje že imelo št. opusa 2135, leta 1895 3820, leta 1900 7610, leta 1910 19570, leta 1920 27920 itn. Ker je bil pianino kupljen leta 1904, lahko letnico izdelave omejimo na čas od 1900 do 1904.

Ob pianinu je bil pridobljen tudi klavirski stolček iz struženega lesa in tekstila, visok 46 cm, z inv. št. N 15019.

Danes je pianino na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.

Klavirsko pregrinjalo

A. Plescovich, Trst, Italija, 1904, volnen filc, vezenina, d. 130 cm, š. 15,5 cm, signatura: *Plescovich, Trieste*, inv. št. N 34594, vir: Urban Magušar.



Sl. 49 / Picture 49

Klavirsko
pregrinjalo / Piano
Keyboard Cover
Foto / Photo:
Tomaž Lauko

Na klaviaturo pianina Stingl, inv. št. N 15018, je položen rdeč zaščitni trak iz okrasnega filca z rastlinskim ornamentom in napisom trgovine, kjer so pianino prodali: *A. Plescovich, Trieste*.

139 Dunajsko podjetje Ehrbar je bilo ustanovljeno leta 1801, leta 1985 pa se je združilo z več delavnicami – Rudolf Stelzhammer, G. Stingl in Josef Baumbach – in se preimenovalo v Ehrbar.

Sl. 48 / Picture 48

Značilni klavirski stolček z navojem za dvigovanje in spuščanje višine sedeža ima štiri navzven ukrivljene nogice, pritrjene na osrednjo čokato os. Sedež je okrogel in oblazinjen. / A typical adjustable piano stool with a thread enabling the seat to be lifted or lowered, with four legs turning outward and fixed to the central axle. The seat is wide and upholstered.

Foto / Photo: Tomaž Lauko



Piano Keyboard Cover

A. Plescovich, Trieste, Italy, 1904, wool felt, embroidery, l. 130 cm, w. 15.5 cm, signature: *Plescovich, Trieste*, inv. No. N 34594, source: Urban Magušar.

The keyboard of the Stingl upright piano, inv. No. 15018, was covered with a protective keyboard cover featuring a floral ornament and the name of the store the instrument was bought from: A. Plescovich, Trieste.

142 Pianino Trautwein

Trautwein, Berlin, Nemčija, 1911, smrekov furniran, rezljan in stružen les, orehov furnir, medenina, slonovina, ebenovina, lito železo, železo, g. 70 cm, v. 166,5 cm, š. 152 cm, signatura: *Trautwein Berlin W*, inv. št. N 37802, vir: družina Adamič, provenienca: Bojan Adamič, restavrirala: Irma Langus Hribar, 2017.



Sl. 50 / Picture 50

Pianino Bojana Adamiča /
Trautwein Upright
Piano
Foto / Photo:
Tomaž Lauko

Pianino Bojana Adamiča ima dva pedala: *una corda* in *forte*. Obe veliki čelni plošči imata dekorativno rastlinsko gravuro. V zgornji čelnici je intarzija. Na vsaki strani je montiran dvojni medeninasti svečnik. Na notranji strani pokrova klaviature je vrezan napis *Trautwein Berlin Wien*. Podjetje Trautwein Pianoforte Berlin deluje od leta 1820.

Na zadnji plošči sta ročaja za premikanje pianina.

Pianino iz leta 1911 je za igranje in skladanje na svojem domu uporabljal skladatelj Bojan Adamič. Pianinu je priložen garancijski

Trautwein, Berlin, Germany, 1911, spruce veneered, carved and turned wood, walnut veneer, brass, ivory, ebony, cast iron, iron, d. 70 cm, h. 166.5 cm, w. 152 cm, signature: *A. Trautwein Berlin W*, inv. No. N 37802, source: the Adamič family; provenance: Bojan Adamič, restored by: Irma Langus Hribar, 2017.

SI. 51 / Picture 51

Signatura na notranji strani pokrova klaviature na klavirju Bojana Adamiča / Signature on Trautwein Upright Piano
Foto / Photo: Tomaž Lauko



SI. 52 / Picture 52

Garancijski list pianina Bojana Adamiča / Warranty for Trautwein Upright Piano
Photo: Photodocumentation of the Department of History and Applied Arts of the National Museum of Slovenia / Foto: Fotodokumentacija Oddelka za zgodovino in uporabno umetnost Narodnega muzeja

Bojan Adamič's upright piano has two pedals, *una corda* and *forte*. Both of the big front boards feature decorative floral engraving. An inscription is carved in the upper board: *Trautwein Berlin Wien*. The company Trautwein Pianoforte Berlin has been active since 1820.

At the back there are two handles enabling the piano to be moved.

The piano was used by Bojan Adamič for playing and composing at his home. The instrument came with a guarantee document. Maridel Adamič, written in at the top of the guarantee, was Bojan Adamič's mother. Adamič practiced on this piano for his Bachelor's degree.

The upright piano was donated to the National Museum of Slovenia by the family of Bojan Adamič.

Today, the piano can be seen as part of the permanent exhibition of the Historical and Art Collection - The Musical Instruments at the National Museum of Slovenia Metelkova.

144 list. Maridel Adamič iz zapisa na vrhu garancijskega lista je bila mati Bojana Adamiča. Z igranjem na ta pianino je Bojan Adamič tudi diplomiral.

Pianino je Narodnemu muzeju Slovenije donirala družina Bojana Adamiča.

Danes je pianino na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.

Bojan Adamič,¹⁴⁰ slovenski skladatelj, dirigent in aranžer, se je rodil 9. avgusta 1912 v Ribnici, svoje bogato življenje je sklenil 3. novembra 1995 v Ljubljani.

Bojan Adamič se je s 13 leti vpisal na Državni konservatorij za klavir (srednja glasbena šola) in končal orgle pri prof. Premrlu, trobento pri prof. Karasu, kompozicijo pa pri prof. Ostercu. Diplomiral je iz klavirja pri prof. Antonu Ravniku leta 1941 na Glasbeni akademiji v Ljubljani, ko je za diplomski izpit

igral Lisztov prvi klavirski koncert. Na Pravni fakulteti je opravil prvi državni izpit in absolutorij.

Njegov pravi umetniški vzpon se je začel takoj po 2. svetovni vojni, ko je kot zrel in izkušen glasbenik razvijal slovensko zabavno glasbo in iskal nove možnosti in poti. Postal je utemeljitelj in vizionar slovenske zabavne glasbe, popevke, šansona, izjemno veliko je ustvarjal na področju filmske in scenske glasbe. Adamičev opus je postal sinonim za ustvarjalnost na področju zabavne glasbe po vsej nekdanji Jugoslaviji.

Njegova velika zasluga je tudi v tem, da se mu je posrečilo izoblikovati profesionalno glasbeno telo – Plesni orkester RTV Ljubljana – in ga tudi popeljati v evropski vrh. Ko so si s koncerti v Jugoslaviji pridobili ugled, so jih vabili na turneje po Poljski, Madžarski in Sovjetski zvezi.



SI. 53 / Picture 53

Bojan Adamič
Foto:
Fotodokumentacija
Oddelka za
zgodovino in
uporabno umetnost
Narodnega muzeja
Slovenije / Photo:
Photodocumentation
of the Department
of History and
Applied Arts of the
National Museum
of Slovenia

140 Več o Bojanu Adamiču v: Darja Koter, *Bojan Adamič, Slovenska glasba 1918–1991*, Ljubljana 2013, str. 234–238.

Bojan Adamič is a Slovenian composer, music arranger and conductor.¹⁴⁰ He was born on 9th August, 1912 in Ribnica and his rich life came to a close on 3rd November, 1995 in Ljubljana.

He entered the National Conservatoire (today Conservatory for Music and Ballet) when he was 13 years old. He finished his organ studies with professor Premrl, trumpet with professor Karas, and composition with professor Osterc. In 1941 he obtained his Bachelor's degree in piano with professor Anton Ravnik at the Academy of Music in Ljubljana. He also passed the first national examination and absolatory at the Faculty of Law in Ljubljana.

His popularity started to grow immediately after World War II, when, as a mature and experienced musician he began developing Slovenian music and looking for new possibilities and directions. He was the founder and a visionary of Slovenian popular music, song, and chanson, and he was prolific in film and stage music. His oeuvre became synonymous with popular music in all the republics of former Yugoslavia.

He was greatly responsible for the formation of the Radio Slovenia Dance Orchestra – a professional musical establishment that he took to the top of European musical creativity. Having built his reputation with concerts in Yugoslavia, the orchestra received invites to tour Poland, Hungary, and the Soviet Union.

He composed over 200 works for Slovenian and foreign films. He also composed popular music and jazz. Inter alia he wrote the first *Planiške fanfare*, otherwise an instrumental arrangement of the popular song *Oj Triglav moj dom*, which was used at the ski-jumping events in Planica.

He did not shy away from any music style, be it classical, chamber, folklore or lied, chanson, pop songs, light orchestra music, stage music or opera (*Moje ljubljeno mesto*), for puppetry (*Žogica marogica*, *Zvezdica zaspanka*), music for radio plays, children's plays, or even the *Veseli tobogan* show. He also composed the *Sneguljčica* (Snow White) musical and arrangements for many brass bands. He borrowed from Slovenian folklore elements as well as those from other countries. He arranged a number of his own and foreign songs not only for dance and symphony orchestras but also for jazz and popular bands.

140 More about Bojan Adamič can be found on Darja Koter, *Bojan Adamič, Slovenska glasba 1918–1991*, Ljubljana 2013, p. 234–238.

146 Napisal je več kot 200 skladb za slovenske in tuje filme. Pisal je tudi popularno glasbo in jazz. Med drugimi je napisal prve *Planiške fanfare*, sicer instrumentalno priredbo pesmi *Oj, Triglav, moj dom*, in sicer za potrebe prireditve v Planici.

Pisal je prav vse zvrsti glasbe, od resne, komorne in folklorne do samospevov, šansonov, popevk, lahke orkestralne glasbe, scenske glasbe za gledališče in opero (*Moje ljubljeno mesto*), za lutke (Žogica Marogica, Zvezdica zaspanka), glasbo za radijske igre, otroške igre, Veseli tobogan. Napisal je muzikal *Sneguljčica* in priredbe za številne pihalne orkestre. Opiral se je na folklorne elemente, a ne samo slovenske. Napisal je več aranžmajev in priredb lastnih in tujih pesmi za plesni in simfonični orkester ter za jazzovske in zabavne ansamble.

Bojan Adamič je bil tudi izvrsten pianist, saj je imel nešteto samostojnih koncertov in koncertov s simfoničnim orkestrom.

Dobil je več nagrad, med njimi tudi tri zlate nagrade za filmsko glasbo v Pulju, nagrado JRT za scensko glasbo, Prešernovo nagrado za ustvarjalni opus v filmu in zabavni glasbi (leta 1979), Ježkovo nagrado za zabavno glasbo (1990) in nagrado viktor za življenjsko delo (1992).

Pianino Germania

Germania, Trst, Italija, po 1903, smrekov les, slonovina, ebenovina, medenina, železo, lito železo, š. 150 cm, v. 138 cm, g. 55 cm, signatura: *Pianoforte Gesellschaft / Germania*, inv. št. N 37502, vir: Tina Mihelič, provenienca: družina Kržmanc, restavriral: Irma Langus Hribar, 2016.

analogija: Tržaški muzej II Civico Museo Teatrale Carlo Schmidl di Trieste hrani pianino tržaške delavnice z značko *Pianoforte Gesellschaft / Germania*, ki je datiran v pozno 19. stoletje.

Rudolf Warbinek (dokumentiran v letu 1895) je bil prvi dokazani ljubljanski izdelovalec klavirjev po Bitencu. V Ljubljani vsaj petdeset let po Bitencu ni bilo aktivnega izdelovalca klavirjev. K temu sta gotovo pripomogla tudi razvoj trgovine in živahnost prometnih poti, saj so velike in pomembne delavnice z Dunaja, iz Gradca in nekaterih nemških mest, kakor je razvidno iz ohranjenih glasbil na Slovenskem, z lahkoto pokrivalo tudi slovensko tržišče. Podjetje Rudolfa Warbineka je imelo sedež v Trstu. Tam je leto prej začelo delovati podjetje *Germania*. Registrirano je bila na ulici Via

Adamič was also an excellent pianist, having performed numerous solo concerts and played with symphony orchestras.

He was awarded various prizes and awards, among which were three top Zlata Arena awards for film music at the festival in Pulj, the JRT (Yugoslav Radio and Television) award for stage music, the Prešeren Award for his oeuvre in film and popular music (1979), Ježek's Award for popular music (1990), and a Viktor for his life work (1992).

Germania Upright Piano

Germania, Trieste, Italy, after 1903, spruce wood, ivory, ebony, brass, iron, cast iron, w. 150 cm, h. 138 cm, d. 55 cm, signature: *Pianoforte Gesellschaft / Germania*, inv. No. N 37502, source: Tina Mihelič, provenance: the Križmanc family, restored by: Irma Langus Hribar, 2016.

Analogies: Il Civico Museo Teatrale "Carlo Schmidl" di Trieste holds an upright piano from a workshop in Trieste with the badge *Pianoforte Gesellschaft / Germania*, dated into the late 19th century.

Rudolf Warbinek (documented in 1895) has been proved to be the first piano maker in Ljubljana after Bitenc. Ljubljana did not have a piano maker for at least 50 years after Bitenc. This was likely due to the development of trade and dynamic transport routes. The instruments preserved in Slovenia show that big and important workshops from Vienna, Graz, and some German cities easily covered the Slovenian market. Rudolf Warbinek's company seat was in Trieste, where a year before the company Germania had been founded. It was registered at Via Felice Venezian 13 under the name J. Schandl and R Wrbinek as *Klavier-Fabrik, Klavuer u.(nd) Harm.(onium) Handlung*.¹⁴¹ The business must have thrived, as Warbinek had enough resources to manage an independent business and store in Ljubljana.¹⁴² We do not know what kind of pianos the company made in Ljubljana, nor how many. In Ljubljana several pianos from this workshop have been preserved through private ownership, though they have not been recorded, apart for the present instrument, which was obtained by the National Museum of Slovenia by way of the event *Podari glasbilo muzeju in ga zapiši v zgodovino*.¹⁴³

141 Koter 2001, p. 124.

142 Koter 2001, p. 133.

143 *Podari glasbilo muzeju in ga zapiši v zgodovino* was an event held in 2016 that encouraged people to unearth old instruments in their ownership and bring them to the National Museum of Slovenia for assessment or donate them to the museum.

148 Felice Venecian 13 z imenom *J. Schandl in R. Warbinek*, in sicer kot *Klavier-Fabrik, Klavier u.(nd) Harm.(onium) Handlung*.¹⁴¹ Posel je očitno cvetel, kajti Warbinek je imel dovolj sredstev za samostojno obrt in prodajalno v Ljubljani.¹⁴² Kakšne klavirje je to podjetje izdelovalo v kranjskem mestu in kolikšen je bil opus, ne vemo. V Ljubljani se je pri zasebnikih še ohranilo nekaj klavirjev te delavnice, vendar niso evidentirani, razen tega, ki smo ga v Zbirko glasbil Narodnega muzeja Slovenije leta 2016 pridobili s pomočjo akcije *Podari glasbilo muzeju in ga zapiši v zgodovino*.¹⁴³

Pianino *Germania* je leta 1903 dobil častno diplomo na obrtni razstavi v Parizu, kot potrjuje tablica z napisom na notranji strani pokrova klaviature: *PIANOFORTE GESELLSCHAFT – GERMANIA / EHREN – DIPLOM PARIS 1903*.

Danes je pianino na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.



SI. 55 / Picture 55

Napis na notranji strani pokrova klaviature na pianinu *Germania* / Signature on *Germania Upright Piano*
Foto / Photo: Tomaž Lauko

Pianino Rosenkranz

Ernst Rosenkranz, Dresden, Nemčija, okoli 1930, smrekov les, lakiran furnir, slonovina, ebenovina, medenina, železo, lito železo, mere: š. 141,5 cm, v. 131,5 cm, g. 66,5 cm, signatura: *Ernst Rosenkranz Dresden*, inv. št. N 37651, vir: družina Jelen, provenienca: družina Jelen, restavriral: Irma Langus Hribar, 2016.

Pianino ima dva pedala. Obe veliki čelni plošči imata dekorativno rastlinsko gravuro.

Na notranji strani pokrova klaviature je pritrjena ploščica z napisom *ERNST ROSENKRANZ DRESDEN*. Podjetje Klavierbaufirma

141 Koter 2001, str. 124.

142 Koter 2001, str. 133.

143 Leta 2016 je bila izvedena akcija *Podari glasbilo in ga zapiši v zgodovino*, s katero smo vzpodbudili javnost, da svoje stare inštrumente prinesejo v Narodni muzej Slovenije v oceno ali pa se odločijo, da jih muzeju podarijo.

SI. 54 / Picture 54

Pianino Germania /
 Germania Upright
 Piano
 Foto / Photo:
 Tomaž Lauko



In 1903 the Germania upright piano was awarded an honorary prize from the Paris trade fair, as proved by the badge from the inside of the fallboard, inscribed: *PIANOFORTE GESELLSCHAFT – GERMANIA / EHREN – DIPLOM PARIS 1903*.

Today, the piano can be seen as part of the permanent exhibition of the Historical and Art Collection - The Musical Instruments at the National Museum of Slovenia Metelkova.

Rosenkrantz Upright Piano

Ernst Rosenkrantz, Dresden, Germany, around 1930, spruce wood, lacquered veneer, ivory, brass, iron, cast iron, w. 141.5 cm, h. 131.5 cm, d. 66.5 cm, signature: *Ernst Rosenkrantz Dresden*, inv. No. N 37651, source: the Jelen family, provenance: the Jelen family, restored by: Irma Langus Hribar, 2016.

The upright piano has 2 pedals. Both of the big front boards feature decorative floral engraving. On the inside of the fallboard there is a badge inscribed *ERNST ROSENKRANTZ DRESDEN*. The Klavierbaufirma Rosenkrantz was set up by Ernst Rosenkrantz

150 Rosenkranz je leta 1797 v Dresdnu ustanovil Ernst Rosenkranz. Podjetje je delovalo do leta 1945.¹⁴⁴

Na zadnji plošči sta ročaja za premikanje pianina.

Danes je pianino na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.



Sl. 56 / Picture 56

Pianino
Rosenkranz /
Rosenkranz
Upright Piano
Foto / Photo:
Tomaž Lauko

Harmonij Hörügel

Max Hörügel, Leipzig, Nemčija, 1906, smrekov les, hrastov furnir, medenina, železo, porcelan, plastika, mere: d. 58 cm, š. 114 cm, v. 120 cm, signatura: *M. Hörügel*, inv. št. N 37668, vir: Avgust Fink, provenienca: Drago Karel Strniša in Avgust Fink, restavriral: Irma Langus Hribar, 2016.

Analogija: Muzej Velenje, inv. št. MV / ZG 1.

Harmonij znamke Hörügel (*Hof-Harmonium und Pianofabrik*) ima pet registrov in je bil izdelan maja 1906 v Leipzigu.

Firma Hörügel (*Hof-Harmonium und Pianofabrik*) je delovala v Nemčiji od leta 1893 do 1953 in je bila največja tovarna za izdelavo harmonijev na evropski celini.¹⁴⁵

144 *Klavierbaufirma Rosenkranz*. Dostopno na: http://www.dresdner-stadtteile.de/Zentrum/Johannstadt/Strassen_Johannstadt/Klavierbaufirma_Rosenkranz/klavierbaufirma_rosenkranz.html, obiskano: 11. marca 2017.

145 *Harmoniumnet.nl, Hörügel Hof-Harmonium und Pianofabrik*. Dostopno na: <http://www.harmoniumnet.nl/horugel.html>, obiskano: 11. marca 2017.

in 1797 in Dresden and continued to operate until 1945.¹⁴⁴ Two handles on the back enable the piano to be moved.

Today, the piano can be seen as part of the permanent exhibition of the Historical and Art Collection - The Musical Instruments at the National Museum of Slovenia Metelkova.

Sl. 57 / Picture 57

Signatura na
notranji strani
pokrova klaviature
na pianinu
Rosenkranz /
Signature on
Rosenkranz
Upright Piano
Foto / Photo:
Tomaž Lauko



The Hörügel Harmonium

Max Hörügel, Leipzig, Germany, 1906, spruce wood, oak veneer, brass, iron, porcelain, plastics, l. 58 cm, w. 114 cm, h. 120 cm, signature: *M.*

Hörügel, inv. No. N 37668, source: Avgust Fink, provenance: Drago Karel Strniša and Avgust Fink, restored by: Irma Langus Hribar, 2016.

Analogies: Velenje Museum, inv. no. MV / ZG 1.

The Hörügel (Hof-Harmonium und Pianofabrik) harmonium has five registers and was made in May 1906 in Leipzig. Hörügel company from Germany (1893–1953) was one of the biggest harmonium factories in Europe.¹⁴⁵

The owner of this harmonium was Drago Karel Strniša, who got it from his grandfather. Drago Karel Strniša was born in 1893 in the village Sela near Šumberk in Suha Krajina. He was considered a musical prodigy, so he went to Ljubljana and later to Vienna to become an organist. Having concluded his studies he played professionally as an organist and worked as a sexton in various churches and parishes in Lower Carniola. From 1921 and until his retirement he worked in the Šentrupert parish. In addition to his regular work, he led amateur choirs, tamburiza orchestras,

¹⁴⁴ *Klavierbaufirma Rosenkranz*. Available at: http://www.dresdner-stadtteile.de/Zentrum/Johannstadt/Strassen_Johannstadt/Klavierbaufirma_Rosenkranz/klavierbaufirma_rosenkranz.html, accessed on: 11th March, 2017.

¹⁴⁵ *Harmoniumnet.nl, Hörügel Hof-Harmonium und Pianofabrik*. Available at: <http://www.harmoniumnet.nl/horugel.html>, accessed on: 11th March, 2017.



Sl. 58 / Picture 58

Harmonij Hörügel

/ The Hörügel

Harmonium

Foto / Photo:

Tomaž Lauko

Harmonij je bil v lasti Draga Karla Strniše, ta pa ga je dobil od svojega starega očeta. Drago Karel Strniša se je rodil leta 1893 v vasi Sela pri Šumberku v Suhi Krajini. Kot glasbeni talent se je v Ljubljani in pozneje na Dunaju izučil za organista in nato opravljal profesionalno delo organista in cerkovnika v različnih cerkvah in župnijah na Dolenjskem, in to od leta 1921 do upokojitve v župniji Šentrupert. Ob svojem delu je poleg cerkvenih vodil tudi kulturno-prosvetne zборе, tamburaške orkestre, spevoigre, organiziral koncerte in kot organist gostoval ob pomembnejši dogodkih v cerkvah po Dolenjski.

Na harmoniju so igrali Drago Karel Strniša in njegovi učenci. V uporabi ga je imel do smrti 1969. Potem ga je prevzel Avgust Fink in ga leta 2016 podaril Narodnemu muzeju Slovenije.¹⁴⁶

146 Po ustnem izročilu Avgusta Finka.

SI. 59 / Picture 59

Drago Karel Strniša za harmonijem /
Drago Karel Strniša at his Harmonium
Foto: Fotodokumentacija Oddelka za
zgodovino in uporabno umetnost Narodnega
muzeja Slovenije / Photo: Photodocumentation
of the Department of History and Applied Arts
of the National Museum of Slovenia



and musical theatre, he organised concerts, and he also guested for important church events as organist in churches across Lower Carniola.

The harmonium was played by Drago Karel Strniša and his students until Strniša's death in 1969, when it passed into the hands of Avgust Fink. Fink donated the instrument to the National Museum of Slovenia in 2016.¹⁴⁶

¹⁴⁶ Avgust Fink oral testimony.

Harmona, Češka, 1955,
plastika, kovina, d. 65 cm,
š. 34 cm, v. 20 cm, signatura:
Harmona, inv. št. N 37537,
vir: Stanislav Kocjan,
provenienca: mešani pevski
zbor gradbenega podjetja
v Ljubljani, restavriral: Igor
Ravbar, 2016.

analogija: Takšni harmoniji,
industrijski izdelki za vodenje
zborovskih vaj, so bili
množični po vsej vzhodni
Evropi.



Električni harmonij s petimi registri je odličen za učenje igranja cerkvenih orgel ali vodenje zbora.

Stanislav Kocjan, darovalec harmonija Narodnemu muzeju Slovenije, je delal v znanem ljubljanskem podjetju kot arhivar. Okrog leta 2004 se je začela rekonstrukcija stavbe v centru mesta, ki bi morala biti končana do slovesnega odprtja in seje vodstva. Časa za selitev stvari in arhiva je bilo zelo malo, večina stvari je bila že prej odnešena. Knjige so podarili šolam, dijakom, študentom in pozneje raznim ustanovam. Nekega dopoldneva so začeli rušiti predelne stene v kleti stavbe, čeprav so bile v stavbi še stvari. Zato so delavci reševali stvari še tik pred rušenjem in ob rušenju z bagrom, čeprav je bilo to nevarno. V zadnji sobi so bile stvari civilne zaščite in tam je delavec zaklical: „*HARMONIKA! HARMONIKA! Ali lahko vzamem in zaigram?*“ Bil je harmonij, še ohranjen, zato so ga dali v arhiv. Stanislav Kocjan je ugotovil, da še deluje, da je bil verjetno last mešanega pevskega zbora podjetja, ki tudi še deluje, in da oni že imajo moderen elektronski inštrument za vaje pevcev.¹⁴⁷

Sl. 60 / Picture 60
Harmonij Harmona /
Harmona Electric
Organ
Foto / Photo:
Tomaž Lauko

147 Po ustnem izročilu Stanislava Kocjana.

Harmona, Czechoslovakia, 1955, plastics, metal, l. 65 cm, w. 34 cm, h. 20 cm, signature: *Harmona*, inv. No. N 37537, source: Stanislav Kocjan, provenance: mixed choir of a Ljubljana construction company, restored by: Igor Ravbar, 2016.

Analogies: This type of harmonium, an industrial product used for the choir practice, was very popular across entire Eastern Europe.

Sl. 61 / Picture 61

Signatura na harmoniju
Harmona /
Signature on
Harmona Electric
Organ
Foto / Photo:
Tomaž Lauko



The electric organ with five registers is excellent for learning to play church organs or for work with a choir.

Stanislav Kocjan, who donated the instrument to National Museum of Slovenia, worked for a well-known company in Ljubljana as an archivist. In 2004 a reconstruction of a building in Ljubljana began in the city centre, with the deadline accompanied by an extraordinary session of the management and with the ceremonial opening of the newly renovated building. There was not much time to move the archive and other material objects, and many of them had already been removed. Books were donated to schools and students and various other institutions. However, the demolition of partition walls in the building's basement began before the building was completely emptied and construction workers tried to save various objects right before the excavator was brought in. At one point a worker shouted: "*ACCORDION! ACCORDION! Can I take it and play it?*" It was actually an electric organ; most likely it belonged to the company choir, which was still active at that time, but also owned another, more modern instrument used for choir rehearsals.¹⁴⁷

¹⁴⁷ Stanislav Kocjan oral testimony.

Harmonika je skupno ime za glasbila z značilnim gubastim mehkom, ki ga stiskamo in raztezamo ter tako dovajamo zrak do prenihajočih jezičkov.¹⁴⁸ Jezička sta dva, eden za vses in eden za izpuh zraka, zato sodi harmonika med aerofone (zrakovna glasbila). Na harmoniko igramo s pritiskanjem na tipke in gumbe ter s stiskanjem in raztezanjem meha. S tipkovnico nadziramo ton in višino glasu.

Harmoniko odlikujejo pravilno pripravljen material, akustična konstrukcija, ergonomska oblika in odlična mehanika.¹⁴⁹

Poznamo več vrst harmonik:

- Klavirsko harmoniko sestavljajo, kot pri klavirju, črno-bele tipke na desni strani in basi na levi.
- Diatonična harmonika,¹⁵⁰ pogovorno frajtonar'ca, sicer pa tudi gumbna ali prostotonska harmonika, je pravzaprav ljudsko glasbilo. Namesto črno-belih tipk ima gumbe, pri basih pa malo drugačne gumbe kot pri klavirski harmoniki in tudi manj jih je.
- Kromatična harmonika je tip harmonike, ki združuje klavirsko in diatonično harmoniko. Na desni strani ima gumbe, tako kot pri diatonični harmoniki, na levi strani pa popolnoma enake base kot pri klavirski harmoniki.

148 *How Products Are Made, Accordion*. Dostopno na: <http://www.madehow.com/Volume-3/Accordion.html>: obiskano: 11. marca 2017.

149 Grove 1, 2014, str. 6.

150 Diatonična harmonika je vrsta harmonike, za katero je značilno, da pri stiskanju meha na določeni tipki proizvaja en ton, pri vlečenju pa drugega, zato diaton. Pred klavirsko in kromatično harmoniko ima prednost na basnem delu, kjer ima vgrajene helikonske glasilke, ki pri igranju oddajajo dovolj močan zvok, da morebitni plesalci dobro slišijo ritem.

Zmotno je mišljenje, da se diatonični harmoniki reče prostotonska harmonika ali z nemško popačenko »*frajtonar'ca*«, ker se glasba nanjo izvaja prosto. Pravzaprav bi vsem harmonikam lahko rekli prostotonske ali *frajtonar'ce*, a je to ime dobila predvsem diatonična. To so izdelali v 19. stoletju, klavirsko in kromatično pa med 1. in 2. svetovno vojno.

Diatonična harmonika je izdelana iz treh sklopov: desnega, diskantnega dela, kjer je več gumbov, meha in basnega dela, kjer so trobente. Leseni elementi so izdelani iz resonančne smreke, nosilni elementi pa iz hruškovega, orehovega ali javorjevega lesa. Glasilke so vgrajene v diskantni in basovski del harmonike ter imajo aluminijasto ohišje, igralno pero pa je iz vzmetnega švedskega jekla. Meh je izdelan iz lepenke, ki je na zgibih prevlečena z ovčino. (Dostopno na: <http://www.accordion.co.uk/accordion-faq.html>, obiskano: 11. marca 2017.)

ACCORDION

Accordion is a generic term for instruments with characteristic pleated bellows that are compressed and expanded to supply air to the reeds. There are two types of reeds; one functions when the air goes in and the other when the air goes out.¹⁴⁸ Thus, accordions belong to the group of aerophones. The instrument is played by way of compressing and extending the bellows while pressing the buttons or keys on the keyboard. The keyboard controls the tone and the pitch of the sound.

The accordion features well-prepared material, acoustic construction, ergonomic form, and excellent mechanics – action.¹⁴⁹

There are several types of accordion:

- The piano accordion, featuring piano-like black and white keys on the right hand side and bass on the left.
- The diatonic accordion,¹⁵⁰ or *frajtonar'ca* in colloquial terms, is a button or free-reed accordion and is in essence a folk instrument. Instead of black and white keys it features buttons; there are fewer bass buttons, which differ from those of the piano accordion.
- Chromatic accordion combines the piano and diatonic accordions. It is a button accordion (on the right hand side), like the diatonic, while the bass buttons on the left are the same as those of the piano accordion.

¹⁴⁸ *How Products Are Made, Accordion*. Available at: <http://www.madehow.com/Volume-3/Accordion.html>, accessed on: 11th March, 2017.

¹⁴⁹ Grove 1, 2014, p. 6.

¹⁵⁰ Each button on the diatonic accordion produces two sounds, one when the bellows are compressed and another when the bellows are extended, hence the name diatonic. Its advantage when compared to the piano or chromatic button accordions is at the bass end, where the diatonic accordion features Helikon reeds that produce a sound powerful enough for the dancers to hear the rhythm.

It would be wrong to call the diatonic button accordion a free-reed accordion or *frajtonar'ca*, to use a Germanised word, only because music is played freely. Actually a free-reed accordion or *frajtonar'ca* could be any type of accordion. However, the diatonic accordion was given this name as it was the first to appear in the 19th century. The piano and the chromatic button accordions both appeared between World War I and World War II.

The diatonic accordion has three parts; the treble (the right hand side, which has more buttons), the bellows, and the bass (the trumpets). The wooden parts are made of spruce wood, while the support elements are made of pear tree, walnut, or maple. The reeds in the treble and the bass are made of aluminium casing, the feather is made of Swedish spring steel. The bellows are cardboard, covered in lambskin where the material is folded. (Available at: <http://www.accordion.co.uk/accordion-faq.html>; accessed on: 11th March, 2017.)

Diatonična harmonika Draga Janca

Drago Janc, 1938, smrekov les, hruškov les, aluminij, jeklo, plastična masa, usnje, škatla: d. 38,5 cm, š. 41,5 cm, v. 21 cm, harmonika: d. 37,5 cm, š. 33 cm, v. 19 cm, signatura: *Drago Janc*, inv. št. N 37484, vir: Terezija Grobelnik, provenienca: Dominik in Zvone Grobelnik.



SI. 62 / Picture 62

Harmonika Draga
Janca / Drago
Janc's Accordion
Foto / Photo:
Tomaž Lauko

Diatonično harmoniko je izdelal Drago Janc, dober izdelovalec harmonik iz okolice Ljubljane. Njen prvotni lastnik je bil Dominik Grobelnik, tast Terezije Grobelnik, ki je harmoniko podarila Narodnemu muzeju Slovenije. Kupljena je bila na razstavi glasbil v Celju leta 1938. Za tiste čase je bila zelo draga, stala je namreč 4800 dinarjev. Dominik Grobelnik je bil gospodar siromašne kmetije v Gorah nad Zidanim mostom, kjer je imel v oskrbi nekaj panjev čebel. Tam je več let nabiral vosek in si z danarjem od prodaje kupil harmoniko. Leta 1952 je sin Zvone Grobelnik (darovalkin mož) odšel od doma in od očeta za doto dobil harmoniko.¹⁵¹

¹⁵¹ Arhiv Narodnega muzeja Slovenije, Pismo Terezije Grobelnik z dne 1. maja 2016, ki ga je priložila ob predaji harmonike Narodnemu muzeju Slovenije.

Drago Janc, 1938, spruce wood, pear wood, aluminium, steel, plastics, leather, box: l. 38.5 cm, w. 41.5 cm, h. 21 cm, accordion: l. 37.5 cm, w. 33 cm, h. 19 cm, signature: *Drago Janc*, inv. No. N 37484, source: Terezija Grobelnik, provenance: Dominik in Zvone Grobelnik.

The diatonic accordion was made by Drago Janc, a skilled accordion maker from the Ljubljana area. Its first owner was Dominik Grobelnik, the father-in-law of Terezija Grobelnik, who donated the instrument to the National Museum of Slovenia. It was bought at the exhibition of musical instruments in Celje in 1938. At that time the price for the instrument was rather high, costing 4,800 dinars. Dominik Grobelnik was an owner of a poor farm in Gore above Zidani most, where he took care of several beehives. For years he gathered beeswax, which he then sold and bought an accordion. When his son Zvone Grobelnik (the donator's husband) left home in 1952, his father gave him the accordion as a parting gift.¹⁵¹

Barcarola Piano Accordion

Barcarola, Germany, first half of the 20th century, leather, plastics, l. 37 cm, w. 16 cm, h. 33.5 cm, signature: *Barcarola*, inv. No. N 37485, source: Nenad Firšt, provenance: the Firšt family, restored by: Igor Ravbar, 2016.

The piano accordion with 80 basses and five registers in the root and 3 in the bass was donated to the National Museum of Slovenia by the Slovenian composer, conductor and violinist Nenad Firšt. His family in Celje had kept the Barcarola accordion from at least 1940. The instrument was made in Germany and the sound quality and technical characteristics make it nearly identical to the better known Weltmeister Royal Standard accordions.

Firšt's mother was given the piano accordion by a Jewish family from Zagreb right before the start of World War II.¹⁵²

151 Archive of the National Museum of Slovenia, Tereza Grobelnik's letter of 1st May, 2016, handed over to the National Museum of Slovenia together with the accordion.

152 Nenad Firšt oral testimony.

Barcarola, Nemčija, prva polovica 20. stoletja, usnje, plastična masa, d. 37 cm, š. 16 cm, v. 33,5 cm, signatura: *Barcarola*, inv. št. N 37485, vir: Nenad Firšt, provenienca: družina Firšt, restavriral: Igor Ravbar, 2016.

Klavirsko harmoniko z 80 basi, ki ima 5 regitrov v primu in 3 v basu, je Narodnemu muzeju Slovenije podaril slovenski skladatelj, dirigent in violinist Nenad Firšt. V njegovi družini v Celju so harmoniko znamke Barcarola hranili vsaj od leta 1940. Harmonika je bila izdelana v Nemčiji in po kakovosti tona in tehničnih značilnostih skoraj identična bolj znanim harmonikam podjetja Weltmeister Royal Standard.

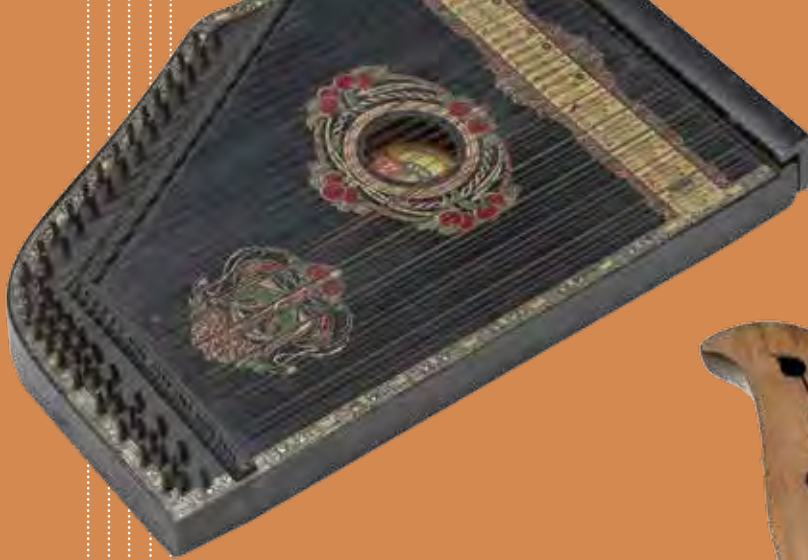
Darovalčeva stara mama je klavirsko harmoniko tik pred začetkom druge svetovne vojne dobila za darilo od neke zagrebške judovske družine.¹⁵²

152 Po ustnem izročilu Nenada Firšta.

Sl. 63 / Picture 63

Harmonika Barcarola /
Barcarola Accordion
Foto / Photo: Tomaž Lauko





BRENKALA

Brenkala so glasbeni inštrumenti, ki jih uvrščamo v isto skupino glasbil zaradi načina izvajanja. Nanje brenkamo, a ker so brenkala strunski inštrumenti, jih lahko imamo tudi za kordofone inštrumente.

Čeprav tudi na te inštrumente lahko igramo na različne načine (npr. godalne citre), je splošna razdelitev brenkal dovolj dosledna.

Posebno mesto bi sicer lahko imela družina električnih kitar, saj tudi pri njih brenkamo na strune, vendar sta za to potrebna električni tok in ozvočenje, zato jih prištevamo k elektrofonim glasbenim inštrumentom.



PLUCKED STRING INSTRUMENTS

Plucked string instruments comprise a group of musical instruments classified according to the way they are played. They are plucked, and as they are string instruments they belong into the group of chordophones.

Despite the various ways these instruments can be played (e.g. the bowed zither) the general classification of plucked string instruments is consistent enough.

The family of electric guitars, which are plucked, could have a place in this group. However, since they can only be played when connected to the electric circuit and to the sound system, they are classified under the category of electric musical instruments.

Citre so ljudsko strunsko glasbilo iz družine brenkal, razširjeno predvsem v alpskih deželah. Imenujejo jih tudi klavir preprostega človeka. Imajo od 30 do 45 strun, od tega 4 ali 5 melodijskih, preostale so spremljevalne. Na melodijske strune igramo s trzalico, na spremljevalne pa s prsti levece. Izvor ni jasen, dokazano pa je, da so že antična ljudstva igrala na inštrumente, podobne današnjim citram.

Glasbilo podolgovate oblike s strunami, na katero se z desnico brenka, z levico pa prebira strune, na Slovenskem na splošno imenujemo citre, ne glede na to, ali so domač ali tovarniški oz. obrtniški izdelek. Glasbilo je narejeno iz podolgovate nizke lesene skrinje, po navadi z izbočeno zunanjo daljšo stranico, in ima na zgornji plošči položno napete različno uglasene strune. Melodijske strune so napete čez ubiralko s prečkami za prijeme. Kupilne, taki imenovane akordične ali koncertne citre so bile ob koncu 19. stoletja priljubljene zlasti po trgih in mestih za hišno muziciranje. Ker so jih dobivali večinoma od avstrijskih ali nemških izdelovalcev, so jih imenovali tudi nemške citre, za razliko od slovenskih, doma narejenih, ki so bile v rabi na podeželju.

Domače citre

Slovenija, 19. stoletje, smrekov les, železo, medenina, d. 61 cm, š. 30 cm, v. 8 cm, inv. št. N 36589, vir: Grebenčeva zbirka,¹⁵³ provenienca: Anton Thangi, Zbirka Grebenc, restavriral: Irma Langus Hribar, 2015.

analogije: Slovenski etnografski muzej, inv. št. 20 630:LJU;0022645; Loški muzej, inv. št. E 2639.

153 Predmeti iz zasebne Grebenčeve zbirke, ki jih je po vsej Sloveniji nabral prof. Oton Grebenc sam ali pa so mu jih prinašali njegovi študenti v prvi polovici 20. stoletja, so inventarizirani v stari inventarni knjigi Narodnega muzeja Slovenije od inventarne številke 11000 do 13797. Omenjene predmete je 26. junija 1929 odkupila Oblastna samouprava oblasti ljubljanske za 100.000 dinarjev in je zaprosila tedanje ravnateljstvo Narodnega muzeja, da jih začasno prevzame v svojo hrambo, zbirko uredi in varuje pred vsako poškodbo. Ko bi Oblastna samouprava ustanovila poseben obrtno-trgovski muzej, bi se zbirka prenesla tja. Ker posebni obrtno-zgodovinski muzej ni bil nikoli ustanovljen, je tedanji ravnatelj dr. Josip Mal predmete Grebenčeve zbirke priključil Narodnemu muzeju, ta pa je tudi priskrbel kupnino za omenjeno zbirko. V naslednjih letih se je za Grebenčevo zbirko začelo zanimati tedanje ravnateljstvo Etnografskega muzeja s pripombo, da so predmeti večji del etnografski. Spor je trajal več let in svoje mnenje o zbirki so izrazili tudi nekateri strokovnjaki, med njimi prof. Albert Sič. Ta je v dopisu z dne 3. aprila 1945 zbirko označil za »obrotno trgovsko«, ker je le osnova etnografska, vse drugo je le izumetničenje in moderniziranje. Zbirka naj ne bi sodila v Etnografski muzej, marveč v umetno trgovinstvo.

ZITHER

The zither is a folk instrument from the family of plucked string instruments. It is mostly found in the Alpine countries. They are also called a poor man's piano. They feature 30 to 45 strings, four or five of them being fretted melody strings, and the rest are accompaniment strings. The melody is played with the fingers of the left hand on the melodic strings while the right thumb plucks the melodic strings with the help of the metallic thumb-pick (plectrum). The three middle fingers of the right hand pluck the accompanying strings. The origin of the zither is not clear. However, it has been proved that people played instruments similar to the zither already in ancient times.

In Slovenia this elongated instrument with strings played by plucking the strings is generally called *citre*, regardless of the instrument's production origin, be it home-made, factory-made, or a craftsman's product. The instrument features an elongated wooden box, and the longer outer side usually curves away from the player. The accompanying strings, each tuned individually, are placed across the upper board and the melodic strings are tightened across the fingerboard (fret board) and the nuts with string slots. At the end of the 19th century chord and concert zithers were a very popular instrument to be played at home, especially in towns and cities. They were mostly procured from the Austrian or German makers, and as such they could also be called the German zither, unlike home-made Slovenian zithers that were played in rural areas.

Home-made Zither

Slovenia, 19th century, spruce wood, iron, brass, l. 61 cm, w. 30 cm, h. 8 cm, inv. No. N 36589, source: Grebenc's Collection,¹⁵³ provenance: Anton Thangi, Oto Greben Collection, restored by: Irma Langus Hribar, 2015.

Analogies: Slovene Ethnographic Museum, inv. No.

20630:LJU;0022645; Škofja Loka Museum, inv. No. E 2639.

153 The objects from the private collection of Oto Grebenc were collected from across Slovenia by Grebenc or his students in the first half of the 1900s. They were entered into the old Inventory Ledger of the National Museum of Slovenia under inv. No. 11000 to 13797. These objects were purchased on 26th June, 1929 by the Self-Management of the Oblast of Ljubljana for 100,000 dinars. The Oblast asked the then management of the National Museum to keep the collection temporarily, as well as to organise it and protect it from damage. Had the Oblast Self-Management established a craft and trade museum, the collection would have been moved there. Since that did not happen, the Museum Director Josip Mal, PhD, annexed Grebenc's collection to that of the

Domače citre /
Home-made Zither
Foto / Photo:
Tomaž Lauko



Domače ali rustikalne bordunske citre so izdelane iz lesa iglavca. Leva stran z rogljem za prenašanje inštrumenta in desna stran sta tesani iz lesenega bloka. Pokrov z zvočnico zgoraj (2 deščici) in dno (2 deščici) sta iz 11 mm debele smrekovine, enako spodnja obodna deščica. Zgornja obodnica (pod okrogolino nad zvočnico) je žagana v krivuljo. Zvočna skrinja je lužena temnorjavo, robovi so obarvani črno.

Citre so brez strun, za napenjala so uporabljeni železni vijaki.

Na hrbtni strani je napis: *Grebenc, Občina Bučka, kraj Močvirje 6, Anton Thangi, 1920 l.*

Takšne citre so ljudje sami izdelovali doma, nanje pa so igrali tako, da so z lipovo paličico drgnili po strunah.

Predmeti Grebenčeve zbirke izhajajo iz območij:

Gorenjska: – okraj Škofja Loka: Sorica, Dražgoše, Zali Log, Železniki, Škofja Loka, Furgtal, Puštal, Ljubno, Ločnica ob Sori, Hoste, Sopotnica, Selce, Dolenja vas; – okraj Radovljica: Kranjska Gora, Gozd, Srednji Vrh, Podkoren, Mojstrana, Dovje, Radeče, Koprivnik, Ljubno, Bled, Gorjuše, Bela Peč, Kropa, Jamnik, Kamna Gorica; – Kamnik in okolica; – Velesovo, Tržič; – Moravska dolina.

Dolenjska: Velika Loka, Male Pece, Stranska vas, Trška Gora, Kočevje, Krška vas, Muljava, Sv. Jurij, Grosuplje.

Štajerska: Celje, Slovenske Konjice in okolica.

Notranjska: neopredeljeno.

Primorska: Vipava, Col, Tolmin.

Bela krajina: Adlešiči, Stari trg, Metlika, Črnomelj.

Ljubljana in okolica: Šiška, Dravljje, Gameljne.

Home-made or rustic drone zithers are made from the wood of a coniferous tree. The left hand side with a horn, which enabled the instrument to be carried and moved, and the right hand side are carved from the same block of wood. The cover with the sound hole (2 wooden boards) and the back (2 wooden boards) are from 11 mm thick spruce wood, the same as the rib panel facing the player. The rib panel facing away from the player (under the curve and above the sound hole) is cut in a curve. The sound box is stained dark brown and the rims are painted black.

The zither has no strings, iron screws were used as fine tuners.

There is an inscription on the back: *Grebenec, Občina Bučka, kraj Močvirje 6, Anton Thangi, 1920 l.*

This is the type of zither people would make at home. They played them by pulling a stick over the strings.

National Museum. The National Museum also provided financial funds for the purchase of the collection. In the following years the management of the Ethnographic Museum showed interest in the objects from Grebenec's collection as they considered them to be ethnographic heritage. The dispute went on for several years, during which various experts expressed their opinions on the collection. Among them was Albert Sič, whose letter of 3rd April, 1945 defines that the type of collection must be "craft and trade", with only the fundamentals having ethnographic quality; all the rest he considered contrived and over-modernised. In his opinion the collection did not belong into the Ethnographic Museum, but should become part of art trade.

The objects of the Oto Grebenec's Collection come from:

Upper Carniola – the Škofja Loka district: Sorica, Dražgoše, Zali Log, Železniki, Škofja Loka, Furgtal, Puštal, Ljubno, Ločnica ob Sori, Hoste, Sopotnica, Selce, Dolenja vas; – Radovljica district: Kranjska Gora, Gozd, Srednji Vrh, Podkoren, Mojstrana, Dovje, Radeče, Koprivnik, Ljubno, Bled, Gorjuše, Bela Peč, Kropa, Jamnik, Kamna Gorica; – Kamnik and its surroundings; – Velesovo, Tržič; – the Moravče valley

Lower Carniola: Velika Loka, Male Pece, Stranska vas, Trška Gora, Kočevje, Krška vas, Muljava, Sv. Jurij, Grosuplje.

Styria: Celje, Slovenske Konjice in okolica.

Inner Carniola: n/a.

Slovene Littoral: Vipava, Col, Tolmin.

Bela krajina: Adlešiči, Stari trg, Metlika, Črnomelj.

Ljubljana and surroundings: Šiška, Dravlje, Gameljne.

Nemčija, konec 19. stoletja, smrekov les, hruškov les, orehov les, orehov furnir, biserna matica, žamet, kovina, papir, škatla: d. 55 cm, š. 34 cm, v. 10 cm, citre: d. 49,5 cm, š. 31 cm, v. 6 cm, inv. št. N 36584, vir: Marija Rihar, 1921 (150 dinarjev), provenienca: družina Rihar iz Mekinj pri Kamniku, restavriral: Irma Langus Hribar, 2016.

Analogija: Loški muzej, inv. št. ZG/1245.



Citre so položene v furnirano in intarzirano kaseto s preklopnim pokrovom. Kaseto iz lesa iglavca je prevlečena z orehovim furnirjem, na pokrovu sta intarzirana upodobitev lire in intarziran violinski ključ. V notranjem delu resonančne skrinjice je slika z vrtnico, ki raste čez knjigo.

Citre imajo plosko in plitvo resonančno telo. Pokrov in dno sta izdelana iz smrekove plošče in oblečena v orehov furnir.

Strune so napete prek trupa in razdeljene na melodijske in spremeljevalne. Pet melodijskih strun obsega 4 oktave in potekajo prek sedelca na strunik, kjer so pritrjene s posebnimi zatiči, na drugem koncu pa potekajo prek drugega sedelca do mehanike, s katero melodijske strune uglašujemo. Pod melodijskimi strunami je na pokrov trupa pritrjena ubiralka iz hruškovega lesa, z razvrščenimi prečkami. Na ubiralki so tudi očesca.

Sl. 65 / Picture 65

Citre brez signature / Zither without Signature
Foto / Photo: Tomaž Lauko

Germany, end of the 19th century, spruce wood, pear-tree wood, walnut wood, walnut veneer, mother of pearl, velvet, metal, paper, box: l. 55 cm, w. 34 cm, h. 10 cm, zither: l. 49.5 cm, w. 31 cm, h. 6 cm, inv. No. N 36584, source: Marija Rihar, 1921 (150 dinars), provenance: the Rihar family from Mekinje near Kamnik, restored by: Irma Langus Hribar, 2016.

Analogies: Škofja Loka Museum, inv. No. ZG/1245.

The zither is in a veneered and inlaid case with a folding cover. The case made of wood from a coniferous tree is lined in walnut veneer; on the cover there is an inlay of a lyre and a treble. On the inside of the zither there is a picture of a rose growing over a book.

The instrument has a flat and shallow sound box. The cover and the bottom are made of spruce board and are lined in walnut veneer.

The melodic and the accompanying strings are placed over the body of the instrument. Five melodic strings range over four octaves and are lined over the saddle onto the tailpiece, where they are tightened with special pins. On the other side the strings go over the saddle to the mechanics used to tune the melodic strings. The melodic strings are placed above the fret board made of pear-tree wood and lined with nuts and mother-of-pearl dots.

Concert Zither

Around 1900, zither: spruce wood, ebony, brass, iron, bone, casing: cardboard, artificial material, zither: l. 55 cm, w. 29.5 cm, h. 4.5 cm, casing: l. 60 cm, w. 36 cm, h. 8 cm, inv. No. N 37545, source: Maja Tratnik, restored by: Irma Langus Hribar, 2016.

Analogies: Škofja Loka Museum, inv. No. ZG/977.

The concert zither comes with its own casing, in the pocket of the casing there is a tuning key.

The instrument has a flat and shallow sound box. The cover and the bottom are made of spruce wood and lined in veneer. The cover and the bottom are connected mechanically with a sound post – a piece of spruce functioning as a conductor of vibration from the cover to

Okoli 1900, citre: smrekov les, ebenovina, medenina, železo, kost, škatla za prenašanje: karton, umetna masa, citre: d. 55 cm, š. 29,5 cm, v. 4,5 cm, škatla: d. 60 cm, š. 36 cm, v. 8 cm, inv. št. N 37545, vir: Maja Tratnik, restavriral: Irma Langus Hribar, 2016.

Analogija: Loški muzej, inv. št. ZG/977.

Koncertne citre imajo pripadajočo zaščitno škatlo, v predalčku škatle je priložen ključ za napenjanje strun.

Citre imajo plosko in plitvo resonančno telo. Pokrov in dno sta izdelana iz smrekove plošče ter oblečena v furnir. Pokrov in dno sta mehansko povezana prek duše, s kosom smrekovega lesa, ki prenaša nihanje pokrova na dno. Spodaj je pokrov še dodatno ojačan z rebri.

Strune so napete prek trupa in razdeljene na melodijske in spremljevalne. Pet melodijskih strun obsega 4 oktave in potekajo prek sedelca na strunik, kjer so pritrjene s posebnimi zatiči, na drugem koncu pa potekajo prek drugega sedelca do mehanike, s katero melodijske strune uglašujemo. Gumbi, ki jih vrtimo ob uglaševanju, so koščeni. Pod melodijskimi strunami je na pokrov trupa pritrjena ubiralka, ki ima 29 razvrščenih prečk, to je lesena plošča iz ebenovine. Za lažjo orientacijo so na ubiralki tudi očesca.

Citre

Druga polovica 19. stoletja, intarziran in politiran les, medenina, železo, d. 30 cm, š. 22 cm, v. 2,5 cm, inv. št. N 36591, vir: Narodni muzej Slovenije, provenienca: iz opreme Narodnega muzeja Slovenije - knjižnica, restavriral: Nataša Nemeček, 2016.

Na intarzirani plošči je na profilirani letvi pritrjenih 6 železnih zatičev, na katerih so visele nitke s kroglicami, kroglice manjkajo. Šest žičnatih strun je napetih na posebni plošči. Citre so bile nekdanj obese na vratih knjižnice Narodnega muzeja Slovenije.

the bottom. The back side of the cover is additionally strengthened with ribs.

The melodic and accompanying strings are placed across the body. Five melodic strings range over four octaves and are lined over the saddle onto the tailpiece, where they are tightened with special pins. On the other side the strings go over the saddle to the mechanics used to tune the melodic strings. The tuning pegs are made of bone. The ebony fret board is glued onto the cover and it features 29 nuts. The dots on the fret board serve as orientation points.

SI. 66 / Picture 66

Koncertne citre /
Concert Zither
Foto / Photo:
Tomaž Lauko



Zither

Second half of the 19th century, inlaid and veneered wood, brass, iron l. 30 cm, w. 22 cm, h. 2.5 cm, inv. No. N 36591, source: National Museum of Slovenia, provenance: National Museum of Slovenia equipment – library, restored by: Nataša Nemeček, 2016.

Six iron pins are fixed onto the profiled lath lying on the inlaid board. Threads with little balls were suspended from the pins and the balls are now missing. Six wire strings were tightened across a

Salzburg, Avstrija, začetek 20. stoletja, lužen les, papir, kovina,
d. 34,5 cm, š. 27 cm, v. 4 cm, inv. št. N 37676, restavriral:
Irma Langus Hribar, 2016.

Citre so narejene iz luženega lesa, na njih je kolorirana upodobitev
panorame Salzburga, zato domnevamo, da gre za spominek. Nekaj
odlomljenih delov in ključ za napenjanje so shranjeni v telesu citer.

Sl. 68 / Picture 68

Citre / Zither
Foto / Photo:
Tomaž Lauko





Zither

Salzburg, Austria, early 20th century, tinted wood, paper, metal,
l. 34.5 cm, w. 27 cm, h. 4 cm, inv. No. N 37676, restored by:
Irma Langus Hribar, 2016.

The zithers are made of tinted wood. The painted panorama of Salzburg indicates the instrument might have been a souvenir. The tuning key and several broken parts are kept in the body of the instrument.

174 Ameriške ali kitarske citre

THE GLOBE, začetek 20. stoletja, poslikan les, kovina, d. 49 cm, š. 34,5 cm, v. 5,7 cm, signatura: *THE GLOBE, PATENTAMTL. GESCH. D. R. G. M.*, inv. št. N 37664, vir: Saša Avguštin, provenienca: Saša Avguštin, restavriral: Nataša Nemeček, 2016.

analogija: Slovenski etnografski muzej, inv. št. 630:LJU;0022643.

Napis v notranjosti citer: *PATENT, Klavier Zither, THE GLOBE, PATENTAMTL. GESCH. D. R. G. M. No. 164133. Vollkommenstes Instrument der Gegenwart.*

V sredini pokrova je okrogla zvočnica, od koder prihaja zvok.

Ameriške ali kitarske citre so za igranje zelo preproste, saj pod strune položimo zapis z melodijo in akordi pesmi, po kateri nato ubiramo strune melodije in spremne akorde.

Sl. 69 / Picture 69
Ameriške ali
kitarske citre /
American or Guitar
Zither
Foto / Photo:
Tomaž Lauko



THE GLOBE, early 20th century, painted wood, metal, l. 49 cm, w. 34.5 cm, h. 5.7 cm, signature: *THE GLOBE, PATENTAMTL. GESCH. D. R. G. M.*, inv. No. N 37664, source: Saša Avguštin, provenance: Saša Avguštin, restored by: Nataša Nemeček, 2016.

Analogies: Slovene Ethnographic Museum, inv. No. 630:LJU;0022643.

Inscription on the inside of the zither: *PATENT; Klavier Zither; THE GLOBE, PATENTAMTL. GESCH. D. R. G. M. No.164133 Volkommenstes Instrument der Gegenwart.*

A round sound hole that provides resonance is placed in the middle of the cover.

The American or the guitar zithers are easy to play; an illustration of the music is placed under the strings that the player follows, strumming the melody and accompanying chords.

SI. 70 / Picture 70

Napis v notranjosti ameriških ali kitarskih citer / Signature on the American or Guitar Zither

Foto / Photo: Tomaž Lauko



AEOL, Berlin, Nemčija, pred 1900, smrekov les, železo, papir, zaščitna škatla: d. 55,5 cm, š. 34 cm, v. 10,5 cm, citre: 49,5 cm, š. 31 cm, v. 5 cm, signatura: *AEOL*, inv. št. N 37665, vir: Darinka Marija Kos, provenienca: Darinka Marija Kos, restavriral: Irma Langus Hribar, 2016.

Citre so shranjene v zaščitni škatli. V predeljenem delu škatle je priložen ročaj ključa za napenjanje strun. Citre so lakirane s črnim svetlečim lakom in ostrunjene „na ameriški način“, kot piše na ohranjeni nalepki. Napis znotraj citer: *AEOL Harfen-Zither Amerikanisches System, A. Eichler, Berlin, Prinzenstr. 85, New York, 88. First St., D. R. P. No. 101661.*

Sl. 71 / Picture 71

Ameriške ali kitarske citre / American or Guitar Zither
Foto / Photo: Tomaž Lauko



Lira

Konec 19. ali začetek 20. stoletja, les, kovina, biserna matica, d. 73 cm, š. 35 cm, g. 12 cm, lok: d. 58 cm, inv. št. N 36590, restavriral: Irma Langus Hribar, 2016.

Lira iz Zbirke glasbil Narodnega muzeja Slovenije je imitacija antičnih instrumentov. Vrvice na njej so samo navezane. Na ubiralki

AEOL, Berlin, Germany, before 1900, spruce wood, iron, paper, protective casing: l. 55.5 cm, w. 34 cm, h. 10.5 cm, zither: l. 49.5 cm, w. 31 cm, h. 5 cm, signature: *AEOL*, inv. No. N 37665, source: Darinka Marija Kos, provenance: Darinka Marija Kos, restored by: Irma Langus Hribar, 2016.

The zither is kept in a protective casing. The tuning key is kept in the separated part of the casing. The instrument is varnished with shiny black varnish and the strings are placed “the American” way, as specified on the preserved label. The inscription inside the zither reads: *AEOL Harfen-Zither Amerikanisches System, A. Eichler, Berlin, Prinzenstr. 85, New York, 88. First St., D. R. P. No. 101661.*

SI. 72 / Picture 72

Napis znotraj
ameriških ali
kitarskih citer /
Signature on the
American or
Guitar Zither
Foto / Photo:
Tomaž Lauko



Lyre

End of the 19th to early 20th centuries, wood, metal, mother-of-pearl, l. 73 cm, w. 35 cm, d. 12 cm, bow: l. 58 cm, inv. No. N 36590, restored by: Irma Langus Hribar, 2016.

The lyre from the Collection of Musical Instruments of the National Museum of Slovenia is an imitation of antique instruments. There are small cords tied on the instrument. The pattern on the

178 so vzorci lunic in nebesnih teles iz biserne matice. V sredini pokrova je zvočnica v obliki zvezde, okoli katere je razporejenih 14 luknjic.

Lira je glasbeni inštrument starih Grkov¹⁵⁴ in drugih ljudstev ob Sredozemskem morju. Najstarejša oblika lire je imela od 4 do 7 strun. Nanjo so igrali s prsti ali kovinskim naprstnikom. Je najstarejše strunsko glasbilo. Lira je bila v zgodnjem srednjem veku upoštevan godalni inštrument in iz njega so se razvila druga godala, tudi violina.

Lira, kitari sorodno starogrško glasbilo, je eno najstarejših brenkal. Je simbol lepote, harmonije, preprostosti, sozvočja, duhovnosti, fantazije ... pa tudi lirskega pesništva in glasbe.



Sl. 73 / Picture 73

Lira / Lyre
Foto / Photo:
Tomaž Lauko

154 Po legendi je prvo liro izdelal Hermes in jo dal Apolonu v zameno za svete krave.

fretboard is shaped like little moons and other celestial bodies. The sound hole in the middle of the cover is shaped like a star and is surrounded by 14 smaller holes.

The lyre was the instrument of Ancient Greeks and other Mediterranean peoples.¹⁵⁴ The oldest lyres had four to seven strings and were played with fingers or a metal plectrum. In the early Middle Ages the lyre was a respected string instrument that gave rise to the development of other string instruments, including the violin.

The lyre, similar to the guitar, is also considered to be one of the oldest plucked instruments. It is a symbol of beauty, harmony, simplicity, spirituality, and fantasy, and is also a symbol of lyric poetry and music.

Lute Guitar

Early 20th century, spruce wood, brass, iron, plastic, l. 90.5 cm, w. 30 cm, h. 12.5 cm, inv. No. N 37455, source: Boštjan Pogorelc, provenance: Karel and Drago Pogorelc, restored by: Irma Langus Hribar, 2016.

Bibliography: Tarbuk 2007, p. 59, cat. No. 62.

Analogies: Museum of Arts and Crafts, Zagreb, Zagreb MUO 13432.

The guitar lute belonged to Karel and Drago Pogorelc, grandfather and father of Boštjan Pogorelc, who donated the instrument to the National Museum of Slovenia.

The lute is similar to the Arabic instrument oud. It has a sound hole or holes, usually exquisitely carved with geometric rosettes in the Arabic style. Both names, lute and oud, derive from the Arabic word al'ud, meaning wood, the material used to make the instrument.

The lute, a predecessor of the guitar, is a pear-shaped instrument with a system of strings tightened across a flat soundboard. The strings' tension is adjusted by turning the pegs on the instrument.

The lute is also a frequent motif in paintings, mainly as an instrument played by angelic musicians.

In the Middle Ages the lute was played with the quill. In this period the lute was a melodic instrument – only one tone could be played at a time. In the 15th century players began plucking the strings

¹⁵⁴ According to legend the first lyre was made by the Greek god Hermes, who gave it to Apollo in return for Apollo's cows.

Začetek 20. stoletja, smrekov les, medenina, železo, plastika, d. 90,5 cm, š. 30 cm, v. 12,5 cm, inv. št. N 37455, vir: Boštjan Pogorelc, provenienca: Karel in Drago Pogorelc, restavrirala: Irma Langus Hribar, 2016.

literatura: Tarbuk 2007, str. 59, kat. št. 62.

analogija: Muzej za umjetnost i obrt, Zagreb MUO 13432.

Kitarska lutnja je bila last Karla in Draga Pogorelca, deda in očeta Boštjana Pogorelca, darovalca glasbila Narodnemu muzeju Slovenije.

Lutnja je glasbilo, ki je sorodno arabskemu udu, ima resonančne(o) luknje(o), umetelno izrezljane(o) z geometrijskimi rozetami v arabskem slogu. Imeni lutnja in ud izvirata iz arabske besede al'ud, ki pomeni les, material, iz katerega so ta glasbila izdelovali.

Lutnja, ki je predhodnica kitare, je glasbilo hruškaste oblike s sistemom napenjanja strun čez ravno zvočno ploščo in prilagajanja napetosti strun z vijaki.

Lutnja je tudi pogost motiv na likovnih upodobitvah, predvsem kot glasbilo, na katero igrajo angelski glasbeniki.

V srednjem veku so na lutnjo igrali s trzalicco iz roženega dela ptičjega peresa. V tem obdobju se je lutnja uporabljala samo kot melodično glasbilo – naenkrat je bilo mogoče igrati samo en ton. V 15. stoletju pa so lutnjisti na lutnjo začeli igrati s konicami prstov. Igranje s prsti je glasbenikom omogočalo ubirati več strun hkrati, da so lahko igrali polifono glasbo – glasbo z dvema ali več melodijami.

Poznorenesančne lutnje so pogosto imele osem parov dvojnih strun, razen zgornje strune, znane kot *chanterelle*, ki je ostala enojna.¹⁵⁵

Kitara Melodije Mengeš

Melodija Mengeš, Mengeš, Slovenija, 1961, pokositrena zlitina, les, vrv, d. 99 cm, v. 10 cm, š. 38 cm, signatura: *Melodija, Mengeš*, inv. št. N 30147, vir: Marko Žvanut, provenienca: Marko Žvanut, restavrirala: Nataša Nemeček, 2016.

Analogija: Loški muzej, inv. št. E 505.

155 Zyl, van 2015, str. 64.

with the tips of their fingers, making it possible for them to play multiple strings at the same time and thus they began playing polyphonic, multipart music.

Sl. 74 / Picture 74

Kitarska lutnja /
Lute Guitar
Foto / Photo:
Tomaž Lauko

In the late Renaissance the lute often had eight pairs of double strings, apart from the top string known as the *chanterelle*, which remained single.¹⁵⁵



Melodija Mengeš Guitar

Melodija Mengeš, Mengeš, Slovenia, 1961, tinned alloy, wood, rope,
l. 99 cm, h. 10 cm, w. 38 cm, signature: *Melodija, Mengeš*, inv. No.
N 30147, source: Marko Žvanut, provenance: Marko Žvanut, restored
by: Nataša Nemeček, 2016.

Analogies: Škofja Loka Museum, inv. No. E 505.

Marko Žvanut bought the acoustic guitar in 1961/1962 as a New Year's gift. On the top front part of the head there is a label with the inscription *Melodija Mengeš*. On the rim of the head there are the numbers 3 3730. Inside the guitar is the number 20257.

¹⁵⁵ Zyl, van 2015, p. 64.

182 V letih 1961–1962 je Marko Žvanut akustično kitaro kupil kot novoletno darilo. Na vrhu sprednje strani glave je nalepka z napisom *Melodija Mengeš*. Na vrhu oboda glave je zapisana številka 3 3730. V notranjosti kitare je številka 20257.

Kitara ima po navadi 6 strun in debel, votel trup za boljši odmev zvoka.

Najbolj znano podjetje harmonik in glasbenih inštrumentov v Sloveniji, Melodija Mengeš, je bilo ustanovljeno leta 1946 v Mengšu, od leta 1995 pa tradicijo izdelovanja inštrumentov nadaljuje Melodija Glasbila d.o.o.

Kitara Melodije Mengeš

Melodija Mengeš, Mengeš, Slovenija, okoli 1975, les, smrekov les, medenina, plastika, volna, akril, umetno usnje, d. 99,5 cm, š. 37,5 cm, v. 8 cm, inv. št. N 37652, vir: Andrej Blatnik, provenienca: Andrej Blatnik, restavriral: Irma Langus Hribar, 2016.



Akustično kitaro je Narodnemu muzeju Slovenije podaril pisatelj Andrej Blatnik,¹⁵⁶ ki jo je dobil za rojstnodnevno darilo leta 1975. Oče mu jo je kupil v trgovini Melodije Mengeš na ljubljanski Wolfovi ulici. Listek (nalepka) s signaturo je s kitare že zdavnaj odpadel.

Sl. 76 / Picture 76
Kitara Melodije Mengeš / Melodija Mengeš Guitar
Foto / Photo: Tomaž Lauko

¹⁵⁶ Andrej Blatnik, slovenski pisatelj, univerzitetni predavatelj in urednik, * 22. maj 1963, Ljubljana.

The guitar usually has six strings and a wide, hollow body to better project the sound.

The most recognisable maker of accordions and other musical instruments in Slovenia, Melodija Mengeš, was established in Mengeš in 1946. Since 1995 onward the company's tradition has continued under the name Melodija Glasbila d.o.o.

Sl. 75 / Picture 75

Kitara Melodije
Mengeš / Melodija
Mengeš Guitar
Foto / Photo:
Tomaž Lauko



Melodija Mengeš Guitar

Melodija Mengeš, Mengeš, Slovenia, around 1975, wood, spruce wood, brass, plastic, wool, acryl, imitation leather, l. 99.5 cm, w. 37.5 cm, h. 8 cm, inv. No. N 37652, source: Andrej Blatnik, provenance: Andrej Blatnik, restored by: Irma Langus Hribar, 2016.

The acoustic guitar was donated to the National Museum of Slovenia by the writer Andrej Blatnik, who got the instrument for his birthday in 1975.¹⁵⁶ His father bought the guitar at the store

¹⁵⁶ Andrej Blatnik, Slovenian writer, university lecturer, and editor, *22nd May, 1963, Ljubljana.

184 Ko si je čez nekaj let Andrej Blatnik kupil novo kitaro, je staro dal preobraziti, v maniri številnih kitar ameriške rock skupine Sonic Youth, prijatelju Janezu Zalazniku.¹⁵⁷ Ta jo je poslikal v slogu Jacksona Pollocka.¹⁵⁸ Po preobrazbi na kitaro ni več nihče igral.

Kitara Turšič

Jože Turšič, 1950–1960, biserna matica, les, medenina, plastika, steklo, d. 79 cm, v. 9,5 cm, š. 28,5 cm, signatura: *Turšič*, inv. št. N 37238, vir: Vojan Tihomir Arhar, 1997, provenienca: Vojan Tihomir Arhar.

Manjša akustična kitar septima ima na hrbtni strani vtisnjen napis *Turšič*. Gre za ročno delo izvrstnega slovenskega goslarja Jožeta Turšiča, ki je deloval na Galusovem nabrežju v Ljubljani.¹⁵⁹



157 Janez Zalaznik, slovenski akademski slikar, * 1963, Ljubljana.

158 Paul Jackson Pollock, ameriški slikar, * 28. januar 1912, Cody, Wyoming, ZDA, † 11. avgust 1956, Springs, New York, ZDA. Pollock je bil vplivni slikar in eden od glavnih predstavnikov gibanja abstraktnega ekspresionizma.

159 Jože Turšič, slovenski izdelovalec violin, Gallusovo nabrežje, Ljubljana.

SI. 77 / Picture 77

Kitara Turšič /
Turšič Guitar
Foto / Photo:
Tomaž Lauko

Melodija Mengeš on Wolfova street in Ljubljana. The label with the signature is long gone.

When Andrej Blatnik bought a new guitar several years later, he overhauled his old guitar to be like that of the members of Sonic Youth, a popular American rock group, and gave it to his friend Janez Zalaznik.¹⁵⁷ Zalaznik then painted the guitar in the style of Jackson Pollock.¹⁵⁸ Since then the guitar has never been played again.

Turšič Guitar

Jože Turšič, 1950–1960, mother of pearl, wood, brass, plastic, glass,
l. 79 cm, h. 9.5 cm, w. 28.5 cm, signature: *Turšič*, inv. No. N 37238,
source: Vojan Tihomir Arhar, 1997, provenance: Vojan Tihomir Arhar.

A smaller acoustic guitar, a type of septima guitar, comes with the engraved signature *Turšič* at the back. This instrument is the handiwork of Slovenian luthier Jože Turšič from Ljubljana.¹⁵⁹

SI. 78 / Picture 78

Signatura nahrbni
strani kitare
Turšič /
Signature on the
Turšič Guitar
Foto / Photo:
Tomaž Lauko



157 Janez Zalaznik, Slovenian painter, 1963, Ljubljana.

158 Paul Jackson Pollock, American painter, *28th January, 1912, Cody, Wyoming, USA, † 11th August, 1956, Springs, New York, USA. Pollock was an influential painter and one of the main representatives of abstract expressionism.

159 Jože Turšič, Slovenian luthier, Gallusovo nabrežje, Ljubljana.

Meinel & Herold Musik Instrumentalfabrik, med letoma 1920 in 1940, les, kovina, mere: d. 61,7 cm, š. 19,5 cm, v. 15,5 cm, inv. št. N 38042, signatura: *MEINEL & HEROLD Musik Instrumentalfabrik und -vertrieb Klingenthal/Sa*, vir: Saša Auguštin.

Literatura: Grove 2, 2014, str. 603–607.

analogija: Pokrajinski muzej Koper, inv. št. NZ - 8903.



Mandolina je brenkalo. Po prednici lutnji je ohranila izbočen trup, zlepljen iz posameznih reber. Zaradi nekoliko upognjenega pokrova je lahko prenesla večje pritiske in tako omogočila zamenjavo črevnatih strun s kovinskimi. Število strun je omejeno na štiri pare, uglašena pa je enako kot godala.

Meinel & Herold je tovarna glasbil iz Klingenthala na Saškem v Nemčiji, ob češki meji, nasproti Karlovih Varov. Podjetje je delovalo od leta 1852. Najprej so izdelovali harmonike, nato še druge inštrumente. To je bila množična industrijska proizvodnja. Leta 1928 je tovarna zaposlovala že 1350 ljudi. Leta 1961 so že bili največji izdelovalec inštrumentov na svetu, predvsem harmonik, saj so tega leta izdelali 125.578 inštrumentov in jih prodali v 40 različnih držav.¹⁶⁰

Sl. 79 / Picture 79

Mandolina /
Mandolin
Foto / Photo:
Tomaž Lauko

¹⁶⁰ *Internationaler Akkordeonwettbewerb Klingenthal*. Dostopno na: <http://www.accordion-competition.de/instrumentenbau.html>, obiskano: 11. marca 2017.

Meinl & Herold Musik instrumentalfabrik, between 1920 and 1940, wood, metal, l. 61,7 cm, w. 19,5 cm, h. 15,5 cm, inv. No. N 38042, signature: *MEINEL & HEROLD Musik instrumentalfabrik und -vertrieb Klingenthal/Sa*, source: Saša Auguštin.

Bibliography: Grove 2, 2014, p. 603–607.

Analogies: Koper Regional Museum, inv. No. NZ - 8903.

The mandolin is classified as a plucked string instrument. It has retained a rounded body and individual ribs glued together, after its predecessor the lute. As the cover is slightly bent it could stand more pressure, which meant that the strings made of gut could be replaced by wire strings. The number of strings is limited to four pairs; it is tuned in the same way as bowed string instruments.

Meinl & Herold is a factory of musical instruments from Klingenthal in Saxony, Germany, not far from Karlovy Vary in the Czech Republic. The company was founded in 1852. First they made accordions, later they started making other instruments. The instruments were mass produced and in 1928 the factory employed 1,350 people. In 1961 they were the largest manufacturer of musical instruments, mainly accordions. In that year they produced 125,578 instruments sold in 40 different countries.¹⁶⁰

Sarangi

India or Nepal, first half of the 20th century, tinned alloy, wood, lacquer, l. 44.5 cm, w. 20 cm, d. 12 cm, bridge 2.5 cm, inv. No. N 5894, source: Alenka and Boris Kenda, provenance: Alenka and Boris Kenda, restored by: Irma Langus Hribar, 2015.

Bibliography: Grove 3, 2014, p. 294–296.

The instrument is made of wood slats that are glued or fixed together with nails. The body is shaped as a half-cylinder, from which a thick neck protrudes. There are 13 secondary strings tightened across it, and screw-like pegs are used for tightening the strings. The original strings were made of sheep gut. Both the body and the neck of the

¹⁶⁰ *Internationaler Akkordeonwettbewerb Klingenthal*. Available at: <http://www.accordion-competition.de/instrumentenbau.html>, accessed on: 11th March, 2017.

Indija ali Nepal, prva polovica 20. stoletja, pokositrena zlitina, les, lak, d. 44,5 cm, š. 20 cm, g. 12 cm, mostiček 2,5 cm, inv. št. N 5894, vir: Alenka in Boris Kenda, provenienca: Alenka in Boris Kenda, restavriral: Irma Langus Hribar, 2015.

literatura: Grove 3, 2014, str. 294–296.

Glasbilo je zgrajeno iz lesenih deščic, sestavljenih z žičniki in lepljenjem. Trup ima obliko polovice valja, ki se nadaljuje v masivni vrat. Prek njega je napetih trinajst sekundarnih kovinskih strun (napenjati jih je mogoče z vijaki). Originalne strune so bile narejene iz ovčjih čreves. Tako trup kot tudi vrat sta bogato okrašena z ornamentiko in različnimi figuralnimi prizori. Na manjkajočem loku je bila kot pri lokih za violine napeta konjska žima.

Sarangi je godalo iz Indije in Nepala, ki se uporablja pri izvajanju hindujske klasične glasbe. To je najbolj priljubljeno glasbilo v zahodnem delu Nepala in oddaja zvok, najbolj podoben človeškemu glasu.

instrument are richly decorated in various figurative scenes. The bow is missing but it would have had horsehair, also typical for violin bows.

The sarangi is a string instrument from India and Nepal, used for playing traditional Hindi music. It is the most popular instrument in the west part of Nepal. The sarangi produces a sound that keenly resembles a human voice.

Sl. 80 / Picture 80

Sarangi / Sarangi

Foto / Photo:

Tomaž Lauko





PIHALA

Pihala sodijo med najstarejše instrumente in so značilna za vse kulture. V nobeni družini glasbil ne slišimo toliko različnih zvokov kot prav pri pihalih – v orkestru jih po navadi slišimo 8.

Pihanje v ustnik sproži nihanje zračnega stebra v cevi in tako nastane zvok. Ko pihalci spreminjajo dolžino zračnega stebra (s preprijemanjem luknjic oziroma zaklopk) nastajajo nižji toni (če so luknjice zaprte, je zračni steber daljši) oziroma višji toni (če so luknjice odprte oziroma je zračni steber krajši). Večina ima trstene jezičke, ki nihajo, ko izvajalec piha vanje. Brez jezička so le: flavta, kljunasta flavta (blok) in pikolo.¹⁶¹

FLAVTA

Moderna prečna flavta izvira iz preprostih glasbil prvobitnih družb izpred več tisočletij.

Prve flavte so bile izdelane iz kosti, lesa ali gline in so jih držali vzdolžno.¹⁶²

161 *Glasbila*, str. 7. Dostopno na: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, obiskano: 1. aprila 2017.

162 Zyl, van 2015, str. 216.



WOODWIND INSTRUMENTS

Woodwind instruments are one of the oldest types of instruments and are considered to be common to all cultures. It is a family of instruments with the most varied sounds – an orchestra usually includes eight types of them.

The sound is produced as the musician blows into the mouthpiece and creates a stream of air that vibrates within the pipe. When musicians change the length of the airstream by opening and closing the holes or valves, they change the pitch. When the holes are closed, the airstream is longer and the pitch is lower, while the open holes shorten the airstream and create higher pitch. Most of the instruments have reeds that vibrate when the musician blows into them. Reedless woodwind instruments include: the flute, the recorder, and the piccolo.¹⁶¹

FLUTE

The modern transverse flute has its roots in the simple musical instruments of primitive humans living thousands of years ago.

The first flutes were made of bone, wood, or clay and were held vertically.¹⁶²

161 *Glasbila*, p. 7. Available at: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, accessed on: 1st April, 2017.

162 Zyl, van 2015, p. 216.

Johann Benedikt Gahn, Nürnberg, Nemčija, okrog 1700, flavta: slonovina, lesen del pri ustniku, lan, konjska dlaka pri stikih, d. 64,5 cm, 2r. 5,5 cm, škatla: lepenka, bombaž, medenina, š. 96 cm, v. 6 cm, g. 13,5 cm, signatura: *J. B. Gahn*, inv. št. N 36582, restavriral: Nataša Nemeček, 2016.

literatura: Wackernagel 1999, str. 50–57.

analogija: Metropolitan Museum of Art, New York, Accession Number: 89.4.909.



Sl. 81 / Picture 81
Kljunasta flavta /
Gahn Recorder
Foto / Photo:
Tomaž Lauko

Na kljunasti flavti ali blok flavti iz slonovine (tenor) je slabo vidna signatura: *J. B. Gahn (Nürnberg, okoli 1700)*.

Johann Benedikt Gahn je bil sprejet kot mojster v ceh nürnbergskih obdelovalcev lesa leta 1698. Specializiral se je za glasbene inštrumente in imel svojo delavnico do smrti 1711. Ohranilo se je približno 16 kljunastih flavt in nekaj oboj iz slonove kosti ali lesa pušpana. Nekateri od njegovih inštrumentov imajo vrezano dekoracijo, na primer akantove liste in masko, motive, povezane z Nürnbergom, ki se pojavljajo tudi na inštrumentih drugih

Johann Benedekt Gahn, around 1700, flute: ivory, the wooden part near the mouthpiece, flax and horsehair at the joints, l. 64.5 cm, 2r. 5.5 cm, box: cardboard, cotton, brass, w. 96 cm, h. 6 cm, d. 13.5 cm, signature: J. B. Gahn, inv. No. N 36582, restored by: Nataša Nemeček, 2016.

Bibliography: Wackernagel 1999, p. 50–57.

Analogies: Metropolitan Museum of Art, New York, Accession Number: 89.4.909.

SI. 82 / Picture 82

Signatura na
kljunasti flavti /
Signature on the
Gahn Recorder
Foto / Photo:
Tomaž Lauko



The poorly visible signature *J. B. Gahn* (Nuremberg, around 1700) can be seen on this recorder made of ivory.

Johann Benedikt Gahn became a master craftsman of the guild of Nuremberg woodworkers in 1698, specialising in musical instruments. He worked in his own workshop until his death in 1711. Approximately 16 recorders and some oboes made of ivory, or boxwood have been preserved. Some of his instruments were carved with ornaments such as acanthus leaves and a mask, as well as scenes from Nuremberg, which is a common motif of other instrument makers as well. Such recorders became very popular after 1700.¹⁶³

The recorder family includes sopranino, soprano, alto, tenor, bass, and great bass. This instrument is the tenor. It has nine holes; one of them is on the opposite side and is closed by the left-hand thumb.

¹⁶³ Available at: http://www.recorderhomepage.net/databases/Historic_Instrumentslist.php?x_Maker_Abbreviation=Gahn&z_Maker_Abbreviation=LIKE&cmd=search, accessed on: 1st April, 2017.

194 izdelovalcev. Takšna kljunasta flavta je postala priljubljena po letu 1700.¹⁶³

Družino kljunastih flavt sestavljajo sopranino, sopran, alt, tenor, bas in veliki bas. V našem primeru gre za tenor. Kljunasta flavta ima devet luknjic, od tega je ena spodaj, to pokriva palec leve roke. Prosta prsta sta levi mezinec in desni palec. Navadno sta luknjici za desni prstanec in mezinec dvojni, da lažje zaigramo polton. Flavta ima dva dela.

Kljunasta flavta ima različne razpone, npr. od C1 do C3. Na naši flavti je z rdečo barvo napisano $4 \times C$ na različnih mestih.

Flavta je shranjena v škatli, ki ni originalna, saj ni namenjena shranjevanju piščali, temveč lokov za kontrabas. Na sredini pokrova je napis v zlati barvi: *Giuseppe Colla, Roma* in grb mesta Rim.

Prečna flavta Ultra

Ultra, 19. stoletje, pušpanov les, medenina, roževina, usnje, d. 61,5 cm, 2r. 3,5 cm, signatura: *Ultra*, inv. št. N 36586, vir: Amalija Strohal, provenienca: Franc Strohal, restavriral: Irma Langus Hribar, 2014 in 2016.

Leseno prečno flauto je po volji svojega pokojnega očeta Franca Strohala iz Metlike leta 1940 Narodnemu muzeju Slovenije darovala Amalija Strohal iz Metlike. V preteklosti so bile prečne flavte izdelane iz lesa, danes so po navadi narejene iz kovine.

Prečna flavta izdelovalca Ultra je sestavljena iz treh kosov, narejenih iz pušpanovega lesa, med deli so okrasni obročki iz roževine.

Prečna flavta ima 12 zaklopk. Pri novejših flautah ima od 5 od 12 zaklopk luknjice, ki jih mora flautist ali flautistka pokriti s prsti. V našem primeru ima flavta iz zbirke Narodnega muzeja Slovenije štiri medeninaste zaklopke, podložene z usnjem.

163 Dostopno na: http://www.recorderhomepage.net/databases/Historic_Instrumentslist.php?x_Maker_Abbreviation=Gahn&z_Maker_Abbreviation=LIKE&cmd=search, obiskano: 1. aprila 2017.

The left little finger and the right thumb are free. Usually there are two holes for the right ring and little fingers in order to better achieve the semitone. The flute has two parts..

Different recorders have different ranges, e.g. from C1 to C3. On our recorder there are red inscriptions *4 x C* written in several places.

The box the recorder is kept in is not original. It is intended to keep double bass bows. There is an inscription written in gold in the middle of the box's lid: Giuseppe Colla, Roma, and the coat of arms of the city of Rome.

Ultra Transverse Flute

Ultra, 19th century, boxwood, brass, horn, leather, measurements: l. 61.5 cm, 2r. 3.5 cm, signature: *Ultra*, inv. No. N 36586, source: Amalija Strohal, provenance: Franc Strohal, restored by: Irma Langus Hribar, 2014 and 2016.



Sl. 83 / Picture 83

Prečna flavta /
Ultra Transverse
Flute
Foto / Photo:
Tomaž Lauko

The wooden transverse flute was donated to the National Museum of Slovenia by Amalija Strohal from Metlika, thus fulfilling her father's will. In the past transverse flutes were made of wood. Today, however, they are metal. The instrument made by Ultra consists of three parts made of boxwood. The parts are divided by decorative bands made of horn.

The transverse flute has twelve keys. The more modern instruments usually have twelve keys; five of them also have holes the musician has to cover with their fingers. This flute from the collection of National Museum of Slovenia has four brass keys lined with leather.

Klarinet je glasbeni inštrument, ki sodi v skupino pihal. Velika družina klarinetov sega od kontrabasovskega (najnižjega) do pikolo (najvišjega) klarineta.

Današnji kakovostni klarineti so narejeni iz ebenovine, trdega afriškega lesa, še posebej iz grenadila, tisti za začetnike pa so izdelani predvsem iz plastike. Nekateri elementi, na primer ustnik, so narejeni iz ebonita. Na glasbilo se igra s pomočjo enojnega jezička, ki med igranjem vibrira in tako ustvarja zvok.

Na glavnem delu je nameščenih več zaklopk, ki s pokrivanjem luknjic omogočajo igranje različnih tonov. Razpon tonov je odvisen od modela klarineta in pri navadnem B klarinetu sega od e do c4.

Sestavni deli klarineta so: ustnik, sodček, dva glavna dela in odmevnik.

Höferjev klarinet

Anton ali Franz Höfer, Kraslice, Češka, začetek 19. stoletja, stružen javorjev les, medenina, železo, d. 44 cm, 2r. 7 cm, signatura: *HÖFER*, inv. št. N 36583, vir: Fr. Raunevegg, 1912 (10 kron), restavrirala: Irma Langus Hribar, 2016.

objava: Koter 2001, str. 164–165.

literatura: Waterhouse 1993; Grove 1, 2014, str. 389–403.

analogiji: V washingtonskem muzeju glasbil hranijo Höferjevo flavto s šestimi zaklopkami (Smithsonian Institution Washington D. C.), v Mestnem muzeju v Münchnu (Münchner Stadtmuseum) pa njegov klarinet s petimi zaklopkami.¹⁶⁴

Na klarinet sta vtisnjena dvoglavi orel s krono in napis *HÖFER*. Klarinet je iz pušpanovega lesa, vsak delček je narejen in označen posebej. Manjka ustnik.

Höferjev klarinet s petimi zaklopkami je datiran v zgodnje 19. stoletje. Če sklepamo po obliki klarineta in njegovi mehaniki, ga je izdelal ali najstarejši Höfer (Anton) ali zadnji s seznama Höferjev (Franz).

Izdelovalci lesenih pihal Höfer iz čeških Kraslic (nem. Graslitz) so strokovni javnosti skorajda neznani. V Kraslicah, ki so bile v 19. stoletju in še dobršen del prve polovice naslednjega stoljetja veliko

¹⁶⁴ Waterhouse 1993, str. 178.

CLARINET

The clarinet is classified as a woodwind instrument. The clarinet family is large, ranging from the contrabass with the lowest pitch to piccolo with the highest pitch.

Today a good clarinet is made of ebony, a hard wood from Africa, although grenadilla – African Blackwood is also very popular. Beginner clarinets are usually made of plastic. Some elements, as for example the mouthpiece, are made of ebonite. The clarinet is a single reed instrument; the sound is made when air is blown across the reed, which then vibrates and produces sound.

The main part of the instrument has several keys. When they cover individual holes the sound changes pitch. The range of sound depends on the clarinet type. The usual B \flat clarinet ranges from E below middle C to c4.

The clarinet consists of a mouthpiece, a barrel, two main parts, and a bell.

Höfer's Clarinet

Anton or Franz Höfer, Kraslice, Bohemia, early 19th century, turned maple wood, brass, iron, l. 44 cm, 2r. 7 cm, signature: *HÖFER*, inv. No. N 36583, source: Fr. Raunevegg, 1912, (10 crowns), restored by: Irma Langus Hribar, 2016.

Publications: Koter 2001, p. 164–165.

Bibliography: William Waterhouse 1993; Grove 1, 2014, p. 389–403.

Analogies: The Smithsonian Institution in Washington D.C. keeps a Höfer flute with six keys (Smithsonian Institution Washington D. C.), while the City Museum in Munich keeps Höfer's clarinet with five keys (Münchner Stadtmuseum).¹⁶⁴

A double-headed eagle is imprinted on the clarinet with the inscription HÖFER. The clarinet is made of boxwood; each separate piece is made and marked individually. The mouthpiece is missing.

Höfer's clarinet with five keys is from the early 19th century. Judging from the shape and the mechanics of the instrument it was made either by the oldest Höfer, Anton, or by the last from the list of Höfers, Franz Höfer.

¹⁶⁴ Waterhouse 1993, p. 178.

198 središče glasbilarstva, je živela rodbina Höferjev. V Waterhousu¹⁶⁵ so navedeni po imenskem abecednem redu. Prvi je Anton Höfer I kot izdelovalec lesenih pihal leta 1796. Imel je več naslednikov: Anton II (deloval med letoma 1814 in 1842), Wenzel (deloval v času 1829–1836), Wenzel mlajši, Anton III (deloval od 1880 in še po 1930), zadnji je naveden Franz Höfer (deloval v Kraslicah (?) v prvi polovici 19. stoletja).¹⁶⁶



Sl. 84 / Picture 84
Höferjev klarinet /
Höfer's Clarinet
Foto / Photo:
Tomaž Lauko

Stowasserjev klarinet

Adolf Stowasser mlajši, Gradec, Avstrija, prva tretjina 20. stoletja, kovina, usnje, d. 57 cm, zr. 7 cm, signatura: *Stowasser GRAZ*, inv. št. N 37806, vir: Tatjana Rogelj, provenienca: Tatjana Rogelj, restavriral: Irma Langus Hribar, 2017.

objava: Koter 2001, str. 164–165.

literatura: Grove 1, 2014, str. 389–403.

Adolf Stowasser (Kraslice, 1842 – Gradec, 1893) izvira iz velike družine izdelovalcev pihal, trobil in tolkal, ki jo je v čeških Kraslicah ustanovil Wenzel Stowasser leta 1824. Po njegovi smrti so mlajši člani družine odprli delavnice še v Budimpešti, Varšavi, Veroni in Gradcu. Adolf se je kot peti sin preselil v Gradec in tam nadaljeval družinsko obrt do leta 1874. Po njegovi smrti ga je nasledil sin Adolf mlajši (1865–1928), nato njegova vdova Anna (1875–1957), delavnico pa je zaprla hči iz prvega zakona Maria Laufenstein (1897–?).

¹⁶⁵ Waterhouse 1993, str. 178.

¹⁶⁶ Koter 2001, str. 164–165.

The makers of the Höfer woodwind instruments from Kraslice (German Graslitz), in today's Czech Republic, are virtually unknown to the professional public today. Kraslice used to be an important centre of instrument making in the 19th century and for the majority of the first half of the 20th century. The city records show that the Höfer family was quite extensive; Warehouse names them in alphabetical order.¹⁶⁵ The first is Anton Höfer I, a maker of woodwind instruments in 1796. He is followed by a number of successors: Anton II, (active between 1814 and 1842), Wenzel (active from 1829 to 1836), Wenzel junior, Anton II (1880 – after 1930), and the last is Franz Höfer (working in Kraslice (?) in the first half of the 19th century).¹⁶⁶

Stowasser's Clarinet

Adolf Stowasser junior, Graz, Austria, first third of the 20th century, metal, leather, l. 57 cm, 2r. 7 cm, signature: *Stowasser GRAZ*, inv. No. N 37806, source: Tatjana Rogelj, provenance: Tatjana Rogelj, restored by: Irma Langus Hribar, 2017.

Publications: Koter 2001, p. 164–165.

Bibliography: Grove 1, 2014, p. 389–403.

Adolf Stowasser (Kraslice, 1842 – Graz, 1893) came from a large family of instrument makers started by Wenzel Stowasser in 1824. They made woodwind and brass instruments, and percussion instrument, and after Wenzel died the younger members of the families set up workshops also in Budapest, Warsaw, Verona and Graz. As the fifth son, Adolf moved to Graz from where he continued his family's trade until 1874. After his death the business went into the hands of his son Adolf junior (1865–1928), and later to his widow Anna (1875–1957). Her daughter from her first marriage Maria Laufenstein (1897–?) finally closed the business down.

As was the case with all the family businesses, the workshop in Graz was a success. Its long history has not yet been researched thoroughly and consequently we do not know where all the preserved instruments have ended up. Some of the woodwind and brass instruments are in the Joanneum at the Graz Stadt Museum.

¹⁶⁵ Waterhouse 1993, p. 178.

¹⁶⁶ Koter 2001, p. 164–165.



Sl. 85 / Picture 85

Stowasserjev
klarinet /
Stowasser's
Clarinet
Foto / Photo:
Tomaž Lauko

Tako kot druge rodbinske delavnice je uspevala tudi graška. Njena dolga zgodovina še ni temeljito raziskana. Zato ne vemo, kje vse so se ohranili inštrumenti. Nekaj pihal in trobil je v Joanneumu in v Mestnem muzeju v Gradcu (Stadt Museum Graz). Pokrajinski muzej Ptuj Ormož hrani mali boben in pavke iz Stowasserjeve delavnice.¹⁶⁷

Piščal bansuri

Indija, sredina 20. stoletja, bambusov les, tekstil (vrvice), d. 43,1 cm, Zr. 1,8 cm, inv. št. N 5900, vir: Alenka in Boris Kenda, provenienca: Alenka in Boris Kenda, restavriral: Irma Langus Hribar, 2016.

Piščal je preprosto glasbilo v obliki cevi, v katero se skozi pihalno režo piha.

Bansuri je indijska klasična piščal, praviloma narejena iz votle palice bambusa s šestimi do osmimi luknjami. Piščal bansuri iz

¹⁶⁷ Koter 2001, str. 163.

Sl. 86 / Picture 86

Signatura na
Stowasserjevem
klarinetu /
Signature on
the Stowasser's
Clarinet
Foto / Photo:
Tomaž Lauko



A small drum and timpani from the Stowasser workshop can also be found at the Ptuj – Ormož Regional Museum.¹⁶⁷

Bansuri Flute

India, mid-20th century, bamboo, textile (threads), l. 43.1 cm, 2r. 1.8 cm,
inv. No. N 5900, source: Alenka and Boris Kenda, provenance: Alenka
and Boris Kenda, restored by: Irma Langus Hribar, 2016.

Sl. 87 / Picture 87

Piščal bansuri /
Bansuri Flute
Foto / Photo:
Tomaž Lauko



The bansuri flute is a simple musical instrument of cylindrical shape, played by blowing air into it.

The bansuri is a traditional Indian flute, usually made of a hollow bamboo stick that has six to eight holes. The bansuri flute from the collection of the National Museum of Slovenia is shaped like a recorder (seven holes). The bamboo stem was cut between two

¹⁶⁷ Koter 2001, p. 163.

202 zbirke Narodnega muzeja Slovenije ima obliko blok flavte (sedem lukenj). Steblo je odrezano med dvema členkoma rastline. Na različnih mestih je okrog trupa navita plastična vrvica modre ali oranžne barve.

DUDE

Dude so glasbilo (pihalo) z vrečastim rezervoarjem za zrak (meh), ki je navadno iz usnja ali obdelane živalske kože, z eno ali več piščalmi. Pogosto imajo dve vrsti piščali: na prvo godec igra melodijo, druge pa proizvajajo konstanten spremljevalni ton (bordun). Nekatere različice imajo dvojno melodijsko piščal in so brez bordunskih piščali (na primer istrski mih, belokranjske diple). Obstajajo tudi različice glasbila s trojno melodijsko piščaljo. Zrak v piščali dovajamo iz vreče, ki jo z usti napihuje godec. V nekaterih različicah godec napihuje meh s posebno napravo, ki jo ima privezano med trupom in komolcem proste roke, da lahko hkrati še poje.

Dude so eno najstarejših glasbil. Izhajajo verjetno iz Male Azije. V Evropi so zelo razširjeno ljudsko glasbilo.

Diple so tip dud z dvojno melodijsko piščaljo, ki je razširjen po dinarskem svetu, v podobnih oblikah pa se družina teh glasbil razteza prek Grčije in Turčije in Severne Afrike še naprej na vzhod. So arhaična netemperirana glasbila, s specifičnim zvokom in melodiko.¹⁶⁸

V Sloveniji poznamo dva samosvoja tipa dipel, in sicer iz Bele krajine ter dve vrsti istrskih dud v Čičariji.

Piščali dud

19. stoletje, rezljan in stružen surov les, prva piščal: d. 17 cm, 2r. 4 cm, druga piščal: d. 15,5 cm, 2r. 3,5 cm, inv. št. N 36587 in N 36588, restavriral: Irma Langus Hribar, 2016.

literatura: Kumer 1983.

Dve vrsti dud, ki sta bili še med vojnama v uporabi po krajih v slovenski Čičariji, sta istrski meh in **šurle** z mehom. Istrski meh, s piščaljo imenovano mešnice, sodi v isto skupino glasbil kot diple, vendar ima svojevrstno kombinacijo tonskih luknjic in melodiko. Je značilen del tradicionalne kulture srednje in južne Istre. Meh

¹⁶⁸ *Hrvatska tradicijska glazbala*. Dostopno na: <http://www.gajde.com/hrvatska-tradicijska-glazbala/>, obiskano: 11. marca 2017.

nodes. Plastic threads in either blue or orange colours are coiled around the body of the instrument in various places.

BAGPIPES

Bagpipes are a woodwind instrument with a baggy reservoir for air supply (the bag is usually made of leather or treated animal skin). It has one or more pipes, often two different types: the first one, the chanter, is a melodic pipe that plays the melody, while the rest (bourdons or drones) produce a constant accompanying or drone sound. Some variants of the bagpipes have a double chanter (two sets of holes in one body), e.g. a type of bagpipes from Istria (*istrski mih*) or from Bela Krajina (*belokranjske diple*). There are also bagpipes with a triple chanter. The air is supplied into the drones from the bag that the musician fills with air by blowing into the blowpipe. In some versions the musician fills the bag with a special device tied between their body and the elbow of their free hand, making it possible for them to sing while they play.

Bagpipes are one of the oldest musical instruments. Most likely they originate from the Anatolian peninsula (Asia Minor). Today, however, it is a common folk instrument found all over Europe.

Diple is a type of bagpipes with a double chanter typical of the Dinaric Alps. Similar bagpipes can be found in the area stretching from Greece and Turkey to North Africa and even further to the west. It is an archaic, non-equal-tempered instrument with a specific sound and melodic character.¹⁶⁸

In Slovenia two unique types of diple can be found in Bela Krajina, while two types of Istrian bagpipes are known in Slovenian Čičarija.

Bagpipe Chanters

19th century, carved and turned wood, the first chanter: l. 17 cm, 2r. 4 cm, the second chanter: l. 15.5 cm, 2r. 3.5 cm, inv. Nos. N 36587 and N 36588, restored by: Irma Langus Hribar, 2016.

Bibliography: Kumer 1983.

Istrski mih and *šurle* are two types of bagpipes that were still in use between the Great Wars in the villages of Slovenian Čičarija.

¹⁶⁸ *Hrvatska tradicijska glazbala*. Available at: <http://www.gajde.com/hrvatska-tradicijska-glazbala/>, accessed on: 11th March, 2017.



Sl. 88 / Picture 88

Piščal dude /
Bagpipe Chanter
Foto / Photo:
Tomaž Lauko

s šurlami kot piščalmi je danes redkejši, saj ga je moč srečati le v tradicionalni glasbi določenih italijanskih skupnosti v Istri.¹⁶⁹

Mizvad

Tunizija, konec 20. stoletja, kozje usnje, kravji rog, trs, d. 73 cm, š. 38 cm, inv. št. N 37801, vir: Peter Krajnc, provenienca: družina Krajnc, Šušteršič.

Afriške dude je Peter Kranjc kupil v Tuniziji v gorski oazi Tamerza od pastirja, ki jih je naredil sam in tudi uporabljal. Ne gre za izdelek s turistične stojnice, je tradicionalni arabski instrument, narejen iz enega kosa odrte kozje kože. Plastično cevko bi bilo treba zamenjati z lesno palčko iz trstičja, vendar je nepripravna za uporabo.

Mizvad je glasbilo (pihalo) z vrečastim rezervoarjem za zrak (meh). Mizvad, ki v arabščini pomeni vrečo, je eden izmed najbolj tradicionalnih inštrumentov v severni Afriki, predvsem ob Sredozemskem morju. Glasbilo je sestavljeno iz pihalne cevi¹⁷⁰, usnja oziroma kozjega meha (vreče), ki ga stiskamo pod ramo, in z

169 *Hrvatska tradicijska glasbala*. Dostopno na: <http://www.gajde.com/hrvatska-tradicijska-glasbala/>, obiskano: 11. marca 2017.

170 V našem primeru je namesto originalne pihalne cevi nameščena sekundarna poliuretanska cevka.

SI. 89 / Picture 89

Piščal dude /
Bagpipe Chanter
Foto / Photo:
Tomaž Lauko



Istrski mih is part of the same group of instruments as diple. Its chanter, called *mešnice*, has a unique combination of holes and a particular melodic profile. It is a characteristic part of traditional culture in central and south Istria. However, today bags (*mehi*) with šurle pipes are very rare, and can only be heard in the traditional music of several Italian communities in Istria.¹⁶⁹

Mizwad

Tunisia, end of 20th century, goatskin, cow horn, cane, l. 73 cm, w. 38 cm, inv. No. N 37801, source: Peter Krajnc, provenance: the families Krajnc and Šušteršič.

Peter Krajnc bought these African bagpipes in Tamerza, a mountain oasis in Tunisia, from a shepherd who made the instrument himself. This instrument is not a souvenir from a tourist stand, but a traditional Arab musical instrument, made of one piece of goat skin. The existing plastic tube should be replaced with a cane stick, but it seems to be unsuitable.

Mizwad is a woodwind instrument with a bag for air supply. The Arabic word *mizwad* means “bag” or “pouch”. This bagpipe is a tradi-

¹⁶⁹ *Hrvatska tradicijska glazbala*. Available at: <http://www.gajde.com/hrvatska-tradicijska-glazbala/>, accessed on: 11th March, 2017.



SI. 90 / Picture 90

Mizwad / Mizwad

Foto / Photo:

Tomaž Lauko

dvojnima melodijskima piščalma iz trsa, ki se končujeta s kravjima rogovoma. Vsaka melodijska piščal ima po pet lukenj. Dovod zraka v piščali je iz vreče, ki jo z usti napihuje godec.

Mizvad je tudi priljubljena vrsta tradicionalne glasbe v Tuniziji, ki vključuje vrsto tunizijskega bobna, imenovanega darbuka,¹⁷¹ kot tudi instrument mizvad. Ta glasba je bila priljubljena na podeželju in med delavskim razredom. Pogosto so jo igrali na porokah. Spremljajo jo tradicionalni plesi, med katerimi ljudje padejo v trans.

¹⁷¹ Darbuka ima značilno obliko keliha in je navadno lončen ali kovinski, za razliko od dumbeka gre za lep in zanimivo okrašen boben.

tional instrument in northern Africa, especially in the countries on the Mediterranean. It consists of a blowpipe, leather, i.e. goatskin, bag, which is clutched under the armpit, and a double chanter made of cane that end in two cow horns.¹⁷⁰ Each chanter has five holes. The air is supplied into the chanter from the bag, which is inflated by the musician blowing air into the bag.

Mizwad is also a popular music style in Tunisia. It includes a type of Tunisian goblet drum called darbuka and mizwad.¹⁷¹ It was popular in rural areas and among labourers, and was often played at weddings. This music is the background to traditional dances, performed until the dancers reach a trancelike state.

170 In our case a secondary polyurethane tube has been fitted instead of the original blowpipe.

171 The darbuka is shaped as a chalice. It is usually made of clay or metal. Unlike the similar dumbek, the darbuka is a beautiful, intricately decorated drum.



TROBILA

Najstarejša trobila so bili predmeti iz narave, na katere je bilo moč trobiti (živalski rogovi, školjke, votle kosti, okli ...).

Trobilo je dolga kovinska cev, ki je večkrat zavita, da jo lažje držimo (npr. če bi raztegovali ali izravnali rog, bi bila cev dolga kar 9 m). V cevi se zračni stolpec spreminja, trobilec pa ga oblikuje z ustnicami, ki v primeru trobil opravljajo enako nalogo kot trsteni jeziček pri pihalih. Ko trobilec vedno bolj stiska ustnice, doseže, da zračni steber niha v polovicah, tretjinah ipd. S tem dobi niz tako imenovanih aktivnih tonov, ki so osnova, „medtone“ pa ustvarja s podaljševanjem oziroma krajšanjem cevi.

Večina trobil ima 3 ventile., Ob pritisku spuščajo zrak v posebne podaljške cevi. S pritiskom ventilov v šestih različnih kombinacijah podaljšujemo cev za različne dolžine, tako da dobimo 6 tonov pod vsakim alikvotom. Izjema je pozavna, saj ima cev na poteg, ki opravlja isto funkcijo kot ventil pri drugih trobilih.

Trobila imajo lijasto ali kotlasto oblikovane ustnike. Kotlasta oblika daje svetlejši zvok od lijaste. Na notranjem delu ustnikov je cevka,



BRASS INSTRUMENTS

Objects found in nature were first used as instruments that produced sound by means of blowing air (animal horns, shells, hollow bones, tusks ...).

A brass instrument is a long metal tube that is bent or coiled several times for better support (if the horn were to be straightened, the tube would measure 9 m in length). The player uses their lips to produce an air stream that vibrates in the tube, the lips functioning in the same way as a reed in woodwind instruments. Changing the form and tension of the lips affects the air stream, which then vibrates in halves, or thirds, and so on. This in turn creates a series of active tones that constitute the base, while the other tones on the scale are produced by lengthening or shortening the tube. Most brass instruments have three valves that, when pressed, release air into the special extensions of the tube. Pressing the valves in six different combinations extends the tube by different length, which creates six tones under each aliquote. The trombone, however, is an exception because of its slide, which functions in the same way as the valves in other brass instruments.

210 ki jo vtaknemo v telo trobila. Ustnice je treba skupaj pritisniti na ustnik in skozi njega pihati zrak – ustnice tako vibrirajo in ustvarijo zvok.¹⁷²

TROBILA – ROG

Trobila delimo na dve poglavitni skupini. Glasbila, podobna trobenti, imajo večinoma cev valjaste oblike, rogovi pa blago stožčasto. Pri vseh izvajalec ustvarja zvok z vibriranjem ustnic ob ustniku.¹⁷³

Tradicionalni signalni rog: izvajalec spreminja zvoke s spreminjanjem toka zraka in pritiska ustnic.

Signalni rog z zaklopkami: zaklopke uravnavamo s prsti in odpiramo luknjice; s tem povečamo tonski razpon.

Basovski signalni rog: ustvarja zelo nizke tone in nanj igrajo v pihalnih godbah.

Med ljudskimi glasbili poznamo sicer veliko rogov (poštnega, alpskega, lovskega ipd.), najdemo pa jih tudi med drugimi umetnimi glasbili (angleški rog, krilni rog ipd.), vendar z oznako rog pojmujejo samo takšno glasbilo. Druga imajo pred imenom obvezni pridevnik.

V Zbirki glasbil Narodnega muzeja Slovenije hranimo štiri rogove, od katerih bi signalni rogovi lahko bili glede na klasifikacijo¹⁷⁴ uvrščeni tudi v Zbirko orožja in bojne opreme.

Slavnostni signalni rog 17. ljubljanskega pehotnega polka

J. F. Červený & S., Hradec Kralove, Češka, 1916, srebro, zlato, d. 49 cm, 2r. 6 cm, inv. št. N 31986, provenienca: 17. ljubljanski pehotni polk, restavrirala: Nataša Nemeček, 2015.

objava: Ličina 2014, str. 37.

literatura: Strukić 2015, str. 158, kat. št. 4.27.

analogija: Slavnostni signalni rog 17. ljubljanskega pehotnega polka izstopa med podobnimi ohranjenimi rogovi po obliki in takratnem pomenu.

172 *Glasbila*, str. 10. Dostopno na: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, obiskano: 1. aprila, 2017.

173 Zyl, van 2015, str. 283.

174 V Sloveniji je za muzeje v veljavi *Pravilnik o seznamu vrsti dediščine in varstvenih usmeritvah* (*Uradni list Republike Slovenije*, Ljubljana 2010), ki v 5. členu našteva vrsti premične kulturne dediščine in vsebuje eno od osnovnih klasifikacij muzejskih predmetov ter jih razvršča v 22 skupin.

The mouthpiece of brass instruments can be either conical or bowl shaped. The bowl shape produces a brighter tone than the conical one. Inside the mouthpiece there is a little tube, the mouthpiece receiver, which is inserted into the trombone. In order to produce sound the lips press onto the mouthpiece and blow air into the instrument. The lips vibrate and create sound.¹⁷²

BRASS INSTRUMENTS – HORN

Brass instruments are divided into two main groups. The instruments similar to the trumpet mostly have a cylindrical tube, while horns feature a slightly conical shape. In both cases the player produces sound with vibrations of lips that are pressed on the mouthpiece.¹⁷³

Traditional bugle, the player changes sounds by changing the air stream and the pressure of the lips.

Valved bugle, this signal horn features valves that are controlled with the fingers, thus opening the holes, which increases the instrument's tonal range.

Contrabass bugle reaches very deep tones, often appearing in brass orchestras.

We can find many types of horns that can be classified as the folk instruments (the post horn, the alphorn, the hunting horn) or as classic concert instruments (the cor anglais, the saxhorn). However, the word horn refers to the generic group of instruments. Each individual type of horns is specified in the name, usually with an adjective. A person who plays the horn is called a horn player, or less commonly, a hornist.

The collection of the National Museum of Slovenia holds 4 horns. The signal horns from the collection could also be classified among the Collection of Arms and Combat Equipment.¹⁷⁴

172 *Glasbila*, p. 10. Available at: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, accessed on: 1st April, 2017.

173 Zyl, van 2015, p. 283.

174 Museums in Slovenia are regulated by the *Pravilnik o seznamu zvrsti dediščine in varstvenih usmeritvah (Rules on the List of Heritage and Protection Guidelines*, Official Gazette of the Republic of Slovenia, Ljubljana 2010), which stipulates in Article 5 all the types of movable cultural heritage and includes one of the fundamental classification systems of museum artefacts, classifying them into 22 individual groups.



Slavnostni signalni rog je med prvo svetovno vojno prejel 17. ljubljanski pehotni polk. Podelitev so kot simbol povezanosti mest in monarhije s svojimi polki izkoriščali predvsem za tedanje propagando.¹⁷⁵ Na mesto pokojnega imetnika polka, pehotnega generala Huga viteza Mildea von Helfensteina, je novi cesar Karel IV. 27. novembra 1916 imenoval svojega sina, prestolonaslednika Otta Habsburškega, in polk je imel od tedaj ob številki tudi naziv *Kronprinz* oziroma slovensko „cesarjevičev“.¹⁷⁶ Ob tej priložnosti je ljubljanski občinski svet na seji 28. novembra sklenil, naj se polku izdela in podari srebrn signalni rog, in to je v naslednjih dneh potrnil tudi cesar. „Prvič v tej vojni se je zgodilo, da je kak polk deležen odlikovanja, da se sme podarjenega signalnega roga že sedaj posluževati,“ je 4. decembra poročal Slovenec.¹⁷⁷

Srebrni rog 17. ljubljanskega pehotnega polka z vgraviranim stihom Jovana Vesela Koseskega „*Hrast se omaje in hrib, zvestoba Slovencev ne gane!*“ ter slovenskim in nemškim napisom „*Junaški Cesarjevičevi pehoti št. 17. Posvetila mestna občina Ljubljanska. / Der tapferen Kronprinz Infanterie No. 17. Gewidmet von der Stadtgemeinde Laibach.*“

Sl. 91 / Picture 91

Slavnostni signalni rog 17. ljubljanskega pehotnega polka / Ceremonial Bugle of the 17th Infantry Regiment of Ljubljana
Foto / Photo: Tomaž Lauko

175 Marko Ličina, Uniforme in nekaj ostalin iz zapuščine »slovenskih« polkov avstro-ogrske armade, v: *Take vojne si nismo predstavljali*, Ljubljana 2014, str. 51.

176 *Slovenec*, leto XLIV., št. 274, 29. november 1916, str. 2.

177 *Slovenec*, leto XLIV., št. 278, 4. december 1916, str. 1.

J. F. Červený & S., Hradec Kralove, Bohemia, 1916, silver, gold, l. 49 cm, 2r. 6 cm, inv. No. N 31986, provenance: the 17th Infantry Regiment of Ljubljana, restored by: Nataša Nemeček, 2015.

Publication: Ličina 2014, p. 37.

Bibliography: Strukić 2015, p. 158, cat. No. 4.27.

Analogies: The ceremonial bugle of the 17th Infantry Regiment is an exception among the similar preserved instruments, distinguished by its form and the meaning it carried.

This ceremonial bugle was given to the Slovenian 17th Infantry Regiment during World War I. The receiving ceremony was used by the propaganda machine of the time as a symbol of the connection between the Austro-Hungarian Monarchy and its regiments.¹⁷⁵ After the death of the Infantry General Hugo Milde von Helfenstein, the new Emperor Charles I named his son, crown prince Otto von Habsburg, patron of the regiment on 27th November, 1916. From that date on the Regiment used the title *Kronprinz* next to its Regimental number.¹⁷⁶ A day later the Ljubljana Municipal Council decided that this occasion warranted the gift of a silver bugle, which was made especially for and presented to the Regiment. Within days this was approved by the Emperor himself. "For the first time in this war a regiment has been given the singular honour of using the gifted bugle immediately," reported the newspaper *Slovenec* on 4th December, 1916.¹⁷⁷

The silver bugle of the 17th Infantry Regiment was dedicated to the Regiment by the Municipality of Ljubljana. The bugle has an engraved verse by Jovan Vesel Koseski: "Hrast se omaje in hrib, zvestoba Sovencev ne gane!" (The oak and the hill may falter, but Slovenian faithfulness will not be shaken) and an inscription in both Slovenian and German language *Junaški "Cesarjevičevi" pehoti št. 17 posvetila Mestna občina Ljubljanska / Der tapferen "Kronprinz" infanterie No. 17 Gewidmet von der Stadtgemeinde Laibach* (Dedicated to the heroic "Crown Prince" Infantry No. 17 by the Municipality of Ljubljana).

175 Marko Ličina, Uniforms and the remnants from the heritage of "Slovenian" regiments of the Austro-Hungarian army, in: *Take vojne si nismo predstavljali*, Ljubljana 2014, p. 51.

176 *Slovenec*, XLIV, No. 274, 29th November, 1916, p. 2.

177 *Slovenec*, XLIV, No. 278, 4th December, 1916, p. 1.

- 214** Srebrni rog ima ustnik dvoglavega plastičnega orla in pozlačen odmevnik. Na začetku napisa je emajliran ljubljanski grb. „*Stribrna polnice, darovana mestem Lublani mistnimu pluku. – Nastroj sam zhotoven firmou V. F. Červený a synove v Hradci Kralove. – Navrh trubky, prave zlate plastiske, ryte vyzdoby a znaky ve zlate smaltovane, prevedla firma Karel Svoboda, Praha I, Uhelny trh 1.*“

Vojaški signalni rog Rudolfa Starka

Rudolf Stark, Kraslice, Češka, pred 1914, tkanina, medenina, d. 36 cm, signatura: *Rud. Stark Graslitz*, inv. št. N 31987, restavrirala: Nataša Nemeček, 2016.

literatura: Strukić 2015, str. 161, kat. št. 4.53.

analogija: Muzej novejšje zgodovine Slovenije, inv. št. 7909/1.

Medeninasti signalni rog z ustnikom in vrvico s cofi za obešanje je vojaško glasbilo, kakršno so uporabljali v 17. ljubljanskem pehotnem polku v času prve svetovne vojne. Barva vrvice je skladna z barvo avstro-ogrskega grba. Na rogu je signatura izdelovalca *Rud.(olf) Stark Graslitz (Kraslice)*.

Vojaški signalni rog

Avstrija, 19. stoletje, medenina, bakrena pločevina, bombaž, d. 37 cm, š. 15 cm, g. 8 cm, inv. št. N 37242, restavrirala: Nataša Nemeček, 2016.

literatura: Tarbuk 2015, str. 158, kat. št. 4.27.

analogija: Muzej za umjetnost i obrt, Zagreb MUO 6491.



Sl. 93 / Picture 93

Vojaški signalni rog / Military Bugle
Foto / Photo: Tomaž Lauko

The silver bugle has a mouthpiece in the shape of a double-headed eagle and a gilded bell. In front of the inscription there is Ljubljana's city coat of arms. *Stribrna polnice, darovana mestem Lublani mistnîmu pluku. – Nastroj sam zhotoven firmou V. F. Červený a synove v Hradci Kralove. – Navrh trubky, prave zlate plastiske, ryte vyzdoby a znaky ve zlate smaltovane, prevedla firma Karel Svoboda, Praha I., Uhelny trh 1.*

Rudolf Stark Military Bugle

Rudolf Stark, Kraslice, Czech, before 1914, tekstile, brass, l. 36 cm, signature: *Rud. Stark Gaslitz*, inv. No. N 31987, restored by: Nataša Nemeček, 2016.

Analogies: Museum of Contemporary History, inv. No. 7909/1.

Sl. 92 / Picture 92

Vojaški signalni rog
Rudolfa Starka /
Rudolf Stark
Military Bugle
Foto / Photo:
Tomaž Lauko



A brass bugle with a mouthpiece and a tasselled string is the type of the military musical instrument that was used in the 17th Infantry Regiment during the World War I. The colour of the string corresponds to the colour of the Austro-Hungarian coat of arms. The instrument has the maker's signature *Rud.(olf) Stark Gaslitz* (Kraslice).

216 O medeninastem vojaškem signalnem rogu iz 19. stoletja ni ohranjene dokumentacije.

Lovski rog

20. stoletje, medenina, usnje, tekstil, v. 32 cm, š. 49 cm, 2r. 6 cm, inv. št. N 6076, vir: Alenka in Boris Kenda, provenienca: Alenka in Boris Kenda, restavrirala: Nataša Nemeček, 2016.



Lovski rog je izdelan iz medeninaste pločevine, na katero je napeto strojeno usnje. Na usnju so trije deli medeninaste pločevine, ki so okrašeni z ornamentalno vgraviranim okrasom, in na njih so obročki, skozi katere je napeljana nosilna vrstica.

Sl. 94 / Picture 94

Lovski rog /
Hunting Horn
Foto / Photo:
Tomaž Lauko

Zurna

R SPECIAL, Indija, 20. stoletje, pokositrena zlitina, les, d. 45 cm, 2r. 8,2 cm, signatura: *R SPECIAL*, inv. št. N 5899, vir: Alenka in Boris Kenda, provenienca: Alenka in Boris Kenda.

literatura: Grove 3, 2014, str. 905–907.

Glasbilo ima lesen cevast trup, ki se na enem koncu razširi. Tu je nanj nasajen kovinski nastavek. Na drugem koncu je trup dekorativno oblikovan. Jeziček je ovit s tanko vrstico. Okoli trupa je zavezana

Austria, 19th century, brass, copper sheet, cotton, l. 37 cm, w. 15 cm, d. 8 cm, inv. No. N 37242, restored by: Nataša Nemeček, 2016.

Bibliography: Tarbuk 2015, p. 158, cat. No. 4.27.

Analogies: Museum of Arts and Crafts, Zagreb 6491.

Hunting Horn

20th century, brass, leather, textile, h. 32 cm, w. 49 cm, 2r. 6 cm, inv. No. N 6076, source: Alenka and Boris Kenda, provenance: Alenka and Boris Kenda, restored by: Nataša Nemeček, 2016.

The hunting horn is made of brass sheet wrapped in tanned leather. Three ornamental brass rings are placed over the leather, decorated with engraved ornaments and added little rings that hold the string used to carry the instrument.

Zurna

R SPECIAL, India, 20th century, tinned alloy, wood, l. 45 cm, 2r. 8.2 cm, signature: *R SPECIAL*, inv. No. N 5899, source: Alenka and Boris Kenda, provenance: Alenka and Boris Kenda.

Bibliography: Grove 3, 2014, p. 905–907.

This is a wooden cylindrical instrument that expands on one end, where metal bell is attached to the wood. On the other end the wood is decoratively shaped, and a thin string is wrapped around the reed and further down a green string is tied around the body. On the body there is a label with the inscription *1 G / R SPECIAL / BEST QUALITY / MADE IN INDIA*.

The zurna is an Eastern version of the oboe and Beethoven regularly included it in his later work.¹⁷⁸

178 Zyl, van 2015, p. 152.

218 zelena vrstica, na kateri visi kovinski ključ. Na trupu je nalepka, na kateri piše: *1 G / R SPECIAL / BEST QUALITY / MADE IN INDIA*. Zurna je vzhodnjaška različica oboe.¹⁷⁸



Sl. 96 / Picture 96

Napis na zurni /
Signature on
Zurna
Foto / Photo:
Tomaž Lauko

Sl. 95 / Picture 95

Zurna / Zurna

Foto / Photo:

Tomaž Lauko





TOLKALA

Tolkala so glasbila, pri katerih zvok nastaja z udarci, stresanjem, drgnjenjem, tolčenjem ali teptanjem.¹⁷⁹

Izvor tolkal sega na začetek zgodovine človeštva, v kameno dobo. Tolkala različnih oblik in materialov so imela že zelo zgodaj pomembno mesto v kulturni in ritualni glasbi. V času križarskih vojn so si bobni in timpani utrli pot v Evropo in tam so jih v več stoletjih razvili do oblik, ki jih poznamo danes.¹⁸⁰

Izdelovanje tolkal se na ozemlju današnje Slovenije ni nikoli razvilo. Imamo pa nekaj arhivskega gradiva, ki dokazuje uporabo tolkal v različnih družbenih okoljih. Omenjajo jih rokopisni viri od druge polovice 17. stoletja. Uporabljali so jih v samostanskih in cerkvenih kapelah, pri mestnih glasbenikih, različnih orkestralnih sestavah in ne nazadnje v vojaško in civilno organiziranih godbah.¹⁸¹

179 Franci Krevh in Marjeta Humar, *Tolkalni terminološki slovar*, Ljubljana 2014, str. 95.

180 *Glasbila*, str. 14. Dostopno na: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, obiskano: 1. aprila, 2017.

181 Koter 2001, str. 168.



PERCUSSION

Percussion instruments produce sound by means of being struck, shaken, rubbed, hit, stomped, etc.¹⁷⁹

The origin of percussions goes back to the beginning of the history of man, to the Stone Age. Very early on percussion instruments of various forms and materials played an important part in cult and ritual music. It was during the period of the Crusades that drums and timpani found their way to Europe, where throughout the centuries they were further developed into the forms we know today.¹⁸⁰

The manufacture of percussion instruments never really took off in Slovenia. We do have some archival material that proves percussion instruments were used in various circles. They were mentioned in manuscripts starting in the second half of the 17th century. They were used in monastery and church chapels, played by musicians in urban environments, in various orchestras, and also in military or civilian brass bands.¹⁸¹

179 Franci Krevh and Marjeta Humar, *Tolkalni terminološki slovar*, Ljubljana 2014, p. 95.

180 *Glasbila*, p. 14. Available at: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, accessed on: 1st April, 2017.

181 Koter 2001, p. 68.

Slovenija, 1848, poslikan les, medenina, usnje, v. 27 cm, 2r. 40 cm, inv. št. N 16997, provenienca: kranjska narodna straža, restavriral: Zdenka Kramar, 1997.

literatura: Koter 1994, str. 53, kat. št. 7; Koter 2001, str. 86, 169.

analogije: Pokrajinski muzej Maribor, inv. št. N. 7551; Pokrajinski muzej Ptuj Ormož, inv. št. GL 40 S; Tržiški muzej, inv. št. TRŽ / LZ 2582.

Boben kranjske narodne straže iz zbirke Narodnega muzeja Slovenije je na lesenem obodu pobarvan s slovensko trobojnico (bela, modra, rdeča).¹⁸² Ima pokončno obliko tako imenovanega vojaškega bobna z vrtljem (nem. *Wirbel*).

Boben z dvema opnoma je iz živalske kože, napete s trakovi oziroma vrvmi, ki ima čez zgornjo ali spodnjo opno napeti dve žici ali več.



Sl. 97 / Picture 97

Boben kranjske narodne straže /
Drum of the Carniolan National Guard
Foto / Photo:
Tomaž Lauko

182 Belo, modro in rdečo barvo je kot kranjske deželne barve leta 1836 določil cesar Ferdinand. To so barve, ki so poleg zlate zastopane v kranjskem deželnem grbu: moder orel na beli podlagi, na orlovih prsih rdeče-bela šahovnica, rdeče barve so tudi orlovi kremplji in kljun.

Slovenia, 1848, painted wood, brass, leather, h. 27 cm, 2r. 40 cm, inv. No. N 16997, provenance: Carniolan National Guard, restored by: Zdenka Kramar, 1997.

Bibliography: Koter 1994, p. 53, cat. No. 7; Koter 2001, p. 86, 169.

Analogies: Maribor Regional Museum, inv. No. N. 7551; Ptuj – Ormož Regional Museum, inv. No. GL 40 S; Tržič Museum, inv. No. TRŽ / LZ 2582.

The drum is a percussion instrument that consists of a shell and one or two membranes, usually skins, stretched over the shell and fixed with a rim, then played with striking or rubbing movements.

The Drum of the Carniolan National Guard from the National Museum of Slovenia collection has a wooden rim painted in the colour of the Slovenian Tricolour (white, blue, and red).¹⁸² It has the vertical form of a military drum (snare drum) with a peg-like strainer (Ger. *Wirbel*).

This drum has two membranes made from animal skin tightened across the drum with a cord, and one or two or even more wires strung over the upper or bottom skin.

Snare or Military Drum

Before 1918, brass, iron, leather, h. 16 cm, 2r. 28.5 cm, inv. No. N 34418, restored by: Nataša Nemeček, 2016.

The snare drum or military drum consists of a shell, hoop, resonating membrane, a snare, and a snare strainer. The diameter of this type of a drum is usually between 33 and 56 cm, the depth is between 10 and 19 cm.

The drum from the collection of the National Museum of Slovenia features two rims painted in “Austrian colours”.¹⁸³

182 In 1836 Emperor Ferdinand I designated the colours white, blue and red as the colours of the province of Carniola. All three can be found in the Carniolan coat of arms, in addition to the gold: a blue eagle on the white background, the chest of the eagle features a red and white chessboard, the eagle's talons and beak are red as well.

183 Originally the colour of Austria was yellow, as were all administrative buildings in Austro-Hungary. The colour even had its own name: imperial yellow.

224 Mali ali vojaški boben

Pred 1918, medenina, železo, usnje, v. 16 cm, 2r. 28,5 cm, inv. št. N 34418, restavriral: Nataša Nemeček, 2016.

Mali ali vojaški boben je sestavljen iz oboda, obroča, resonančne opne, mrežice in napenjala mrežice. Premer malega bobna je navadno med 33 in 56 cm, globok pa je od 10 do 19 cm.

Boben iz Zbirke glasbil Narodnega muzeja Slovenije ima robova obarvana z „avstrijsko barvo“.¹⁸³

Palice manjkajo.

Mali ali vojaški boben s palicami

19. stoletje, les, medenina, usnje, boben: v. 12,5 cm, 2r. 30,5 cm, palice za boben: d. 41 cm, 2r. 2,5 cm, pas za boben: d. 59,5 cm, š. 9 cm, inv. št. N 34419/ 1-3, restavriral: Nataša Nemeček, 2016.

Mali ali vojaški boben ima ohranjene originalne paličice v usnjenem nosilcu za boben in palice.



Sl. 99 / Picture 99

Mali ali vojaški
boben s palicami /
Snare or Military
Drum with
Drumsticks
Foto / Photo:
Tomaž Lauko

¹⁸³ Avstrijska barva je v originalu rumena, tako kot so bile vse upravne stavbe v Avstro-Ogrski. Ta barva je imela celo ime – cesarsko žolta.

The drumsticks are missing.

Sl. 98 / Picture 98

Mali ali vojaški
boba / Snare or
Military Drum
Foto / Photo:
Tomaž Lauko



Snare or Military Drum with Drumsticks

19th century, wood, brass, leather, drum: h. 12.5 cm, 2r. 30.5 cm,
drumsticks: l. 41 cm, 2r. 2.5 cm, drum belt: l. 59.5 cm, w. 9 cm,
inv. No. N 34419/ 1-3, restored by: Nataša Nemeček, 2016.

The snare or military drum comes with preserved original drumsticks kept in a leather belt that carries both the drumsticks and the drum.

226 Mali ali vojaški boben

Pred 1918, medenina, les, usnje (koža), v. 15,5 cm, 2r. 34,5 cm, inv. št. N 34420.

analogija: Loški muzej, inv. št. ZG/1246.



Sl. 100 / Picture 100

Mali ali vojaški boben / Snare or Military Drum
Foto / Photo: Tomaž Lauko

Mali ali vojaški boben ima strgani obe koži.

Palice manjkajo.

Veliki boben

Začetek 20. stoletja, les, usnje, medenina, koža, boben: v. 32 cm, 2r. 60 cm, palica: d. 27,5 cm, inv. št. N 37142/ 1-2, vir: Mario Modrinjak, provenienca: Franc Modrinjak starejši, restavriral: Nataša Nemeček, 2016.

Veliki boben z usnjenim pasom in pravima kožama (nestrojeno usnje). Bobnu je priložena palica za igranje. S tem bobnom je Franc Modrinjak starejši, dedek darovalca Maria Modrinjaka iz Maribora, igral na pogrebih.

Boben je bil ob uvrstitvi v Zbirko glasbil Narodnega muzeja Slovenije v slabem stanju, ena opna je bila počena. V konservatorsko-restavratorski delavnici Narodnega muzeja Slovenije so ga v celoti obnovili in usposobili za igranje.

Before 1818, brass, wood, leather (skin), h. 15.5 cm, 2r. 34.5 cm, inv. No. N 34420.

Analogies: Škofja Loka Museum, inv. No. ZG/1246.

Both of the skins on the drum are torn.

The drumsticks are missing.

Bass Drum

Early 20th century, wood, leather, brass, skin, drum: h. 32 cm, 2r. 60 cm, drumstick: l. 27.5 cm, inv. No. N 37142/ 1-2, source: Mario Modrinjak, provenance: Franc Modrinjak Sr, restored by: Nataša Nemeček, 2016.

SI. 101 / Picture 101

Veliki boben / Bass
Drum
Foto / Photo:
Tomaž Lauko



The bass drum with a leather belt and two skins (untanned leather) with only one drumstick. Franc Modrinjak Sr, grandfather of donor Mario Modrinjak from Maribor, used to play this drum at funerals.

The drum was in poor condition when it first came to the National Museum of Slovenia collection. One membrane was cracked. The conservation and restoration workshop of the National Museum of Slovenia completely restored the instrument, which is now fit to be played.

Turčija, sredina 19. stoletja, usnje, medenina, 2r. 40 cm, inv. št. N 37143, vir: Mario Modrinjak, provenienca: Franc Modrinjak starejši, restavriral: Nataša Nemeček, 2016.



Sl. 102 / Picture 102

Orkestrske ročne činele / Orchestral Hand Cymbals
Foto / Photo: Tomaž Lauko

Orkestrske ročne činele so bile ročno kovane in izdelane v Turčiji sredi 19. stoletja. Na eni izmed činel so dobro vidni sledovi kovanja. Činele je uporabljal Franc Modrinjak starejši, dedek darovalca Maria Modrinjaka.

Činele so skupina kovinskih tolkal v obliki okroglih, izbočenih, izjemoma tudi vbočenih plošč, ki jih lahko držimo v rokah ali so vpete na stojala, manjše pa so del drugih tolkal. Činele uporabljamo v kompletu bobnov ali samostojno, praviloma je njihov premer od 40 do 50,8 cm.¹⁸⁴

Orkestrske činele

Turčija, sredina 19. stoletja, usnje, medenina, 2r. 42 cm, inv. št. N 37672, vir: Mario Modrinjak, provenienca: Franc Modrinjak st., restavriral: Nataša Nemeček, 2016.

Orkestrske činele, ročno kovane, izdelane v Turčiji sredi 19. stoletja. Činele je uporabljal Franc Modrinjak st., dedek Maria Modrinjaka.

Danes so činele na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.

¹⁸⁴ Kreuh in Humar 2014, str. 54–55.

Orchestral Hand Cymbals

Turkey, mid-19th century, leather, brass, 2r. 40 cm, inv. No. N 37143, source: Mario Modrinjak, provenance: Franc Modrinjak Sr, restored by: Nataša Nemeček, 2016.

The orchestral hand cymbals were hand-forged in Turkey in the mid-19th century. One of the cymbals bears clearly visible indentations from the forging process. The instrument was used by Franc Modrinjak Sr, grandfather of the donor Mario Modrinjak from Maribor.

Cymbals are a set of metal percussion instruments, round, convex, occasionally even concave plates that can be held in the hands or set on a stand. The smaller cymbals can be a part of another percussion instrument, as cymbals can make up part of a percussion set or be used individually. Generally they measure from 40 to 50.8 cm in diameter.¹⁸⁴

Orchestral Cymbals

Turkey, mid-19th century, leather, brass, 2r. 42 cm, inv. No. N 37672, source: Mario Modrinjak, provenance: Franc Modrinjak Sr, restored by: Nataša Nemeček, 2016.

Orchestral cymbals, hand-forged, made in Turkey in the mid-19th century. The cymbals were played by Franc Modrinjak Sr, grandfather of Mario Modrinjak.

Today, the cymbals can be seen as part of the permanent exhibition of the Historical and Art Collection – The Musical Instruments at the National Museum of Slovenia Metelkova.

SI. 103 / Picture 103

Orkestrske činele /
Orchestral Cymbals
Foto / Photo:
Tomaž Lauko



¹⁸⁴ Kreuh and Humar 2014, p. 45–55.

Pro Mark 5a, Združene države Amerike, 2015, les hikori (*hickory*),¹⁸⁵
d. 39 cm, 2r. 0,551 cm, signatura: *Pro Mark*, inv. št. N 37548, vir: Jakob
Vanček, provenienca: Jakob Vanček.

Bobnarske palice so bile prvi predmeti, ki jih je Narodni muzej Slovenije pridobil s pomočjo akcije *Podari glasbilo muzeju in ga zapiši v zgodovino*.

Na palicah je napis: *American Hickory 5A, Pro Mark, Millenium 4 II, Made in USA Hickory*. Zbirki glasbil Narodnega muzeja Slovenije jih je podaril slovenski bobnar Jakob Vanček.

Palice so narejene iz lesa hikori, ki je zaradi odpornosti, odzivnosti, trajnosti in otipa najprimernejši les za izdelavo bobnarskih palic. Palice so premera 0,551 cm. Ovalna lesena konica zagotavlja globok, topel ton, primeren za različne žanre. Srednji del je zožan za uravnotežen odziv in povezanost tonov. Vse palice Pro Mark so zasnovane in izdelane v ZDA. Palice Model 5a so v sodobnem času zaradi dobre uravnoteženosti in dolžine najbolje prodajane bobnarske palice.

Danes so bobnarske palice na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.



Sl. 104 / Picture 104
Bobnarske palice
Pro Mark / Pro Mark
Drumsticks
Foto / Photo:
Tomaž Lauko

Bobnarske palice TAMA

TAMA, konec 20. stoletja, les, d. 40,5 cm, signatura: *TAMA*, inv. št.
N 37140, vir: Igor Pristovnik, provenienca: Igor Pristovnik.

Bobnarske palice znamke *TAMA*¹⁸⁶, ki je med večjimi izdelovalci bobnov na svetu, je uporabljal Igor Pristovnik, bobnar pri skupinah *Skakafci*, *Preporod* in *Country Ketchup*. Skupine so imele

¹⁸⁵ Hikori (*Carya*) je les iz družine orehovk, ki raste samo v Združenih državah Amerike (Virginia / Apalači).

¹⁸⁶ TAMA je japonsko podjetje za izdelavo bobnov in bobnarske opreme. Deluje od leta 1974.

Pro Mark 5a, United States of America, 2015, hickory,¹⁸⁵ l. 39 cm, 2r. 0.551 cm, signature: *Pro Mark*, inv. No. N 37548, source: Jakob Vanček, provenance: Jakob Vanček.

The Pro Mark drumstick set was the first object obtained by the National Museum of Slovenia through its *Podari glasbilo muzeju in ga zapiši v zgodovino* event.

The signature on the drumsticks reads *American Hickory 5A, Pro Mark, Millennium 4 II, Made in USA Hickory*. The set was donated by the Slovenian drummer Jakob Vanček.

The drumsticks are made of hickory, the best type of wood for drumsticks due to its resistant properties, reactivity, durability, and their feel in the hands. Their diameter is 0.551 cm; the ovular tip made of wood produces a warm, deep sound, perfect for a variety of genres. The middle part is narrowed to make for a balanced response and connected tones. All Pro Mark sticks are designed and made in the USA. Due to its length and balance, the 5A Model has lately been the most sought after brand of drumsticks

TAMA Drumsticks

TAMA, end of 20th century, wood, l. 40.5 cm, signature: *TAMA*, inv. No. N 37140, source: Igor Pristovnik, provenance: Igor Pristovnik.

TAMA is one of the biggest manufacturers of drums in the world.¹⁸⁶ These drumsticks were used by Igor Pristovnik, drummer for the bands Skakafci, Preporod, and Country Ketchup. These groups toured across Yugoslavia, also appearing in Opatija and *Dnevi Jugoslovanske radiotelevizije*.

The drumsticks are made from different materials and comprise of the handles and the heads used with most types of percussions.

¹⁸⁵ Hickory (*Carya*) wood belongs to the family of walnut trees. It can only be found in the United States of America (Virginia / Appalachia).

¹⁸⁶ TAMA is a Japanese maker of drums and accompanying equipment, established in 1974.

232 samostojne koncerte po Jugoslaviji, nastopile so tudi v Opatiji, na dnevih Jugoslovanske radiotelevizije.

Bobnarske palice so narejene iz različnih materialov in sestavljene iz ročaja in glave, ki se uporablja za igranje za večino tolkal.



Sl. 105 / Picture 105

Bobnarske palice
TAMA / TAMA
Drumsticks
Foto / Photo:
Tomaž Lauko

Bobnarske palice TAMA, model Marko Soršak Soki

TAMA, začetek 21. stoletja, les, d. 41 cm, signatura: TAMA,
inv. št. N 37090, vir: Marko Soršak, provenienca: Marko Soršak.

Palice je Narodnemu muzeju Slovenije podaril Marko Soršak – Soki, bobnar skupine *Elvis Jackson*, in sicer 25. marca 2015 po velikem promocijskem koncertu skupine *Elvis Jackson* v Kinu Šiška. Koncert je bil promocija nove plošče *Radio unfriendly*.

Na palicah je napis *Marko Soršak SOKI Elvis Jackson TAMA SIGNATURE MODEL* in na ovitku palic *TAMA THE STRONGEST NAME IN DRUMS*. S tem je TAMA bobnarju Sokiju izkazala prav posebno čast, saj so zanj izdelali poseben model bobnarskih palic z njegovim imenom in imenom matične zasedbe *Elvis Jackson*.

TAMA, early 21st century, wood, l. 41 cm, signature: *TAMA*, inv. No. N 37090, source: Marko Soršak, provenance: Marko Soršak.

The drumsticks were donated to the National Museum of Slovenia on 25th March, 2017 by Marko Soršak, better known by his nickname Soki, the drummer of the band Elvis Jackson, after Elvis Jackson performed a concert in Kino Šiška to promote their new CD Radio Unfriendly.

The inscription on the sticks reads: *Marko Soršak SOKI Elvis Jackson TAMA SIGNATURE MODEL*. On the drumsticks' sleeve there is another inscription: *TAMA THE STRONGEST NAME IN DRUMS*. By making a custom set of drumsticks for Marko Soršak with the name Elvis Jackson, Tama showed great regard for the drummer.

Soki's set of drumsticks were tested by several world renowned drummers, as well as Slovenian drummers.

SI. 106 / Picture 106

Bobnarske palice
TAMA / TAMA
Drumsticks
Foto / Photo:
Tomaž Lauko



234 Bobnarske palice DynaVox, model Mario Modrinjak

Slovenija, DynaVox, začetek 21. stoletja, drenov les, d. 37,5 cm, signatura: *DynaVox*, inv. št. N 37141, vir: Mario Modrinjak, provenienca: Mario Modrinjak.

Sinhrono bobnarske palice – model Mario Modrinjak je izdelalo slovensko podjetje DynaVox.

Mario Modrinjak, znani slovenski bobnar, član skupine *The Kroniks*, je igral s številnimi slovenskimi glasbeniki (Zoran Predin, Peter Lovšin, Vlado Kreslin ...) v studiu in na koncertih. S temi palicami, posebej zanj prilagojenim modelom DynaVox, je leta 2003 na mednarodnem tekmovanju na Dunaju dosegel drugo mesto v kategoriji *speed drumming* (hitrostno bobnanje).



SI. 107 / Picture 107

Bobnarske palice
DynaVox, model Mario
Modrinjak / DynaVox
Drumsticks, Mario
Modrinjak Set
Foto / Photo: Tomaž Lauko

Modeli bobnarskih palic DynaVox

Slovenija, DynaVox, 2017, drenov les, gorski javorjev les, akacijin les, ameriški rdeči hikori, d. 37,5 cm, signatura: *DynaVox*, inv. št. N, vir: Lado Černoš.

Slovensko podjetje DynaVox deluje od leta 1985. Stroje, orodja in tehnološki postopek za proizvodnjo bobnarskih palic so razvili sami. Izdelujejo številne modele bobnarskih palic – približno 460 modelov po posebnem naročilu in 22 standardnih modelov.

Palice so maloserijsko in natančno izdelane ter povsem ravne. V paru je odstopanje v teži pri obeh palicah minimalno, saj je največje dovoljeno odstopanje zgolj 0,5 grama.

Slovenia, DynaVox, early 21st century, cornel, l. 37.5 cm, signature: *DynaVox*, inv. No. N 37141, source: Mario Modrinjak, provenance: Mario Modrinjak.

Synchronous drumsticks – the Mario Modrinjak model was made by the Slovenian company DynaVox.

Mario Modrinjak, a well-known Slovenian drummer who played for band *The Kroniks*, also worked as a studio musician and played with many Slovenian musicians (Zoran Predin, Peter Lovšin, Vlado Kreslin, and more), both in studio and live. The DynaVox drumsticks were custom made for him. In 2003 he played with this set at an international competition in Vienna, reaching second place in the Speed Drumming category.

DynaVox Drumsticks Sets

Slovenia, DynaVox, 2017, cornel, sycamore, acacia wood, red hickory, l. 37.5 cm, signature: *DynaVox*, inv. No. N 37821, N 37940 – N 37943, N 37944/ 1-11, source: Lado Černoš.

The Slovenian company DynaVox, was established in 1985. They developed the machinery, tools, and the technological procedures for producing the drumsticks themselves. The company makes many models of drumsticks, approximately 460 custom made models and 22 standard models. The sets are made in limited numbers. They are very precisely made and weighed within, give or take, a half gram in the same set; they are completely straight.

The types of wood used by DynaVox in the making of their drumsticks are:

- Slovenian: sycamore, acacia, and cornel
- Foreign: American red hickory (Virginia / Appalachia)

The surface of the sticks is specifically made. The standard sets feature an anti-slip finish achieved through a special application process. As such they stick to the drummer's hands even when they are wet with sweat and there is no danger of them sliding out. Besides drumsticks DynaVox also makes wooden brushes both

Vrste lesa, ki jih DynaVox uporablja za izdelavo palic, so:

- slovenski: gorski javor, akacija in dren,
- ameriški: ameriški rdeči hikori (Virginia / Apalači).

Palice imajo prilagojeno površino, ki je v standardni izvedbi protizdrsna in izdelana s posebnim tehnološkim postopkom nanašanja. Zato se bobnarjem, ki imajo potne roke, palice nekoliko "zalepijo" na prste in ne drsijo iz rok.

Poleg palic izdelujejo tudi lesene metlice z ročajem ali brez njega. Palice ali metlice so lahko v naravnih lesnih barvnih odtenkih, pobarvane ali pa so narejene po posebni metodi, pri kateri palice svetijo v temi s pomočjo UV žarnice.¹⁸⁷

Danes so modeli bobnarskih palic na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.



SI. 108 / Picture 108

Paleta bobnarskih palic slovenskega izdelovalca DynaVox / A range of Drumsticks Sets by Slovenian producer DynaVox
Foto / Photo: Tomaž Lauko

¹⁸⁷ V DynaVoxu so našli lesen material, ki ima posebne naravne lastnosti: les / palice ali lesene metlice zeleno svetijo, potem ko jih v temi osvetlijo z UV žarnico. Pri tem kemični površinski premaz na palicah ni potreben.

with handles and without. The sticks and brushes come in natural colours of wood, painted or finished using a special method that makes the sticks glow under UV light.¹⁸⁷

Today, the drumsticks sets can be seen as part of the permanent exhibition of the Historical and Art Collection – The Musical Instruments at the National Museum of Slovenia Metelkova.

SI. 109 / Picture 109

DynaVox Drum
Sticks / DynaVox
Drumsticks
Foto / Photo:
Tomaž Lauko



¹⁸⁷ DynaVox developed a wooden material with natural characteristics that cause the wood to glow greenish when illuminated by with UV light. No chemical varnish is needed to achieve this result.



ELEKTROAKUSTIČNI INŠTRUMENTI

Elektroakustična glasbila so tista, ki elektrodinamično ali elektronsko vzbujajo nihanja. Ta primerno oblikovana (zven) in ojačana melodijo posredujejo poslušalcem prek zvočnika. Takšni inštrumenti so:

- sintetizator zvoka,
- električna kitara, bas kitara,
- električne klaviature,
- ritem mašine,
- delno vsi inštrumenti, ki so ozvočeni prek zvočnikov s pod-magnetenjem (brenkala, godala ...).

Hiter razvoj elektronike in njenih komponent je omogočil izdelavo naprav, ki lahko uspešno nadomestijo klasična glasbila in celo človeški glas, hkrati pa imitirajo številne zvene ali celo ustvarjajo nove, ki jih v naravi ni. Elektronska glasba je danes samostojna veda, ki je tesno povezana z računalništvom.¹⁸⁸

188 *Glasbila*, str. 21–23. Dostopno na: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, obiskano: 1. aprila, 2017.



ELECTROACOUSTIC MUSICAL INSTRUMENTS

Electroacoustic musical instruments induce electrodynamic or electronic vibrations, which, when suitably formed (as sound) and amplified, communicate the music to listeners through speakers. These instruments are:

- sound synthesizer
- electric guitar, bass guitar
- electric pianos
- drum machines
- almost all instruments that are amplified through loudspeakers by means of sub-magnetisation (string instruments, plucked string instruments, etc.)

The rapid development of electronics and its components gave rise to the production of devices that could successfully replace classic musical instruments or even the human voice. Even more, they can also imitate various sounds or even create new ones not found in nature. Today electronic music has grown into an independent field, closely connected with computers and information technology.¹⁸⁸

188 *Glasbila*, p. 21–23. Available at: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, accessed on: 1st April, 2017.

Yamaha, druga polovica 20. stoletja, material: umetna masa, mere: d. 128 cm, v. 18 cm, š. 63 cm, Yamaha, inv. št. N 37805, vir: družina Adamič, provenienca: Bojan Adamič.



Električni klavir znamke Yamaha je Narodnemu muzeju Slovenije donirala družina Bojana Adamiča.

Električnemu klavirju rečemo tudi digitalni pianino. V nasprotju s klasičnimi se ne razglasijo, niso občutljivi za vlago in temperaturo ter so neprimerno lažji. Pomembni lastnosti sta tudi vgrajen metronom ter možnost snemanja in igranja na slušalke.

Teža tipke in mehanika sta do popolnosti natančen posnetek teže tipke in mehanike pravega koncertnega klavirja.

Zvok v digitalnem klavirju je večstopenjski stereo posnetek pravega koncertnega klavirja, zajet v več jakostnih stopnjah.

SI. 110 / Picture 110

Električni klavir
Bojana Adamiča /
Bojan Adamič's
Electric Piano
Foto / Photo:
Tomaž Lauko

Yamaha, second part of the 20th century, material: plastic, measures: l. 128 cm, w. 63 cm, h. 18 cm, Yamaha, inv. No. N 37805, source: the Adamič family, provenance: Bojan Adamič.

SI. 111 / Picture 111

Signatura na električnem klavirju Bojana Adamiča / Signature on Bojan Adamič's Electric Piano
Foto / Photo: Tomaž Lauko



The Yamaha electric piano was donated to the National Museum of Slovenia by Bojan Adamič's family.

The electric piano, also called the digital upright piano, is never out of tune, does not react to humidity or temperature, and is incomparably lighter than acoustic pianos. Additionally, it has a built-in metronome, recording options, and a headphone jack.

The weighted keys and the action are a faithful copy of that of a concert piano.

The sound of the digital piano is a multi-level stereo recording of a concert piano that is reproduced with varying levels of intensity. These characteristics generally make it a better option than a cost-effective model of the classic.

Domače muziciranje so postopno nadomestili aparati, ki so z vrtenjem ročice ali pritiskom na gumb prinesli glasbo v dom.

Po zaslugi vzpona fonografa Thomasa Edisona (1877) so v domovih začeli poslušati glasbo od zunaj.

Po letu 1920 je radio nadomestil muziciranje kot poglavitno obliko domačega razvedrila. V tem času so ljudje začeli vse bolj iskati zabavo zunaj doma, denimo v kinu.¹⁸⁹

Valjčni glasbeni avtomat

Seewen, Švica, druga polovica 19. stoletja, orehov les, kovina, v. 116 cm, š. 86 cm, g. 57 cm, inv. št. N 33689/1, vir: Amalija Pegan, provenienca: družina Tomažič Pegan.

objava: Lozar Štamcar 2011, str. 55.

literatura: Motte-Haber, de la, 1996.

analogija: V švicarskem muzeju *Das Museum für Musikautomaten* iz Seewna v muzejski zbirki, ki je izjemno bogata, tega modela valjčnega glasbenega avtomata nimajo, vendar imajo zdaj registrirano evidenčno številko naše glasbene skrinje.

Empirsko-bidermajerska glasbena omara oziroma historična aparatura za reprodukcijo zvoka na ključ ima obliko nizkega pianina z igralnim nastavkom in resonančno podzgradbo. Omara je iz orehovega furnirja, glasbeni nastavek je uokvirjen z več vzporednimi intarziranimi linijami. Mehanični vzvodi imajo gesla v francoščini. Pokrov ima znotraj intarziranega okvira lep raport izbrane orehove korenine. Spredaj so nosilne noge s floralno dekoracijo, spodaj pa se zaključujejo z levjimi šapami.

Ščitniki za ključe predalov in glasbene skrinje so iz slonovine. Lese ne aplikacije in nosilne noge so ebenovinsko črno obarvane. V spodnjem delu omare sta dva predala z 12 cilindri velikosti 32 x 8 cm, à 8 krogov z 96 melodijami s klasično in narodno poljudno glasbo. Folklorna glasba je večinoma z alpskega območja. Predali so v notranjosti črno lakirani.

189 Zyl, van 2015, str. 171.

MUSIC MACHINES

In homes musical instruments have been gradually replaced by machines that can be started either by turning a crank or by simply pressing a button.

The rise in the popularity of Thomas Edison's phonograph (1877) brought music from the outside world into private homes.

Sometime after 1920 the radio became the primary source of home entertainment, and listening to the radio replaced playing musical instruments. More and more, people were looking for amusement outside their homes, for example at the cinema.¹⁸⁹

Player Piano

Seewen, Switzerland, second half of the 19th century, walnut wood, metal, h. 116 cm, w. 86 cm, d. 57 cm, inv. No. N 33689/1, source: Amalija Pegan, provenance: the Tomažič Pegan family.

Publication: Lozar Štamcar 2011, p. 55.

Bibliography: Motte-Haber, de la, 1996.

Analogies: The Swiss *Das Museum für Musikautomaten* from Seewena does not hold this model of the player piano, although their collection is quite large. However, they have entered the register number of this player piano into the holdings of National Museum of Slovenia into their records.

The Empire-Biedermeier piano player is a historic machine that reproduces sound. It has the form of a low upright piano featuring specific Mechanism that operates piano action. The soundboard is under the mechanism. The casing is walnut veneer and the mechanism is framed with inlaid wood. The notes on the mechanical levers are in French. Inside the fallboard the inlay work shows a beautiful pattern created by walnut root. The legs in the front feature floral decorations and end in lion's paws.

The protective casings for the keys of the drawers and the music box are made of ivory. The wooden decoration and the legs are stained in ebony black. In the lower part of the casing there are two drawers with 12 cylinders, 32 x 8 cm in size, 8 rounds with 96 musical pieces, from classical music to folk music. The style of folk

¹⁸⁹ Zyl, van 2015, p. 171.



SI. 112 / Picture 112

Valjčni glasbeni
avtomat /
Player Piano
Foto / Photo:
Tomaž Lauko

V zgornjem predalu je poleg valjev pritrjena medeninasta plošča (8 x 11 cm) z napisom: *1864, Felix in Marija Tomažič, Zdenka Pegan, roj. Tomažič, Ljubljana & Efrem in Amalija Pegan, roj. Rozman, Ljubljana – München, 2008.*

Za vseh dvanajst valjev so priložene originalne polikromirane in ilustrirane kartonske table z ročno napisanimi imeni glasbenih del (glej v nadaljevanju).

Glasbena skrinja je bila od vsega začetka v lasti družine Tomažič Pegan.¹⁹⁰ Leta 1955 so starši Efrema Marcela Pegana glasbeno skrinjo kot poročno darilo podarili njegovi ženi Amaliji. Ta je bila njena zadnja lastnica.

¹⁹⁰ Skrinja je v bila v lasti pradede Efrema Marcela Pegana, Augusta Tomažiča oz. njegove žene Marije Tomažič, roj. Waschiza, lastnikov podjetja Iv. A. Hartmanna nasl., Ljubljana, Dunajska c. (pri Ajdovščini – stavba Kavarne Evropa), veletrgovca z deželnimi pridelki ter uvoznika živilskih in kolonialnih izdelkov. Skrinja je nato prišla v last starega očeta Efrema Marcela Pegana po materini strani, Felixa Tomažiča, knjigovodje v "Krakauer Dom". Od leta 1955 je bila v lasti Amalije Pegan iz Ljubljane.

music is mostly that of the Alpine regions. Inside the drawers are varnished in black.

SI. 113 / Picture 113

Medeninasta
ploščica z napisom /
Brass plate with
inscription
Foto / Photo:
Tomaž Lauko



The upper drawer next to the cylinders contains a brass plate (8 x 11 cm) with the inscription: *1864, Felix in Marija Tomažič, Zdenka Pegan, roj. Tomažič, Ljubljana & Efrem in Amalija Pegan, roj. Rozman, Ljubljana – München, 2008.*

All twelve cylinders come with original polychrome and illustrated cardboard boards with handwritten music titles.

This machine was owned by the Tomažič Pegan family from the very beginning.¹⁹⁰ In 1955 Efrem Marcel Pegan's parents presented the player piano to his wife Amalija as a wedding gift. Amalija was the last owner of the machine.

According to the Pegan family oral tradition, Dr Mal wanted the player piano to go the National Museum of Slovenia in Ljubljana, where it would make up part of the planned exhibitions replicating burger homes in individual rooms of the Museum.¹⁹¹

190 The player piano was originally owned by the great-grandfather of Efrem Marcel Pegan, August Tomažič and his wife Marija Tomažič, neé Waschiza, the owners of the company Iv. A. Hartmann on Dunajska street in Ljubljana (Ajdoščina – the building of Kavarna Evropa), a produce wholesaler and importers of food stuffs. The “piano” was later inherited by Efrem Marcel Pegan's grandfather on his mother's side, Felix Tomažič, a bookkeeper for “Krakauer Dom”. In 1955 it came into the hands of Amalija Pegan from Ljubljana.

191 Josip Mal, PhD, historian, (1884–1978). From 1924 until 1945 Josip Mal was the Director of the National Museum of Slovenia. After retiring he was contracted to manage the City Museum of Ljubljana, which he did from 1950 to 1961. He supported the idea that regional and local museum institutions would give up objects of historic and national importance in favour of the central museum. By making substantial acquisitions for National Museum of Slovenia, Mal created a lasting memory of his work and legacy. His excellent knowledge of the procured material helped him make purchases at large auctions and sales of objects from castles and manors. Horvat 2009, p. 417–470.

246 Po izročilu družine Pegan si je že dr. Mal¹⁹¹ prizadeval pridobiti glasbeno skrinjo za Mestni muzej v Ljubljani, saj jo je želel umestiti v načrtovane meščanske ambiente v posameznih sobah muzeja.

Efrem Marcel Pegan se spominja, da je bila v obdobju, ko je bil še otrok, na božični večer obvezna “Sveta noč” iz *špila*, kakor so doma poimenovali glasbeno skrinjo.¹⁹²

Ta iglična valjčna glasba ima povsem drugačen zvočni efekt, kakor smo ga vajeni pri drugih glasbenih inštrumentih. Po pripovedovanju g. Pegana povzroča svojevrstno “štimungo”, je zelo plastična, mogočna, globoko doneča in prikliče oz. posreduje občinstvu duh preteklosti; to odlično sovпада z vlogo muzejske dejavnosti.

Takšne glasbene naprave so zelo kakovostni izdelki in so jih imeli samo v premožnih družinah. V takratnih salonih višjega družbenega sloja so povabljeni zabavali z glasbo med čakanjem na sprejem. Dame so se pogovarjale, medtem pa so gospodje kadili cigare.

Danes je valjčni glasbeni avtomat na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.

191 Dr. Josip Mal, zgodovinar (1884–1978). Od leta 1924 pa vse do leta 1945, s kratkim presledkom, je bil ravnatelj Narodnega muzeja. Kot upokojenec je od leta 1950 do leta 1961 honorarno vodil Mestni muzej v Ljubljani. Zavzemal se je za to, da bi se provincialne in krajevne muzejske ustanove v korist osrednjega muzeja odrekle predmetom, ki so pomembni za narodno zgodovino. Z velikimi nakupi si je ustvaril trajen spomenik v Narodnem muzeju. Zaradi dobrega poznavanja že nabranega gradiva je hodil na velike dražbe in odprodaje graščinskih inventarjev. Horvat 2009, str. 417–470.

192 Ustno izročilo Efrema Marcela Pegana.

Efrem Marcel Pegan remembers his childhood Christmas Eves, when hearing Holy Night from the “špil”, as they called the machine, was obligatory.¹⁹²



Sl. 114 / Picture 114

Dom družine Pegan v božičnem času, na Pražakovi 8 v Ljubljani, leta 1933. V ozadju desno je glasbena skrinja. / The home of the Pegan family on Pražakova 8 in Ljubljana during Christmas 1933. The player piano stands at the back to the right.
Foto / Photo: Zdenka Pegan

This music played by means of a rotating cylinder has a completely different sound effect from that we are used to hearing from other musical instruments. According to Mr. Pegan it creates a unique atmosphere; it is very distinct, powerful, and resounding. It brings out the spirit of the past, which is perfectly aligned with the role and purpose of a museum.

Such musical machines are objects of high quality and were only found in well-off families. The parlours of high society featured such instruments to entertain visitors while they were waiting for receptions. The ladies chatted and the gentlemen smoked their cigars.

Today, the player piano can be seen as part of the permanent exhibition of the Historical and Art Collection – The Musical Instruments at the National Museum of Slovenia Metelkova.

192 Oral tradition as repeated by Efrem Marcel Pegan.

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/2, vir: Amalija Pegan, provenienca: družina Tomažič.



Napis na kartonski tabli: /

Inscription:

27228

Cylinder I

Sublime Harmonie

1. Aida. Egyptischer Marsch

2. Il Trovatore. Ai nostri monti Verdi

3. Cavalleria rusticana. Intermezzo.

Mascagni

4. Il Guarany senza letto. Gomes

5. La forza del destino. Rataplan Verdi

6. Die Glocken von Corneville va petite
monsse Planquette

7. Mandolinata. Paladhele

8. Tannhäuser. Wolfran's Lied. Wagner

Originalne polikromirane in ilustrirane kartonske table z natančno napisanimi imeni glasbenih del. Table so sestavni del valjčnega glasbenega avtomata inv. št. N 33689. Na spodnjem robu tabel je mestna veduta proizvodne urarske oz. finomehanične delavnice glasbil (Zürich ali Ženeva). Na levi strani kartonskih tabel je portret Mozarta, na desni pa Verdija. Bile so v lasti pradedca Augusta Tomažiča oziroma njegove žene Marije Tomažič, roj. Waschiza, lastnikov podjetja Iv. A. Hartmanna nasl., Ljubljana, Dunajska c. (pri Ajdovščini – stavba Kavarne Evropa), veletrgovca z deželnimi pridelki ter uvoznika živilskih in kolonialnih izdelkov. Od leta 1955 je bila v lasti Amalije Pegan, Pražakova 8, Ljubljana.

Kartonska tabla z ročno napisanimi imeni glasbenih del

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/3, vir: Amalija Pegan, provenienca: družina Tomažič.

Sl. 115 / Picture 115

Kartonska tabla
z ročno pisanimi
imeni glasbenih del
/ Cardboard Plate
with Handwritten
Music Titles
Foto / Photo: Tomaž
Lauko

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/2, source: Amalija Pegan,
provenance: the Tomažič family.

The original polychrome and illustrated cardboard boxes with exact, handwritten music titles. The plates are an integral part of the player piano inv. No. N 33689. At the bottom of the plate is a view of the city, where the watchmakers' workshop or the precision mechanics production was located (most likely Zürich or Geneva). To the left there is a portrait of Mozart and to the right is Verdi. The plates belonged to the great-grandfather of August Tomažič and his wife Marija Tomažič, neé Waschiza August and Marija Tomažič owned the company Iv. A Hartmann, with headquarters on Dunajska street in Ljubljana (near Ajdovščina, the building of *Kavarna Evropa*), a produce wholesaler and importer of food stuffs and colonial products. In 1955 they came into possession of Amalija Pegan from Ljubljana.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/3, source: Amalija Pegan,
provenance: the Tomažič family.



Napis na kartonski tabli: / Inscription:

27228

Cylinder II

Sublime Harmonie

1. Tannhäuser Marsch Wagner
2. Faust Walzer Gounod
3. Stephanie Gavotte Czibulka
4. Rigoletto Quatuor „bella figlia“ Verdi
5. La Norma. Mira o Norma Bellini
6. Der Obersteiger sei nicht böß Zeller
7. O theure Margarethe Kuhn
8. Die Klostersglocken

SI. 116 / Picture 116

Kartonska tabla z ročno pisanimi imeni glasbenih del / Cardboard Plate with Handwritten Music Titles
Foto / Photo: Tomaž Lauko

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/4, vir: Amalija Pegan, provenienca: družina Tomažič.



Napis na kartonski tabli: / Inscription:

27228

Cylinder III

Sublime Harmonie

1. Cavallerie March Hampsch

2. Lustige Brüder Walzer Wollstedt

3. Heimliche Liebe Gavotte Resch

4. Fatinitza Rondo Suppe

5. Silberglöcklein Polka Bohrer

6. Der Bettelstudent. Schöne Polin. Millöcker

7. Tannhäuser Abendstern. Wagner

8. Ave Maria. Gebet der Jungfrau. Schubert

SI. 117 / Picture 117

Kartonska tabla z ročno pisanimi imeni glasbenih del /

Cardboard Plate with Handwritten Music Titles

Foto / Photo: Tomaž Lauko

Kartonska tabla z ročno napisanimi imeni glasbenih del

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/5, vir: Amalija Pegan, provenienca: družina Tomažič.

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/4, source: Amalija Pegan,
provenance: the Tomažič family.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/5, source: Amalija Pegan,
provenance: the Tomažič family.

Napis na kartonski tabli: / Inscription:

27228
Cylinder IV
Sublime Harmonie

1. Dichter & Bauer Ouverture	Suppé
2. Estudiantina. Spanischer Walzer Waldteufel	Waldteufel
3. Stabat mater No. 2 Rossini	Rossini
4. L'Educande di Sorrento Usiglio	Usiglio
5. I Lombardi Coro della Processione Verdi	Verdi
6. Die Glocken von Corneville. Polka Planquette	Planquette
7. La Maccotte Walzer Audran	Audran
8. Wilhelm Tell. Oper Rossini	Rossini

SI. 118 / Picture 118

Kartonska tabla z ročno pisanimi imeni glasbenih del /
Cardboard Plate with Handwritten Music Titles
Foto / Photo: Tomaž Lauko

252 Kartonska tabla z ročno napisanimi imeni glasbenih del

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/6, vir: Amalija Pegan, provenienca: družina Tomažič.



Napis na kartonski tabli: / Inscription:

27228

Cylinder V

Sublime Harmonie

1. Lohengrin Schwanengesang Wagner
2. La Gran Via. Walzer Chucca y Valverde
3. La Traviata Preludio Verdi

4. Cavalleria rusticana. Lola' Lied Mascagni
5. Mignon kennst du das Land Thomas
6. Die schöne blaue Donau Walzer Strauss
7. Carmen. Habanera Bizet
8. Die Glocken von Corneville. Auf Reisen Planquette

SI. 119 / Picture 119

Kartonska tabla z ročno pisanimi imeni glasbenih del /

Cardboard Plate with Handwritten Music Titles

Foto / Photo: Tomaž Lauko

Kartonska tabla z ročno napisanimi imeni glasbenih del

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/7, vir: Amalija Pegan, provenienca: družina Tomažič.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/6, source: Amalija Pegan,
provenance: the Tomažič family.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/7, source: Amalija Pegan,
provenance: the Tomažič family.



Napis na kartonski tabli: / Inscription:

27228

Cylinder VI

Sublime Harmonie

1. Russische Nationalhymne Kvofff

2. Wein. Weib & Gesang Strauss

3. Trauer Marsch Chopin

4. I Puritani a te o cara Bellini

5. Il Trovatore Cavatina Verdi

6. Mein schönes Wien Strauss

7. La Sonnambula Quinteto Bellini

8. Addio bella Napoli Coltrau

SI. 120 / Picture 120

Kartonska tabla z ročno pisanimi imeni glasbenih del /

Cardboard Plate with Handwritten Music Titles

Foto / Photo: Tomaž Lauko

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/8, vir: Amalija Pegan, provenienca: družina Tomažič.



Napis na kartonski tabli: / Inscription:

27228

Cylinder VII

Sublime Harmonie

1. Die Piraten von Penzance Marsch Sullivan

2. Der Mikado. Walzer Sullivan

3. Mikado No. 5 Chor Sullivan

4. Soldatenlust

5. Geduld. Sullivan

6. Nichts gleicht der lieben Heimat

7. Nancy Lee Adams

8. Maritana Finale Wallace

SI. 121/ Picture 121

Kartonska tabla z ročno pisanimi imeni glasbenih del /

Cardboard Plate with Handwritten Music Titles

Foto / Photo: Tomaž Lauko

Kartonska tabla z ročno napisanimi imeni glasbenih del

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/9, vir: Amalija Pegan, provenienca: družina Tomažič.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/8, source: Amalija Pegan,
provenance: the Tomažič family.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard,
h. 19 cm, w. 27 cm, inv. No. N 33689/9, source: Amalija Pegan,
provenance: the Tomažič family.



Napis na kartonski tabli: / Inscription:

27228

Cylinder VIII

Sublime Harmonie

1. Radetzky Marsch Strauss

2. Wiener Blut. Walzer Strauss

3. Freikugeln Polka Strauss

4. Figaros Hochzeit. Schönes Kind Mozart

5. Freischütz Durch die Wälder Weber

6. Der Tyroler & sein Kind

7. Alpenlied

8. Mailüfterl. Kreipel

SI. 122 / Picture 122

Kartonska tabla z ročno pisanimi imeni glasbenih del /

Cardboard Plate with Handwritten Music Titles

Foto / Photo: Tomaž Lauko

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/10, vir: Amalija Pegan, provenienca: družina Tomažič.



Napis na kartonski tabli: / Inscription:

27228

Cylinder IX

Sublime Harmonie

1. Die Mascotte Quadrille No. 1 Audran

2. Die Mascotte Quadrille No. 2 Audran

3. Die Mascotte Quadrille No. 3 Audran

4. Die Mascotte Quadrille No. 4 Audran

5. Die Mascotte Quadrille No. 5 Audran

6. Lauterbacher Walzer

7. Champagner Polka Boullain

8. Champagner Walzer Boullain

SI. 123 / Picture 123

Kartonska tabla z ročno pisanimi imeni glasbenih del /

Cardboard Plate with Handwritten Music Titles

Foto / Photo: Tomaž Lauko

Kartonska tabla z ročno napisanimi imeni glasbenih del

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/11, vir: Amalija Pegan, provenienca: družina Tomažič.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard, h. 19 cm, w. 27 cm, inv. No. N 33689/10, source: Amalija Pegan, provenance: the Tomažič family.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard, h. 19 cm, w. 27 cm, inv. No. N 33689/11, source: Amalija Pegan, provenance: the Tomažič family.

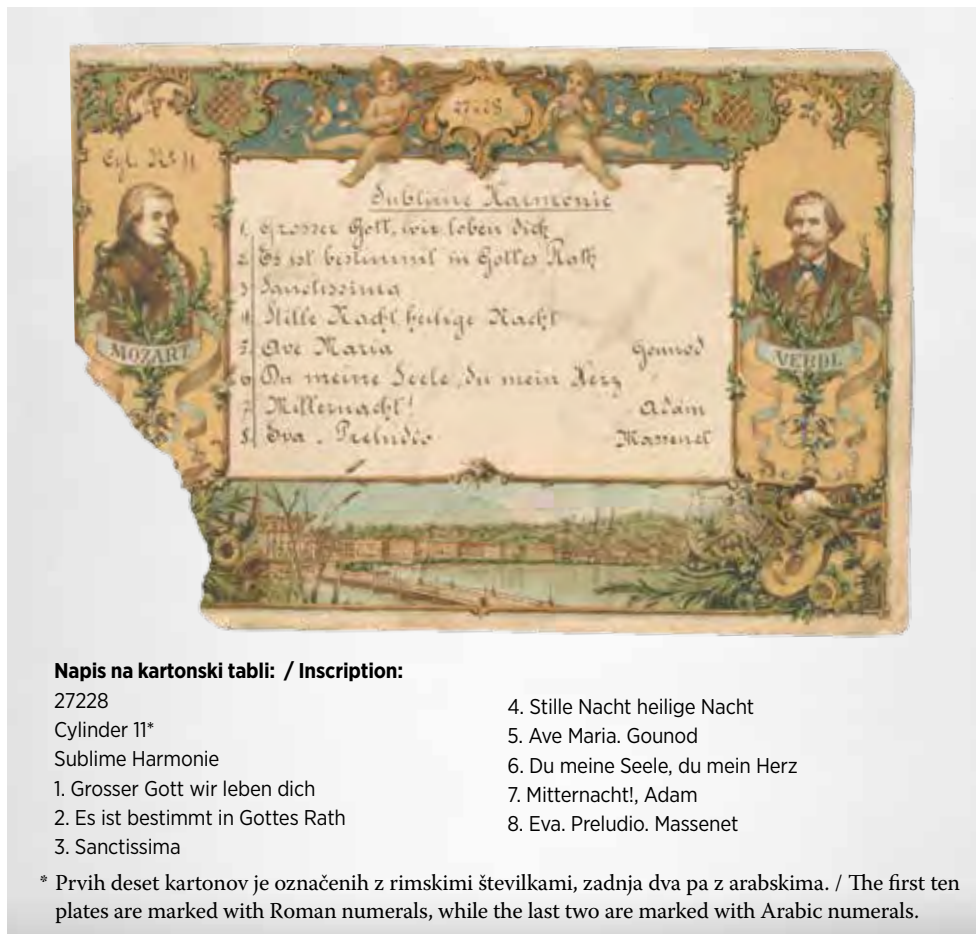
Napis na kartonski tabli: / Inscription:

27228	4. Vittorina Polka Forni
Cylinder X	5. Il Trovatore Miserere. Verdi
Sublime Harmonie	6. Bocaccio Serenade Suppe
1. Imno Nazionale di Mamelli	7. Freyschütz Agathas Gebet Weber
2. Polynete. Chor Gounod	8. Faust Himmelschor Gounod
3. Bocaccio Walzer Suppe	

Sl. 124 / Picture 124

Kartonska tabla z ročno pisanimi imeni glasbenih del /
Cardboard Plate with Handwritten Music Titles
Foto / Photo: Tomaž Lauko

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/12, vir: Amalija Pegan, provenienca: družina Tomažič.



SI. 125 / Picture 125

Kartonska tabla z ročno pisanimi imeni glasbenih del /
Cardboard Plate with Handwritten Music Titles
Foto / Photo: Tomaž Lauko

Kartonska tabla z ročno napisanimi imeni glasbenih del

Švica, druga polovica 19. stoletja, papir, karton, v. 19 cm, š. 27 cm,
inv. št. N 33689/13, vir: Amalija Pegan, provenienca: družina Tomažič.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard, h. 19 cm, w. 27 cm, inv. No. N 33689/12, source: Amalija Pegan, provenance: the Tomažič family.

Cardboard Plate with Handwritten Music Titles

Switzerland, second half of the 19th century, paper, cardboard, h. 19 cm, w. 27 cm, inv. No. N 33689/13, source: Amalija Pegan, provenance: the Tomažič family.



Napis na kartonski tabli: / Inscription:

27228

Cylinder 12

Sublime Harmonie

1. Gigerlkönigin. Linke

2. Der Vogelhändler wie mein Ahnl Zeller

3. Hobellied

4. Eine Nacht in Venedig. Walzer Strauss

5. O du Himmelblauer See Millöker

6. Die Wachtparade kommt Eilenbing

7. Mandolinen Serenade Förster

8. Abschied von der Alp

Sl. 126 / Picture 126

Kartonska tabla z ročno pisanimi imeni glasbenih del /
Cardboard Plate with Handwritten Music Titles

Foto / Photo: Tomaž Lauko

260 Glasbeni avtomat Symphonion

Symphonion, konec 19. stoletja, papir, cink, jeklo, orehov les, v. 19 cm, š. 27 cm, g. 20,5 cm, signatura: *Symphonion*, inv. št. N 35430.

objava: Lozar Štamcar 2011, str. 56.

literatura: Heck 2012.

Namizne modele glasbenega avtomata z jeklenimi ploščami so v poznih osemdesetih letih 19. stoletja začeli izdelovati v Leipzigu v Nemčiji. Podjetji Polyphone in Regina sta pri izdelavi teh kmalu sledili Symphonionu. Po 1890 so glasbene skrinjice izpodrinile valjčne glasbene avtomate. Jeklene plošče so bile izdelane na Dunaju.



Fonograf Sonora

O. W. Wuertz co., New York, Združene države Amerike, dvajseta leta 20. stoletja, furniran les, kovina, v. 102 cm, d. 47 cm, š. 47 cm, signatura: *O. W. Wuertz co.*, inv. št. N 34061.

objava: Lozar Štamcar 2011, str. 57.

Napis na notranji strani pokrova: *Sonora, The instrument of quality*, ploščica z napisom: *from O. W. Wuertz Co., New York*. V omari, že brez troblje. Temno rjavordeč furniran les s secesijskim ornamentom. V spodnjem delu omarice 7 gramofonskih plošč. Na notranji strani pokrova tudi napis, da je bil ta tip gramofona nagrajen na razstavi Panama Pacific leta 1915 / *CLEAR AS A BELL / HIGHEST AWARD FOR TONE AT PANAMA PACIFIC EXPOSITION 1915*. Fonograf je v omarici iz temno rdečerrjavega furniranega lesa s poznosecesijskim ornamentom. Po prvi svetovni vojni so cenovno ugodnejši fonografi začeli izpodrivati glasbene avtomate. Stara inv. št. 21061, Omara z gramofonom (že brez troblje) in ploščami. Črn les s secesijskim ornamentom, dvajseta leta 20. stoletja. Nakup: Dom Exim (Antika), Ljubljana, nov. 1986. 180.000 din.

Danes je fonograf na ogled na stalni razstavi Glasbila v Narodnem muzeju Slovenije Metelkova.

Sl. 127 / Picture 127

Glasbeni avtomat
Symphonion /
Symphonion Music
Box
Foto / Photo:
Tomaž Lauko

Symphonion Music Box

Symphonion, end of 19th century, paper, zink, steel, walnut wood, h. 19 cm, w. 27 cm, d. 20.5 cm, signature: *Symphonion*, inv. No. N 35430.

Publication: Lozar Štamcar 2011, p. 56.

Portable models of the music box featuring steel plates were first produced in late 1890s in Leipzig, Germany. Symphonion was the first brand, closely followed by two producers, Polyphone and Regina. After 1890 music boxes replaced larger cylindrical musical machines. The steel plates were made in Vienna.

Sonora Phonograph

O. W. Wuertz co., New York, United States of America, 1920s, veneered wood, metal, h. 102 cm, l. 47 cm, w. 47 cm, signature:

O. W. Wuertz co., inv. št. N 34061.

Publication: Lozar Štamcar 2011, p. 57.

Bibliography: Heck 2012.

Sl. 128 / Picture 128

Fonograf Sonora /
Sonora Phonograph
Foto / Photo:
Tomaž Lauko



Inscription on the inner side of the lid reads: *Sonora, The instrument of quality*. A plate inscribed: *from O. W. Wuertz Co., New York*. Inside the cabinet is a phonograph made without the horn. The maroon veneer features late Art Nouveau style ornaments. In the lower part of the cabinet there are seven gramophone records. The inside of the lid features another inscription, which reveals that this type of the phonograph was awarded a prize at the Panama Pacific exhibition in 1915: */ CLEAR AS A BELL / HIGHEST AWARD FRO TONE AT PANAMA PACIFIC EXPOSITION 1915*. After World War I phonographs began replacing the more expensive music machines.

Old inv. No. 21061, cabinet with a gramophone (already made without the horn) and records. Black wood with Art Nouveau ornaments, 1920s. Purchase: Dom Exim (Antika), Ljubljana, November 1986. Din 180,000.

Džuboks TH Bergman & Co Simphonie 80

TH Bergman & Co., petdeseta leta 20. stoletja, les, tkanina, steklo, plastika, medenina, v. 144 cm, š. 90 cm, g. 73 cm, signatura: *TH Bergman & Co Simphonie 80*, inv. št. N 36645, vir: Drago Vončina, provenienca: neka gostilna v Celju, restavriral: Igor Ravbar, 2016.

literatura: Ladwig 1993, str. 41.

analogije: Slovenski etnografski muzej, inv. št. EM 24745, Muzej Velenje, inv. št. MV / ZG 2.



Sl. 129 / Picture 129

Džuboks TH
Bergman & Co.
Simphonie 80 /
TH Bergman &
Co. Simphonie 80
Jukebox
Foto / Photo:
Tomaž Lauko

Džuboks je glasbeni avtomat, ki je igral na gramofonske plošče. Ime džuboks izvira iz črnske slengovske besede jook, ki pomeni plesati in seks. Bil je namenjen zabavi nižjih in srednjih slojev.

Osnovna marketinška strategija izdelovalcev je bila, da lahko lastniki lokalov z njimi povečajo promet.

Today, the sonora phonograph can be seen as part of the permanent exhibition of the Historical and Art Collection – The Musical Instruments at the National Museum of Slovenia Metelkova.

TH Bergman & Co Simphonie 80 Jukebox

TH Bergman & Co., 1950s, wood, textile, glass, plastics, brass, h. 144 cm, w. 90 cm, d. 73 cm, signature: *TH Bergman & Co Simphonie 80*, inv. No. N 36645, source: Drago Vončina, provenance: a *gostilna* in Celje, restored by: Igor Ravbar, 2016.

Bibliography: Ladwig 1993, p. 41.

Analogies: Slovene Ethnographic Museum, inv. No. EM 24745, Velenje Museum, inv. No. MV / ZG 2.

The jukebox is an automated music device that plays gramophone records. The word jukebox derives from African American slang word *jook*, which implies both dancing and sex. It was a popular source of entertainment with middle and lower classes.

The producer marketed the jukebox to bar owners as a means to increase their revenue.

RAZNO

Sanza (prstni klavir, *lamelofon*, kalimba, mbira)

Sredina 20. stoletja, les, vrv, železna pločevina, š. 20,5 cm, v. 5,5 cm, g. 13 cm, inv. št. N 37543, vir: Vesna Osojnik, provenienca: Janez Štern, restavriral: Irma Langus Hribar, 2016.

literatura: Grove 2, 2014, str. 497-502.

analogije: Slovenski etnografski muzej, inv. št. EM 2954, inv. št. EM 24743 in inv. št. EM 24744, Muzej Velenje, inv. št. MV / F 608, inv. št. MV / F 623, inv. št. MV / F 1018 in inv. št. MV / F 1019.

Prstni klavir je iz Etiopije, gospod Janez Štern ga je dobil od domačinov v sedemdesetih letih 20. stoletja, ko je bil tam na delovni odpravi.

Družina glasbil *lamellophone* označuje širok spekter afriških inštrumentov, ki so sestavljeni iz več kovinskih ali lesenih jezičkov, pritrjenih na votlo skrinjico, največkrat iz lesa. Poznamo jih z več imeni, kot so: *likembe*, *mbila*, *mbira huru*, *mbira njari*, *mbira nyunga nyunga*, *nhare*, *matepeand njari*, *sansu*, *zanzu*, *karimbao*, *marimba*, *karimba*, *kalimba*, *okeme*, *ubo*, predvsem v zahodnih virih pa tudi kot prstni klavir ali pianino. Nekateri jih kvalificirajo kot brenkajoče idiofone. Nanje igramo z rokami, največkrat jih držimo v dlaneh in nanje brenkamo s palci. Število jezičkov, oblike in luknje se razlikujejo od ene različice inštrumenta do druge.

Najverjetneje sta se lesena in kovinska različica glasbila razvili ločeno, lesena pred 3000 leti na zahodni obali Afrike, kovinska pa pred 1300 leti s prihodom kovine v dolino reke Zambezi. V stoletjih se je glasbilo razširilo in zdaj ga najdemo pri posameznih plemenih, razpršenih po celotni podsaharski Afriki. Pogosto so ga igrali potujoči glasbeniki, nanj pa so igrali na številnih obredih, od porok do verskih dogodkov. Najbolj se je razširilo in ohranilo v Demokratični Republiki Kongo in v Zimbabveju. Evropejci so prvič

MISCELLANEOUS

Sanza (Finger Piano, Lamellophone, Kalimba, Mbira)

Mid-20th century, wood, rope, iron sheet, w. 20.5 cm, h. 5.5 cm, d. 13 cm, inv. No. N 37543, source: Vesna Osojnik, provenance: Janez Štern, restored by: Irma Langus Hribar, 2016.

Bibliography: Grove 2, 2014, p. 497–502.

Analogies: Slovene Ethnographic Museum, inv. No. EM 2954, inv. No. EM 24743 and inv. No. EM 24744, Velenje Museum, inv. No. MV / F 608, inv. No. MV / F 623, inv. No. MV / F 1018 and inv. No. MV / F 1019.

The finger piano comes from Ethiopia; it was given to Janez Štern by natives in the 1970s, when Štern visited the country for work.

The *lamellophone* constitutes a family of musical instruments that includes a broad spectrum of African instruments featuring a series of metal or wooden plates, “tongues”, attached to a hollow box, mostly wooden. It is known under several names, such as *likembe*, *mbila*, *mbira huru*, *mbira njari*, *mbira nyunga*, *nhare*, *matepeand njari*, *sansu*, *zanzu*, *karimbao*, *marimba*, *karimba*, *kalimba*, *okene*, or *ubo*. Western sources, however, mostly refer to it as the finger piano. Some classify it as plucked idiophones. It is played with hands, mostly it is held in the palms of the hands and the tongues are plucked with the thumbs. The number of tongues, the form and the holes differ from one variation of the instrument to the other.

It is very likely that the wooden and metal variations of the instrument developed separately, the wooden some 3000 years ago on the west coast of Africa, while the metal 1300 years ago, when metal arrived in the Zambezi river valley. Throughout the centuries the instrument spread and today it can be found among individual tribes scattered across sub-Saharan Africa. It was often played by travelling musicians, but it also appeared during various rituals, from weddings to religious events. The instrument was most popular



SI. 130 / Picture 130

Sanza / Sanza

Foto / Photo:

Tomaž Lauko

opisali takšne inštrumente v dobi njihovega odkrivanja Afrike, in sicer leta 1583. Glasbilo se je razširilo povsod, kjer je bilo več afriških sužnjev, najbolj se je uveljavilo v Južni Ameriki.

Na inštrument igramo dvoročno, držimo ga v dlaneh in igramo s palcema, pri večjih različicah pa z vsemi prsti. Sredinski jeziček ima največkrat najnižji ton, a se potem izmenično viša na jezičkih levo in desno navzven. Zaradi mnogih različic in razširjenosti na takšnih zgodovinskih glasbilih ne najdemo enotne lestvice. Uglášenost je treba uravnavati z daljšanjem in krajšanjem jezičkov. Večina *lamellophonov* ima luknjo za zvonečnost, nekateri pa imajo na hrbtni strani še luknjo, na katero položimo prst in s tem glasbilo stabiliziramo. Na mnogih doma narejenih izvedenkah najdemo tudi ropotajoče koščke kovine ali zamaškov, ki dodajo glasbilo zvok, značilen za afriško celino.¹⁹³

193 Grove 2, 2014, str. 497-502; Grove 3, 2014, str. 293.

and well-preserved in the Democratic Republic of the Congo and in Zimbabwe. Europeans first described such an instrument in the period of European exploration of Africa, more specifically in 1583. The instrument spread wherever there were large numbers of African slaves, though it firmly established itself in South Africa.

The finger piano is held in both hands and played with the thumbs. Larger versions are played with all fingers. Most often the middle tongue is the lowest sound, and the pitch rises as the tongues go to the left and to the right. As there are so many variations of the instrument spread across a large territory, there is no single tone scale. The instrument is tuned by lengthening or shortening the tongues. Most *lamellophones* have a hole, functioning as a sound hole. Sometimes there is also a hole at the back where a finger is placed to provide stability to the instrument while it is played. Many homemade versions also include metal pieces or bottle caps to add typically African sound to the instrument.¹⁹³

Baton

1929, baton: wood, silver: l. 41.2 cm, case: cardboard, velvet, l. 45.5 cm, w. 6.8 cm, h. 3 cm, inv. No. N 21234, source: Antika, trade company (din 2,000, 1982), restored by: Nataša Nemeček, 2016.

Sl. 131 / Picture 131

Dirigentska palica /

Baton

Foto / Photo:

Tomaž Lauko



193 Grove 2, 2014, p. 497–502; Grove 3, 2014, p. 293.

1929, dirigentska palica: les, srebro: d. 41,2 cm, škatla: lepenka, žamet, d. 45,5 cm, š. 6,8 cm, v. 3 cm, inv. št. N 21234, vir: Antika, trgovsko podjetje (2000 din, 1982), restavriral: Nataša Nemeček, 2016.

Dirigentska palica je shranjena v škatli iz lepenke, ki je obložena z rdečim žametom. Palica je izdelana iz lesa in ovita s srebrnim trakom, na katerem sta vgravirana okras in napis: *pevski odsek Sokola Vič svojemu pevovodji 19. marca 1929.*

Metronom Maelzel

Wittner Maelzel, Nemčija, začetek 20. stoletja, orehov les, kovina, v. 24 cm, š. 11,5 cm, g. 11,5 cm, signatura:

*METRONOM*MAELZEL*MADE IN GERMANY, inv. št. N 37237.

literatura: Kowar 2004.

Še vedno delujoč metronom Wittner Maelzel¹⁹⁴ v obliki piramide, ki ga je Narodni muzej Slovenije pridobil leta 1906¹⁹⁵ ima leseno ohišje iz matiranega orehovega lesa. Kovinsko nihalo je opremljeno z utežjo, ki jo lahko premaknemo vzdolž nihala in tako uravnavamo število udarcev v minuti, kar je jasno označeno na kovinski zadnji plošči.

Tovarna Wittner je izdelovala zelo kakovostne metronome od leta 1895. Mnogi imajo njihove metronome za najboljše »tradicionalne« metronome. Metronomi Maelzel serije 800 so sestavljeni iz snemljivega sprednjega dela z varnostnim zapiralom in mehanizma za navijanje.

¹⁹⁴ Johann Nepomuk Maelzel (1772–1838) je prijavil patent za metronom v letu 1815, potem, ko je oblikoval glasbeno lestvico za napravo, ki jo je izumil in skonstruiral Dietrich Nikolaus Winkel leto poprej. Maelzel je začel izdelovati metronome v Parizu leta 1816. (*Antique Metronome Manufacturer Information*. Dostopno na: <http://www.antique-metronomes.com/makers.html>, obiskano: 11. marca 2017.)

¹⁹⁵ Inventarna knjiga, Oddelek za zgodovino in uporabno umetnost, Narodni muzej Slovenije.

The baton is kept in a cardboard box lined in red velvet. The baton is made of wood, a silver ribbon is wrapped around it, inscribed: *pevski odsek Sokola Vič svojemu pevovodji 19. marec 1929*. (To our choir master by the choir of Sokol Vič, 19th March, 1929).

Metronome Maelzel

Wittner Maelzel, Germany, beginning of 20th century, walnut wood, metal, h. 24 cm, w. 11.5 cm, d. 11.5 cm, signature: *METRONOM*MAELZEL*MADE IN GERMANY, inv. No. N 37237.



The pyramid-shaped Wittner Maelzel metronome in matte walnut was obtained by the National Museum of Slovenia in 1906.^{194,195} The weight attached to the metal pendulum slides along the length of the pendulum to match the desired beats per minute, as marked on the metal back plate.

The Wittner family has been making metronomes to their highest standard since 1895. Their products are considered by many to be the best “traditional” style metronomes. The Maelzel series 800 metronomes feature a detachable front cover with a safety lock and a wind-up mechanism.

SI. 132 / Picture 132

Metronom Maelzel /
Metronome Maelzel
Foto / Photo:
Tomaž Lauko

¹⁹⁴ Johann Nepomuk Maelzel (1772–1838) registered the metronome patent in 1815 after devising the musical scale for a device largely constructed and invented by Dietrich Nikolaus Winkel a year earlier. Maelzel started production of the metronome in Paris 1816. (*Antique Metronome Manufacturer Information*. Available at: <http://www.antiq-metronomes.com/makers.html>, accessed on: 11th March, 2017.)

¹⁹⁵ Inventory Ledger of the Department of History and Applied Arts, National Museum of Slovenia.

SKLEP

O izdelovanju glasbil na ozemlju današnje Slovenije v arhivskem gradivu ni veliko podatkov. Ohranilo se je tudi malo starih glasbil, zato so številni njihovi izdelovalci skoraj neznani. Pa vendarle slovenske instrumentalne dediščine nikakor ne moremo soditi samo po v muzejih ohranjenih primerkih. Večina drugih izdelovalcev glasbil, katerih izdelki so bili doslej dostopni strokovnjakom, meni, da so bili dobri v svoji stroki. Toda njihovo zapuščino bomo morali v prihodnje bolj načrtno zbirati, kot to pohvalno počnejo v nekaterih slovenskih muzejih, med katerimi izstopata Pokrajinski muzej Ptuj Ormož in Narodni muzej Slovenije, jo preučevati in primerjati z izdelki drugih izdelovalcev glasbil. Šele tako bomo dobili natančnejšo sliko o razvoju in kakovosti glasbilarstva na Slovenskem.

Lastniki inštrumentov so se menjavali. Po slovenskih muzejih se je ohranilo nekaj zelo starih inštrumentov imenitnih izdelovalcev od drugod. Ker je vsaj pri nekaterih provenienca znana, lahko sklepamo, da so na ozemlju današnje Slovenije delujoči glasbeniki poznali dobre izdelovalce glasbil in pri njih tudi kupovali. Glasbil največjih svetovno priznanih mojstrov na Slovenskem sicer nimamo, vendar se je ohranilo nekaj primerkov, ki so jih izdelali drugi odlični mojstri. Posebna vrednost slovenske dediščine je tudi v tem, da kakovostno dopolnjuje sicer majhno število ohranjenih primerkov posameznih izdelovalcev po muzejih in v zasebnih zbirkah po svetu.¹⁹⁶ Na podlagi obravnave Zbirke glasbil Narodnega muzeja Slovenije lahko ugotovimo, da sta v slovenskih muzejskih zbirkah zastopani predvsem dve skupini glasbil, in sicer skupina glasbil, ki so izdelana v uglednih sodobnih delavnicah, in skupina povsem industrijskih glasbil.

Inštrumentalna dediščina brez dvoma sodi med pomembnejše elemente snovne in nesnovne kulturne dediščine. Ugotoviti moramo, da je precej glasbil ohranjenih v slovenskih muzejih, v njih

¹⁹⁶ Koter 2001, str 144–145.

CONCLUSION

The archive material of the National Museum of Slovenia includes little data on the making of musical instruments. Additionally, few old musical instruments have been preserved and many of the makers have remained unknown. Still, we cannot judge Slovenian musical instruments tradition only by the artefacts preserved in the museums. The general consensus about the makers of the instruments known to the experts is that they were highly skilled in what they did. It is necessary then, to start deliberately collecting their heritage in order to examine and compare it with the objects made by other instrument makers, thus following the good example set by individual museums, especially the Ptuj – Ormož Regional Museum and the National Museum of Slovenia. Only then will we be able to better understand the development and the quality of instrument making in Slovenia.

Musical instruments changed owners through time. Several very old instruments made by excellent makers outside Slovenia have been preserved in Slovenian museums. The provenance of several of these artefacts is known and we can conclude that the musicians working here recognised good instrument makers and would buy instruments from them. It is clear from the preserved artefacts that both professional and amateur musicians in what is today Slovenia favoured instruments in the middle and higher price ranges and did not consider products made by ordinary craftsmen. It is nearly impossible to find artefacts of lesser quality in our museums. Although we do not hold any instruments made by the most renowned international masters, there are some objects that were made by the hands of excellent makers. Slovenian musical instruments heritage is especially valuable as a high quality addition to otherwise small number of preserved artefacts made by individual makers, which are held in museums and private collections around the world.¹⁹⁶

196 Koter 2001, p. 144–145.

272 pa glasbene zbirke niso paradni konji, zato ugotavljam, da muzeji odlično opravljajo svoje poslanstvo.

Z objavo Zbirke glasbil Narodnega muzeja Slovenije smo želeli javnost opozorili na ta dragoceni fond v upanju, da bo spodbudil zanimanje ne samo strokovnjakov, ampak tudi vseh drugih, ki jih zanima glasbena kulturna dediščina.

V celoti je Zbirka glasbil Narodnega muzeja Slovenije prvič predstavljena v tej publikaciji, v bližnji prihodnosti pa v Narodnem muzeju Slovenije načrtujemo predstavitev tudi na specializirani razstavi. Na razstavi bomo predstavili nova spoznanja strokovnjakov in skušali odgovoriti na vprašanja, na katera nam še ni uspelo najti odgovorov in zahtevajo nadaljevanje temeljite raziskave.

Narodni muzej Slovenije še naprej dopolnjuje Zbirko glasbil. Z novimi pridobitvami ne le pridobiva redke inštrumente, ampak tudi dokumentira delo domačih delavnic, tudi tistih, ki so v obstoječi zbirki že zastopane. Ob tem ni nepomembno tudi to, da smo v Narodnem muzeju Slovenije poleg inštrumentov v Zbirki glasbil, ki so danes že vsi restavrirani, nekateri usposobljeni za muziciranje (*pochette*, violina, baročne sobne orgle, klavikord, klavir pianino, klarinet, flavta ...).

The musical instruments heritage is undoubtedly an essential part of material and non-material cultural heritage. Although musical instruments do not represent a flagship collection in any of the Slovenian museums, those that we have been able to preserve still make for a significant contribution to our holdings.

It is therefore our goal that by publishing the Collection of Musical Instruments of the National Museum of Slovenia we highlight this invaluable fund in order to inspire not only the professionals but also the general public interested in the musical cultural heritage.

This publication presents the Collection of Musical Instruments of the National Museum of Slovenia in its entirety for the first time. Additionally, the National Museum of Slovenia plans to present the collection at a specialised exhibition, which will also include the latest findings of experts, who are always welcome at the museum. We will seek to answer the questions that have so far remained unanswered and that may require further thorough research.

The National Museum of Slovenia continues to add to the Collection of Musical Instruments. The obtained instruments are not only rare artefacts, but also serve as documents of the work the local workshops did in the past, including those already presented in the existing collection. Today, all the instruments in the collection have been restored, some can be played as well. Hence we should not neglect to mention that many of us working for the National Museum of Slovenia are musicians, able to play instruments we have so carefully restored: the *pochette*, the violin, the baroque chamber organ, the clavichord, the upright piano, the clarinet, the flute and others.



Irma Langus Hribar

Narodni muzej Slovenije

Glasbila: konserviranje- restavriranje in hranjenje zbirke glasbil v Narodnem muzeju Slovenije



Irma Langus Hribar

National Museum of Slovenia

Musical Instruments: Conservation and Restoration of the Collection Kept in the National Museum of Slovenia

276 Konserviranje-restavriranje celotne zbirke glasbil v Narodnem muzeju Slovenije je zgoščeno potekalo od začetka pa do konca leta 2016, ko smo v muzeju načrtovali predstavitev vseh predmetov v zbirki s to publikacijo. Pred tem je bilo restavriranih samo nekaj izjemnih primerkov iz zbirke, predvsem za razstave in pred izposajo v druge muzeje.

Naši cilji pri konserviranju-restavriranju zbirke glasbil so bili: pregled celotne zbirke, priprava načrta za temeljite konservatorske-restavratorske posege in preiskave, ki nam jih omejen čas pred objavo celotne zbirke ni dopuščal, ter ohranjanje originalnih materialov in poznejših dodatkov brez poskusov oživljanja zvočne podobe glasbil. Takšno odločitev smo utemeljili z izkušnjami z glasbili iz naše zbirke, ki so bila že restavrirana oziroma usposobljena za igranje v zadnjih desetletjih, s sodobno muzejsko prakso in s priporočili in napotki v strokovni literaturi.^{1,2}

Zbirka je raznorodna, saj obsega historična in sodobna godala, pihala, tolkala, trobila, brenkala, glasbila s tipkami, elektronska glasbila, studijsko in ljubiteljsko glasbeno opremo, dele ozvočenj ter pribor, pomožno opremo in varovalne škatle za ta glasbila. Materiali, uporabljeni za glasbila, pa so različne vrste lesa (najpogostejše so smrekovina, jelovina, orehovina, javorovina, češnjovina, rožni les, pušpanovina, hruškovina, ebenovina, tisovina, bukovina, lipovina, macesnovina, mahagonijevina, ebenovina, pernambuk), kovine, kot so kovano in lito železo, kromana in nikljana železna pločevina, bron, medenina, srebro, kositer, različne vrste pozlat na lesu (vodna in oljna pozlata) in kovinah (oljna, ognjena in galvanska pozlata), naravne in umetne smole in gumiji, sušča olja, barvne plasti in poslikave, usnje, pergament in semiš, konjska žima, slonovina, čreva in kosti, kožni in kostni kleji, roževina, biserna matica, volnena, lanena, bombažna in svilena vlakna, preje, vrvi in niti, tkanine in filci, umetno usnje, guma, sintetični materiali in plastika ...

Na vseh predmetih (v zbirki jih je 90) smo izvedli raziskovalno čiščenje in konserviranje-restavriranje s spremljajočo dokumentacijo, ki obsega pisno in fotografsko dokumentiranje opažanj in opravljenih posegov, popis uporabljenih snovi in načine njihove uporabe, popis dodanih, zamenjanih in shranjenih delov

1 Crispin Paine (urednik), Standards in the Museum Care of Musical Instruments, *Museum & Galleries Commission*, 1995.

2 Robert L. Barclay (urednik), The Care of Historic Musical Instruments, *CIMCIM* 2005. Dostopno na: <http://network.icom.museum/cimcim/resources/the-care-of-historic-musical-instruments-full-text/>, obiskano: 27. 4. 2016.

Comprehensive conservation and restoration of the entire collection of musical instruments in the National Museum of Slovenia took place throughout 2016, in a bid to present all the artefacts from the collection in this publication. Previously, only a few exceptional artefacts had been restored, mostly for the purposes of exhibitions, or prior to being lent to other museums.

The aim of the conservation and restoration of the instruments was to carry out an overview of the entire collection and to set up a plan for in-depth procedures and research for conservation and restoration – something which, due to time constraints, we had not been able to do before. Furthermore, we wanted to preserve the original materials and later additions without having to try to restore the sound image of the instruments. The reasons we took this decision are manifold. We based the decision on our experience with instruments from the collection which have been restored during recent decades, and the sounds of which have been revived. We followed modern museum practices and proposals, as well as directions from professional literature.^{1,2}

The collection is diverse, and includes historical and modern string instruments, wind instruments, percussion, brass instruments, keyboard instruments, electronic instruments, studio and music equipment used at home, individual parts of sound equipment, tools, accessories and instrument cases. The materials used in making instruments are numerous. They range from various types of wood (the most common being spruce and fir, walnut, maple, cherry, rosewood, boxwood, pear, ebony, yew tree wood, beechwood, limewood, larchwood, mahogany, ebony, pernambuco), various types of gilding on engravings (water gilding and oil-gilding) and on metals (oil-gilding, fire-gilding and electroplating), natural and synthetic resins and colour layers and paintings. The materials also include various metals like wrought iron, cast iron, chromium plated sheet iron, nickel plated sheet iron, silver, tin, bronze and brass. Finally there are materials such as leather, parchment and suede, horse hair, ivory, gut and bones, skin and bone glue, horn, mother of pearl, linen, cotton and silk fibres, yarn, rope, thread and fabric, felt, faux leather, rubber, synthetic materials and plastic.

- 1 Crispin Paine (editor), *Standards in the Museum Care of Musical Instruments, Museum & Galleries Commission*, 1995.
- 2 Robert L. Barclay (editor), *The Care of Historic Musical Instruments, CIMCIM* 2005. Available at: <http://network.icom.museum/cimcim/resources/the-care-of-historic-musical-instruments-full-text/>, accessed on: 27th April, 2016.



ter priporočila za nadaljnje hranjenje in ravnanje. Na izbranih predmetih smo izvedli tudi naravoslovne raziskave.

Na tak postopek pa še čakajo nekatere najnovejše pridobitve. Na začetku leta 2016 je namreč stekla akcija »Podari muzeju glasbilo in ga zapiši v zgodovino«. Zaradi nje so donatorji muzejsko zbirko do konca leta 2016 obogatili še z nekaj deset predmeti. Del glasbil, pridobljenih v zadnjem času, še opazujemo v karanteni.

Predmete, na katerih smo opazili znamenja dejavnosti lesnih insektov, umaknemo, izoliramo in po nekajtedenskem mirovanju pregledamo, da ugotovimo morebitno aktivnost insektov. S pravočasnim posegom na okuženem predmetu (z zaplinjevanjem z inertnim plinom argonom ali z natapljanjem z insekticidom) tako preprečimo okužbo muzealij v depojih, razstavnih prostorih ali konservatorskih-restavratorskih delavnicah.

Večna vprašanja: vzdrževanje za uporabo, restavriranje prejšnjih stanj ali muzejski molk konserviranih-restavriranih glasbil?

Najpomembnejši del glasbila (ob njegovi estetski, tehnični in družbeni vlogi) je v času njegovega nastanka gotovo njegova zvočna podoba. Navdušenje nad glasbo prejšnjih obdobij, ki se je močno razširilo ob koncu 19. stoletja, je med izvajalci in poznavalci porodilo tudi prepričanje, da je glasbo klasičnih mojstrov mogoče doživeti samo z izvajanjem na glasbilih, za katera je ta bila napisana,³ z vsemi njihovimi čari in omejitvami. To je povzročilo

Sl. 1 / Picture 1
Citre pred konserviranjem-restavriranjem / Zither before conservation-restoration
Foto / Photo: Irma Langus Hribar

3 Richard in Katrina Burnett, zbiratelj in nekdanja lastnika glasbenega muzeja Finchcocks, v: Robert L. Barclay, *Preservation and Use of Historic Musical Instruments: Display Case and Concert Hall*, London 2005, str. 65.



Sl. 2 / Picture 2

Citre po
konserviranju-
restavriranju /
Zither after
conservation-
restoration
Foto / Photo: Tomaž
Lauko

Our plan was to have all the artefacts in the collection (ninety pieces in all) undergo exploratory cleaning, and conservation and restoration work. All the work was accompanied by documentation including written and photographic notes and description of performed procedures, a list of the substances used and the ways these were used, a list of added, changed and stored parts, and recommendations for the future upkeep and handling of the artefacts. Several selected artefacts were examined with the help of analytical methods.

Some of our most recent acquisitions still need to go through the entire procedure. At the beginning of 2016 an event entitled “Donate a Musical Instrument to the Museum and Make it a Part of History” kicked off, and by the end the year the collection was richer by over ten artefacts. Some of the instruments that we have recently obtained are still being monitored under quarantine.

Objects that show signs of woodworm are isolated and, after being left undisturbed for several weeks, inspected to establish whether or not there are any signs of insect activity. An infected object needs to be treated promptly (by fumigating it with an inert gas or treating it with an insecticide) to prevent the spread of the infection to other museum artefacts in the depots, exhibition spaces or conservation and restoration workshops.



Sl. 3 / Picture 3

Gúsle pred
konserviranjem-
restavriranjem /
Gúsle before
conservation-
restoration

Foto / Photo:
Irma Langus Hribar

Sl. 4 / Picture 4

Odstranjevanje
površinskih
nečistoč /
Removal of
superficial dirt
deposits

Foto / Photo:
Irma Langus Hribar

obnovo in vzpostavljanje igralnega stanja pri mnogih zgodovinskih glasbilih. Na začetku 20. stoletja so vedno večje konservatorske težnje med ljubitelji in poznavalci zgodovinskih glasbil omogočile vznik mojstrskih delavnic, ki so se ukvarjale z izdelovanjem replik zgodovinskih inštrumentov.⁴ Nastajajo pa tudi nova, izvirna glasbila, konstruirana za igranje glasbe starejših obdobj. Primer takega razvoja je klavir, ki so ga leta 2015 v sodelovanju s pianistom in maestrom Davidom Barenboimom razvili v delavnici Chrisa Maeneja v Belgiji.⁵

4 Barclay 2005, str. 2.

5 Chris Maene, Wolf Leye, *The Next Generation Concert Piano*, v: *COST FP1302 WoodMusICK, Effects of Playing on Early and Modern Musical Instruments*, London 2015.

SI. 5 / Picture 5

Gúsle po
konserviranju-
restavriranju /
Gúsle after
conservation-
restoration
Foto / Photo:
Tomaž Lauko



The Enduring Question: Should a Musical Instrument be Maintained for Use, Restored to its Previous Condition or Rendered Silent through Conservation and Restoration?

The most important part of a musical instrument (others being its aesthetic, technical and social function) is undeniably its sound image. At the end of the 19th century, people became increasingly fascinated with the music of past periods, giving rise to the belief that the music of classical masters could only be truly appreciated if played on the very instruments the score was written for,³ regardless

3 Richard and Katrina Burnett, collectors and previous owners of Finchcocks Musical Museum, in: Robert L. Barclay, *Preservation and Use of Historic Musical Instruments: Display Case and Concert Hall*, London 2005, p. 65.

**Sl. 6 / Picture 6**

Klarinet pred konserviranjem-restavriranjem / Clarinet before conservation-restoration
Foto / Photo: Irma Langus Hribar

Sl. 7 / Picture 7

Klarinet pred konserviranjem-restavriranjem. Ob medeninastih zaklopkah mešanica nečistoč, korozije in maščob, kolonije gliv na oljenih lesenih površinah. / Clarinet before conservation-restoration. Brass keys surrounded by dirt, corrosion and fats, fungi colonies on the oiled wooden surfaces.

Foto / Photo: Irma Langus Hribar

Pomembnost zvočne podobe s staranjem glasbila pravzaprav izgublja veljavo. Pri izjemnih primerkih počasi postanejo pomembnejše druge vrednosti: tehnične odlike in rešitve, likovna oprema in zgodovinska vrednost, še posebej kadar glasbilo povezujemo z izjemnimi dogodki ali vidnimi predstavniki družbe.

Vse te vrednosti lahko utrpijo nepopravljivo škodo, če dajemo prednost zvočni podobi glasbil, zato so se z izmenjavo izkušenj med izdelovalci glasbil, muzikologi, glasbeniki, konservatorji-restavratorji in publiko pri ohranjanju glasbil razvile tri glavne smeri: prizadevanje za obujanje izvirne zvočne podobe glasbil, restavriranje glasbil v eno od prejšnjih zvočnih podob in konserviranje-restavriranje vseh sestavnih delov glasbil brez novih sprememb in dodatkov.



Sl. 8 / Picture 8

Klarinet po
konserviranju-
restavriranju /
Clarinet after
conservation-
restoration
Foto / Photo: Tomaž
Lauko

of their limitations. Consequently, many historical instruments were restored and their original musical function was re-established. At the beginning of the 20th century, the trend among the enthusiasts and connoisseurs of historical instruments was leaning strongly towards the conservation of instruments, bringing about a rise in workshops specialising in the manufacture of replicas of historical instruments.⁴ However, we can also see the emergence of new, original instruments, made for playing old music. An example of such an instrument is a piano developed in 2015 in co-operation with the pianist and maestro David Barenboim, in Chris Maene's workshop in Belgium.⁵

The importance of sound image decreases with the age of an instrument. In exceptional cases, the importance of sound image is superseded by other features of significance: technical qualities and solutions, art details, and historical value – especially when an instrument is linked to an extraordinary event, or to prominent people.

These, however, can be irreparably damaged if we prioritise an instrument's sound image. Through the exchange of experience

⁴ Barclay 2005, p. 2.

⁵ Chris Maene, Wolf Leye, *The Next Generation Concert Piano*, in: *COST FP1302 WoodMusICK, Effects of Playing on Early and Modern Musical Instruments*, London 2015.

Prav tako kot večina materialov se tudi večina glasbil s staranjem ne izboljšuje in brez vmesnih vzdrževalnih posegov glasbila ne zvenijo enako ali bolje kot ob nastanku.⁶

Glasbilo, ki ni v delujočem stanju, bo ob opremljanju in pripravljanju za ponovno rabo gotovo utrpelo izgubo dela originalne snovi. V njegovo konstrukcijo bomo vnesli nove snovi in nove napetosti, ki bodo povzročile nove poškodbe, ki jih bo treba odpraviti in inštrument spet nekoliko spremeniti. Kot piše Mimi Waitzmann,⁷ smo z vsakim restavratorskim posegom korak dlje od prvotnega stanja glasbila, izgubimo del originalne snovi in zakrijemo prejšnja, starejša stanja.⁸ Vzhičenje, ki ga doživljamo ob inštrumentu zaradi njegove domnevne avtentičnosti, ne temelji na dejanskem stanju in zvoku inštrumenta, ampak na naši predstavi o izvorniku in naši domnevni povezavi s preteklostjo, ki jo s poslušanjem zvoka starega glasbila vzpostavljamo.

Ob redni rabi glasbil se obremenjeni deli mehanizmov izrabljajo in poškodujejo. Leseni deli počijo in se zvijejo, obremenjeni z napetimi strunami ali zaradi prevelikih nihanj relativne vlage okoliškega zraka, ošibijo jih lesni insekti, mikroorganizmi ali glive. Kovine korodirajo zaradi vplivov iz okolja, vlage, korozivnih kislin in soli v človeškem potu, zaradi ponavljajočih se obremenitev se kovinski elementi utrudijo in zlomijo, pločevina počī zaradi notranjih napetosti, ustvarjenih že ob izdelavi glasbila. Zaščitni premazi se obtolčejo, odrgnejo, zgubijo lesk, odstopijo. Lepila popustijo. Organske materiale použijejo insekti ali glive.

Glasbila imajo omejeno življenjsko dobo; tako je lahko vrhunška koncertna lesena oboa nezanesljiva že v manj kot petih letih.⁹ Leseno pihalo manj aktivnega glasbenika je morda uporabno do dvajset let, podobno velja za medeninasta pihala in trobila. Življenjska doba klavirja je do sto let, večina strunskih glasbil pa ima pričakovano

6 Andrew Lamb, To Play or Not to Play: the Ethics of Musical Instrument Conservation, *Conservation Journal*, April 1995, Issue 15. Dostopno na: <http://www.vam.ac.uk/content/journals/conservation-journal/issue-15/to-play-or-not-to-play-the-ethics-of-musical-instrument-conservation/>, obiskano: 5. 6. 2016.

7 Mimi Waitzman je bila skrbnica delujoče zbirke 19 glasbil majorja Bentona Fletcherja v hiši Fenton, danes je kustosinja v novi glasbeni galeriji v Hornimanovem muzeju v Londonu.

8 Barclay 2005, str. 62.

9 Pogovor z oboistko Melino Todorovsko, april 2016.

the makers of instruments, along with musicologists, musicians, restorers, conservators, and even the public, have developed three main directions in instrument preservation: the endeavour to revive the original sound image of an instrument, restoration of instruments in a way that preserves one of the past sound images, and finally the conservation and restoration of all parts of an instrument without new changes or additions.

Maintenance and Revival of Sound Image

As is the case with most materials, the majority of instruments do not improve with age and without maintenance interventions, the instruments do not sound the same or better than they did at the time they were first made.⁶

An instrument that does not work will undoubtedly lose parts of its original matter, as it is newly equipped and prepared to be used again. New substances and materials will be applied and new tensions will affect its construction, which can all cause new damage that will need to be repaired further down the line, thus changing the instrument yet again. According to Mimi Witzmann,⁷ every restoration intervention takes an instrument further away from its original condition; original substances are lost, and earlier, older conditions concealed.⁸ The actual state and sound of a restored instrument does not really warrant our enthusiasm about its presumed authenticity. The enthusiasm rather stems from our idea of the original and our supposed link to the past established through the sound of the old instrument.

When an instrument is regularly played, the parts that are most worked can suffer considerable wear and tear. The wooden parts snap or warp as a result of tension created by strings, or due to considerable fluctuation of the relative humidity of the environment. They can be weakened by wood insects, microorganisms or fungi. Metals can corrode when affected by conditions in the environment, as well as humidity, and the corrosive acids and salts present in

6 Andrew Lamb, To Play or Not to Play: the Ethics of Musical Instrument Conservation, *Conservation Journal*, April 1995, Issue 15. Available at: <http://www.vam.ac.uk/content/journals/conservation-journal/issue-15/to-play-or-not-to-play-the-ethics-of-musical-instrument-conservation/>, accessed on: 5th June, 2016.

7 Mimi Waitzman served as curator of 19 Benton Fletcher instruments at the Fenton House, London. Today she is the Deputy Keeper of Musical Instruments at the Horniman Museum and Gardens in London.

8 Barclay 2005, str. 62.



Sl. 9 / Picture 9

Violina pred konserviranjem-restavriranjem. Na površinah vrta kolofonija in mešanica maščobe in nečistoč, strgane črevne strune. / Violin before conservation-restoration.

Deposits of rosin, dust, grime and fats, torn gut strings

Foto / Photo: Irma Langus Hribar

skrajno uporabno dobo do dvesto let. Ob redni uporabi, prenašanju in prevažanju glasbil je večja tudi verjetnost poškodb zaradi nezgod.

Za vzdrževanje glasbila za nadaljnjo rabo moramo ošibljene materiale okrepiti, namesto izgubljenih ali uničenih izdelati nove, propadle dele nadomestiti in se ob tem odreči delu originalnih materialov, ki so sestavljali glasbilo. Pred obsežnim posegom se moramo tudi vprašati, koliko izvirne snovi mora biti ohranjene, da še upravičeno trdimo, da uporabljamo zgodovinsko, staro glasbilo.

V tujini sicer obstajajo zbirke zgodovinskih glasbil, v katerih del glasbil ali celo vsa vzdržujejo za uporabo v študijske namene,¹⁰ zgodovinske inštrumente, predvsem godala priznanih izdelovalcev pa redno uporabljajo pri koncertiranju in jih lastniki ponudijo v rabo izbranim virtuozom. Tudi v Sloveniji je v muzejskih zbirkah nekaj inštrumentov, ki so usposobljeni za muziciranje. Največjo zbirko glasbil na Slovenskem hrani Pokrajinski muzej Ptuj in obsega okrog 300 glasbil. Za izdelavo zvočnih posnetkov so usposobili deset glasbil. Zbirka Narodnega muzeja Slovenije z manjšimi posegi premore petnajst delujočih glasbil, med njimi posebej omenimo *pochette*, klavikord Georga Eisla in dva klavirja Antona Bitenca.

10 Na primer zbirke glasbil v Metropolitanskem muzeju umetnosti v New Yorku, v Muzeju Kraljeve akademije za glasbo v Londonu, zbirka Bentona Fletcherja v hiši Fenton v Londonu, zbirka glasbil v muzeju Fenchcocks (muzej deloval do maja 2016), ki sta jo zbrala Richard in Katrina Burnett.



Sl. 10 / Picture 10

Violina po konserviranju-restavriranju. Odstranjena odvečna kolofonija in nečistoče, originalne črevne strune nemoteče povezane. / Violin after conservation-restoration.

Deposits of rosin and grime removed, gut strings connected.

Foto / Photo: Tomaž Lauko

human sweat. And they can also wear and break due to repetitive use. Sheet metal can also break because of the internal tension created during the making of the instrument. In addition, coatings get bruised, get scratched, lose their shine and start to peel, while glues dry off and no longer hold, and organic materials risk being eaten by insects or fungi.

Instruments have limited life span; a concert wood oboe becomes less reliable within five years.⁹ The woodwind instrument of a less active musician may be usable for twenty years. The same is true for wind and brass instruments. The life span of a piano can be up to a hundred years, while most string instruments are expected to last up to two hundred years. However, the regular use, carrying and moving of instruments increases the possibility of damage and accidents.

Maintaining an instrument for use beyond its normal life span means strengthening weakened parts, and replacing lost or bro-

⁹ From a talk with oboe player Melina Todorovska, April 2016.

**Sl. 11 / Picture 11**

Klavir Martin Wessely med odstranjevanjem nečistoč. / Piano Martin Wessely during removal of dirt accretions.
Foto / Photo: Irma Langus Hribar

**Sl. 12 / Picture 12**

Klavir Martin Wessely pred konserviranjem-restavriranjem / Piano Martin Wessely before conservation-restoration
Foto / Photo: Hamid Koso

Poskusi oživljanja zvočne podobe glasbila so smiselni samo, če za glasbilo predvidevamo in izvedemo uigravanje, redno vzdrževalno igranje, predstavljanje glasbila publiki ter izdelavo dokumentarnih posnetkov. V našem primeru bi morali za vsako glasbilo, ki bi ga želeli spet zvočno oživiti, najti mojstra izdelovalca, ki bi upošteval tudi načela muzejskega konserviranja-restavriranja. Mojstrsko poznavanje načina izdelovanja posameznih vrst glasbil, njihovega zgodovinskega razvoja in problematike uporabljenih materialov je nujno za kakovosten in etično izveden restavratorski postopek na določenem glasbilu. Kot smo že omenili, je smiselno vzpostavljajne

SI. 13 / Picture 13

Klavir Martin
Wessely po
konserviranju-
restavriranju. /
Piano Martin
Wessely after
conservation-
restoration.
Foto / Photo:
Tomaž Lauko



ken parts with new ones. This also means sacrificing part of the instrument's original material. Before any major intervention, we also need to ask ourselves how much of the original material should be preserved in order to ensure that we can still say that the instrument is an old, historical instrument.

There are collections of historical instruments which conserve and restore part or all instruments of the collection in order to be used for study purposes,¹⁰ and regularly use historical instruments, predominantly string instruments made by prominent makers, in concerts. The owners of these instruments will also offer them to renowned musicians for their performances. Slovenian museums hold several instruments that can still be played. The biggest collection of musical instruments is held at the Ptuj Ormož Regional

10 For example collections of musical instruments in the Metropolitan Museum of Art in New York, Museum of the Royal Academy of Music in London, Benton Fletcher collection in the Fenton House in London, Fenchcocks Collection of Musical Instruments (closed in May 2010) collected by Richard and Katrina Burnett, and others.

290 zvočne podobe utemeljiti z vzdrževalnim programom v prihodnosti, to pa zahteva angažma usposobljenih glasbenikov in redne vzdrževalne preglede glasbil.

Za nekatera glasbila (predvsem godala) glasbeniki in muzikologi menijo, da z rednim igranjem zorijo, njihov zvok pa postaja vse bolj poln in kakovosten. To so v devetdesetih letih 20. stoletja dokazovali z več študijami in meritvami z naravoslovnimi raziskovalnimi tehnikami.¹¹ V novejših študijah z natančneje nadziranimi in merjenimi okoliščinami na primer razlike med dvema enakima mojstrskima inštrumentoma, od katerih so na enega igrali, drugi pa je bil hranjen v muzejskih pogojih, po primerjalnih testih, izvedenih po 1, 3 in 5 letih, še niso opazili.¹²

Z meritvami so sicer ugotovili, da vrhunski izdelki sodobnih mojstrov goslarjev po akustičnih in mehanskih lastnostih dosegajo izjemno kakovostne violine starih italijanskih mojstrov.¹³ Praksa pa kaže, da je občutek vzpostavljanja vezi s preteklostjo, ki jo občutimo ob poslušanju inštrumenta, na katerega so igrali več stoletij, še vedno neprecenljiv. Vrednost starih godal se je v zadnji tretjini 20. stoletja skokovito povečala zaradi povpraševanja vrhunskih glasbenikov, ki želijo uporabljati glasbila s posebno karizmo, pa tudi zaradi povpraševanja naložbenikov.

Glasbila imajo pričakovano uporabno življenjsko dobo. Zaradi staranja materialov in nadomeščanja sestavnih delov se v resnici oddaljujemo od izvirnega zvoka. Resnični izvirni zvočni podobi se zgolj približamo in je ne moremo popolnoma doseči. Verjetno bi se prvotni zvočni podobi bolje približali z dobro kopijo takšnega glasbila.¹⁴

Restavriranje glasbil

Restavriranje je poskus vračanja predmeta ali dela predmeta v prvotno ali eno od prejšnjih znanih stanj. V primeru naše zbirke smo to storili v primeru manjkajočih elementov glasbil, če je bilo to potrebno. Celostno restavriranje v večini primerov danes razumemo kot neetično, saj je predmet z vsemi spremembami in

11 Voichita Bucur, *Handbook of Materials for String Musical Instruments*, Springer, 2016, str. 339.

12 Prav tam, str. 340.

13 Prav tam, str. 368–369.

14 Lamb 1995. Dostopno na: <http://www.vam.ac.uk/content/journals/conservation-journal/issue-15/to-play-or-not-to-play-the-ethics-of-musical-instrument-conservation/>, obiskano: 5. 6. 2016.

Museum, consisting of approximately 300 artefacts. Among them, ten have been restored for use in sound recordings. The instrument collection at the National Museum of Slovenia includes 15 working instruments (some may need minor interventions before use). Most notable among these are the clavichord that once belonged to Janez Jurij Eisl, and two of Anton Bitenc's pianos.

Efforts to revive an instrument's sound image can only be justified when we expect the instrument to be tuned, regularly played and presented to the public, or else used in the making of documentary recordings. In our case we would need to find a master maker for each instrument we wanted to revive, who would in turn have to follow the principles of museum conservation and restoration. Expert knowledge of the workmanship applied to the making of individual types of instrument, as well as of their historical development and of the characteristics of the materials used, are essential for the high-quality, ethical restoration of an instrument. As mentioned above, the restoration of an instrument's sound image should be substantiated by its future maintenance programme. This, however, requires regular maintenance inspections and the involvement of skilled musicians.

Musicians and musicologists believe that some instruments (mainly string instruments) mature with regular playing, with their sound gaining fullness and quality. In the 1990s, there were efforts to prove this through numerous studies and measurements using scientific research techniques.¹¹ However, the latest studies, conducted in more precisely monitored and measured conditions, do not show any difference between, for example, two instruments – one played regularly, the other held in museum conditions – tested after 1, then 3, and finally 5 years.¹²

The measurements did show that the best work of contemporary violin makers do match the high quality products of the old masters in their acoustic technical features.¹³

The practice shows that the connection to the past that we feel when listening to an instrument that has been played for centuries is invaluable even today. The value of old string instruments grew substantially during the last decades of the 20th century. The reason

11 Voichita Bucur, *Handbook of Materials for String Musical Instruments*, Springer 2016, p. 339.

12 Ibid., p. 340.

13 Ibid., p. 368–369.



SI. 14 / Picture 14

Odstranjevanje površinskih nečistoč s poslikanega sarandija. / Removal of superficial dirt from painted sarandi
Foto / Photo: Irma Langus Hribar

dodatki dokument svojega obstoja in duha časa, zato ne dajemo prednost eni od vmesnih faz.

Za lažjo predstavo o tem, kaj je restavriranje, vzemimo predelane kote in dolžine violinskih vratov in ubiralk. Prehod iz baročne oblike violinskega vratu in ubiralk v sodobno obliko (vrat je nasajen na telo v ostrejšem kotu, ubiralka in vrat sta daljša) je bil postopen in se je začel v tretji četrtini 18. stoletja.^{15,16} Nekaj podobnih inštrumentov sicer najdemo tudi že med starejšimi, baročnimi violinami.¹⁷ Stare, baročne viole so goslarji po tem obdobju predelovali in posodabljali, da so ustrezale sodobnemu načinu igranja. Med ohranjenimi 244 violinami in 13 violami iz delavnice Antonia Stradivarija¹⁸ je danes zato z izvirnimi vratovi ohranjenih samo šest violin in tenorska viola, pa še med temi imajo nekateri vratovi naknadno popravljen naklon.¹⁹

Modna menjava kota vratov violin z vstavljanjem daljših krcljev, podaljševanje vratov in ubiralk je brez dvoma spremenila zvok inštrumentom, na katerih so bile narejene takšne spremembe.

Restavriranje, torej vračanje vseh teh violin v prvotno stanje, pa bi usodno poseglo v njihovo današnjo zvočno podobo, poleg

15 Pogovor z mojstrom goslarjem Blažem Demšarjem, januar 2016.

16 Stewart Pollens, Some Misconceptions about the Baroque Violin, *Performance Practice Review*, Vol. 14, No. 1, Article 6, 2009.

17 Stewart Pollens, *The Manual of Musical Instrument Conservation*, Cambridge 2016, str. 341.

18 *List of Stradivarius Instruments*. Dostopno na: https://en.wikipedia.org/wiki/List_of_Stradivarius_instruments, obiskano: 22. 1. 2017.

19 Glej op. 17.

Sl. 15 / Picture 15
 Klavir Stingl med
 konserviranjem-
 restavriranjem. /
 Piano Stingl during
 conservation-
 restoration.
 Foto / Photo: Irma
 Langus Hribar



was mainly due to the demand from music publishers, and from renowned musicians, who wanted to play instruments with special charisma.

Instruments usually come with an expected life span. The aging of materials and the changing of parts mean that the original sound is slowly lost. We can come close to the original sound image, but we cannot ever truly recreate it. A good copy of an old instrument would probably come closer to the original sound than the restored instrument itself.¹⁴

Restoration of Musical Instruments

Restoration of musical instruments is essentially the attempt to return objects, or parts of them, to their original forms, or at least to one of their previously experienced forms. In the case of our collection we focused on missing elements, if it was deemed necessary. A complete restoration of a musical instrument is today considered to be unethical. An object with all its changes and additions is a document of its own existence and the spirit of its time, therefore we do not prioritise any of the phases the instrument went through.

To illustrate what restoration is, we can look at the resetted / changed angles and lengths of a violin's neck and fingerboard. The

¹⁴ Lamb 1995. Available at: <http://www.vam.ac.uk/content/journals/conservation-journal/issue-15/to-play-or-not-to-play-the-ethics-of-musical-instrument-conservation/>, accessed on: 5th June, 2016.

294 tega pa v večini primerov dejanske originalne oblike ni mogoče z gotovostjo rekonstruirati. Zaradi predelav bi morali nadomestiti obstoječe stanjšane vratove z novimi, zamenjati bi morali ubiralke, katerih izvirne dolžine nam niso znane, in podobno. Po izkušnjah kustosov, ki so spremljali restavrirana, za igranje usposobljena glasbila, se napetosti, ki jih v glasbilo vnesejo z novimi materiali, ponovnim napenjanjem strun in prilagajanjem za nadaljnjo rabo slej ko prej pokažejo v novih poškodbah na telesu glasbila, te pa je treba odpravljati in ponovno posegati v glasbilo.²⁰

Konserviranje-restavriranje glasbil

Predmete smo v letu 2016 konservirali-restavrirali sodelavci Oddelka za konserviranje in restavriranje Narodnega muzeja Slovenije. Ker med nami ni specialista za glasbila, smo si delo razdelili glede na sorodnost materialov, za katere smo specializirani. S konserviranjem-restavriranjem smo predmetom v zbirki omogočili daljšo dobo trajanja s čim manj spremembami. To smo dosegli z dezinfekcijo, odstranjevanjem nečistoč z vseh dosegljivih površin, utrjevanjem ošibljenih struktur, nadomeščanjem manjkajočih nosilnih delov, dopolnjevanjem in zapolnjevanjem motečih poškodb, retuširanjem novih dodatkov, da ne izstopajo iz celote, in z izdelavo primerne embalaže za hranjenje. Prizadevali smo si, da s posegi nismo spremenili ali odvzeli originalne snovi. Pri dodanih materialih pa smo izbrali tiste, ki jih bo pri naslednjem posegu mogoče odstraniti brez škode za original. Konserviranju-restavriranju ali samo konserviranju dajemo danes prednost pred drugimi postopki, da glasbilo ohranimo z vso njegovo zgodovinsko pričevalnostjo.

Zaščita in ohranjanje celotne zbirke: preventivna konservacija

Za varno dolgotrajno hranjenje predmetov s čim manj spremembami in poškodbami je ključna dobra preventivna konservacija.²¹ Ta vključuje izbiro in zagotavljanje primernih okoljskih pogojev za hranjenje predmetov glede na materiale, iz katerih so sestavljeni

20 Barclay 2005, str. 154–167.

21 Preventivna konservacija so “vsa sredstva in ukrepi, namenjeni preprečevanju in zmanjševanju prihodnjega propadanja ali izgube”, povzeto po *ICOM-CC Resolution on Terminology – English*. Dostopno na: <http://www.icom-cc.org/54/document/icom-cc-resolution-terminology-english/?id=744>, obiskano: 12. 4. 2016.

transition from the baroque form of violin's neck and fingerboard, to the modern form (the neck meets the body at a sharper angle, while the fingerboard and neck are longer) was gradual, starting in the third quarter of the 18th century.^{15,16} Several similar musical instruments can also be found among older, baroque violins.¹⁷ Old, baroque violins would be modified and modernised through time in order for them to suit more modern styles of playing. Among the 244 preserved violins and 13 violas from the Antonio Stradivari workshop,¹⁸ there are only six violins and one tenor viola with their original necks. Still, not even all of these have remained completely untouched – the slant of the neck has been changed in some of them.¹⁹

The modifications in violin neck angles followed trends, and were achieved the addition of a longer block where the neck attached to the body. This lengthening of necks and fingerboards undoubtedly changed the sound of these instruments.

Restoration, in the sense of returning these violins to their original state, would not only considerably interfere with their present sound image, it would also be practically impossible. The modifications would, just for a start, require us to replace the existing thinned necks with new ones, and change the fingerboards without actually knowing their original lengths. The experience of our curators – who have cared for instruments restored for the purpose of playing – has been that the tensions the instrument goes through with every new tightening of strings, and every adjustment for further use, sooner or later lead to new damage on the instrument's body. That damage needs to be repaired, which means further intervention in the instruments.²⁰

Conservation and Restoration of Musical Instruments

During the last year, the instruments have been conserved and restored by the associates of the National Museum of Slovenia.

15 Discussion with master luthier Blaž Demšar, January 2016.

16 Stewart Pollens, Some Misconceptions about the Baroque Violin, *Performance Practice Review*, Vol. 14, No. 1, Article 6, 2009.

17 Stewart Pollens, *The Manual of Musical Instrument Conservation*, Cambridge 2016, p. 341.

18 *List of Stradivarius Instruments*. Available at: https://en.wikipedia.org/wiki/List_of_Stradivarius_instruments, accessed on: 22nd January, 2017.

19 Cf. op. 17.

20 Barclay 2005, p. 154–167.



Sl. 16 / Picture 16

Dvojna violina. Delno ohranjeni stari laki in podloga fluorescirajo pri obsevanju s svetlobo bližnjega UV področja. / Double violin. Partially preserved old varnishes and ground layer emitting fluorescence in the near UV field.

Foto / Photo: Irma Langus Hribar



Sl. 17 / Picture 17

Dvojna violina. Delno ohranjeni stari laki in podloga fluorescirajo pri obsevanju s svetlobo bližnjega UV področja. / Double violin. Partially preserved old varnishes and ground layer visible in the near UV field.

Foto / Photo: Irma Langus Hribar

(primerno in stabilno relativno vlago in temperaturo v muzejskih prostorih, uravnavanje osvetljenosti, čisto okolje), redno pregledovanje predmetov in preprečevanje okužb z insekti, glivami in mikroorganizmi ter pravilno ravnanje s predmeti ob premikanju in prevažanju. Dobro usklajeni strokovnjaki iz različnih muzejskih oddelkov in služb s preventivno konservacijo skrbimo za celotno zbirko in za preprečevanje oziroma hitrejšo obvladovanje težav.

As the museum does not have an expert in musical instruments, we have allocated tasks according to instruments' similarity with the materials we are each specialised in. Our conservation and restoration efforts have prolonged the life span of artefacts in the collection, with as few modifications as possible. We have achieved this by disinsecting the instruments, and thoroughly cleaning all accessible surfaces. We strengthened the weakened structures, replaced the missing structural parts and either repaired or filled in troublesome damage. Then we retouched any new parts to blend them in with the rest of the instrument. Finally, we made suitable packaging for the keeping of the instruments. When choosing the material to be added, we decided to use material that can be removed during later interventions without causing further damage to the original. Today, either a combination of conservation and restoration, or else just the conservation process alone, is given priority over other processes, in order to preserve musical instruments as testimonies of history.

Protection and Preservation of the Whole Collection; Preventive Conservation

The key to safe and long-term keeping of artefacts with minimal modifications and damage is good preventive conservation.²¹ This includes the choice and maintenance of environment suitable for the each type of material individual objects are made from (i.e. suitable and stable relative humidity and temperature in the museum premises, adjustment of lighting, clean environment). Furthermore, the objects need to be regularly checked in order to prevent infestation by insects, fungi or microorganisms. Correct handling of objects when they are moved or transported is also imperative. By implementing preventive conservation measures, experts from various museum departments maintain and take care of the whole collection, and can therefore quickly control, or even prevent, any difficulty they may meet.

21 Preventive conservation refers to "all measures and actions aimed at avoiding and minimizing future deterioration or loss," from *ICOM-CC Resolution on Terminology – English*. Available at: <http://www.icom-cc.org/54/document/icom-cc-resolution-terminology-english/?id=744>, accessed on: 12th April, 2016.



Naravoslovne preiskave zbirke glasbil

Ob zbiranju podatkov in pripravljanju zbirke za prvo celostno predstavitev smo iskali tudi možnosti za raziskovanje in določanje materialov, iz katerih so sestavljena glasbila iz naše zbirke. Sodelovali smo z Naravoslovnim oddelkom Restavratorskega centra ZVKDS; tam je dr. Katja Kavkler preučila zaščitne premaze na violinah iz zbirke. Izsledki raziskav so objavljeni v tej publikaciji.

Vzpostavili smo stike z Oddelkom za lesarstvo na Biotehniški fakulteti Univerze v Ljubljani; tam dr. Katarina Čufar in dr. Maks Merela ustvarjata zbirko dendrokronoloških podatkov in se ukvarjata z znanstveno prepoznavo lesnih vrst, ukvarjala pa sta se tudi z dendrokronološko obravnavo glasbil.²² Obsežna baza dendrokronoloških podatkov za vrste lesa, uporabljenega v predmetih kulturne dediščine v Sloveniji, ki so jo v zadnjih dveh

SI. 18 / Picture 18

Dvojna violina po konserviranju-restavriranju. / Double violin after conservation-restoration.
Foto / Photo: Tomaž Lauko

22 Katarina Čufar, Micha Beuting, Michael Grabner, Dendrochronological dating of two violins from private collections in Slovenia, *Zbornik gozdarstva in lesarstva*, številka 91, str. 75–84, Ljubljana 2005. Dostopno na: <http://www.dlib.si>, obiskano: 12. 1. 2017.

While collecting data and preparing the collection for the first comprehensive presentation, we were also looking for opportunities to research and define the materials our collection's musical instruments are made of. This led us to collaborate with the Natural Sciences Department of the Restoration Centre at the Institute for the Protection of the Cultural Heritage of Slovenia. Katja Kavkler, PhD, studied the types of coating on the violins from our collection. The findings of the research can be found in this publication.

Furthermore, we established contact with the Department of Wood Science and Technology at the Biotechnical Faculty of the University of Ljubljana, where Katarina Čufar, PhD and Maks Merela, PhD, experts in the scientific determination of the types of wood, are building a collection of dendrochronological data.²² The Biotechnical Faculty's Department of Wood Science and Technology has an extensive dendrochronological database, assembled during the last two decades, of the different types of wood used in objects of cultural heritage in Slovenia. This database makes it possible for us to identify at least part of our collection in terms of time period, and in terms of the origins of the wood the instruments are made of. In return, the dendrochronological database has been enriched by our own findings. Additionally, our colleagues at the Carpentry Department have healthy connections with research institutions in Austria, Italy and Germany. This increases the possibility of accessing the data of institutions in these countries, and enables us to compare the habitats of various types of wood and the time of each instrument's creation on the European scale. The Department of Conservation and Restoration at the National Museum of Slovenia has been successfully using XRF analyser *PEDUZO OI/Am/Sip-250* to identify metals and metal alloys on smaller objects. After a planned modernisation of the analyser, we expect to use it in the research of musical instruments as well.

22 Katarina Čufar, Micha Beuting, Michael Grabner, Dendrochronological dating of two violins from private collections in Slovenia, *Zbornik gozdarstva in lesarstva*, no. 91, p. 75–84, Ljubljana 2005. Available at: <http://www.dlib.si>, accessed on: 12th January, 2017.

300 desetletjih zbrali na Oddelku za lesarstvo Biotehniške fakultete Univerze v Ljubljani, nam namreč omogoča, da del naše zbirke do leta natančno umestimo v čas in določimo izvor lesa, iz katerega so sestavljeni inštrumenti, hkrati pa obogatimo skupno dendrokronološko zbirko. Poleg tega imajo raziskovalci z Oddelka za lesarstvo dobre povezave z raziskovalnimi ustanovami v Avstriji, Italiji in Nemčiji, to pa razširja možnosti dostopanja do podatkov, ki so jih zbrale omenjene ustanove, in omogoča primerjave z rastišči in obdobji nastanka v evropskem merilu.

V Oddelku za konserviranje in restavriranje v Narodnem muzeju Slovenije smo za kvalitativne analize kovin in njihovih zlitin na manjših predmetih dve desetletji s pridom uporabljali XRF analizator *PEDUZO Ol/Am/Sip-250*. Po načrtovani posodobitvi ga bomo lahko uporabili tudi za preučevanje zbirke glasbil.

Z novimi spoznanji, ki jih bomo pridobili s pomočjo naravoslovnih raziskav, bomo razširili naše poznavanje zbirke in njenega snovnega stanja, natančneje določili uporabljene materiale, časovni okvir njihovega nastanka in njihov izvor.

Za konservatorja-restavratorja so pridobljeni podatki lahko ključni pri načrtovanju konservatorsko-restavratorskega posega, zato bi bilo optimalno, če bi analize na predmetih opravili že pred konservatorsko-restavratorskimi posegi.

New findings obtained through scientific research will certainly improve our understanding and knowledge of the collection and its material condition. We will be able to more precisely determine the materials our instruments are made of, as well as the time period during which they were made, and their places of origin.

The data obtained can be critical in the planning of conservation and restoration interventions. Therefore it would be most beneficial if the analyses of artefacts were carried out before conservation and restoration intervention.



Katja Kavkler

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Analiza površinskih premazov izbranih strunskih glasbil



Katja Kavkler

Institute for the Protection of Cultural Heritage of
Slovenia, Conservation Centre, Restoration Centre

Analysis of Surface Coatings on Selected String Instruments

Strunski inštrumenti so večinoma lakirani. Lak je sloj organskega materiala, ki na predmetu naredi nekaj (deset) mikrometrov debel film.¹ Njegova funkcija naj bi bila zaščita lesa pred vplivi okolja in umazanijo, vpliva pa tudi na videz inštrumenta² in njegov zvok.³

Violinski laki in drugi premazi že od nekdaj vznemirjajo duhove, saj jim nekateri pripisujejo veliko vlogo pri zvenu inštrumentov.⁴ Še posebej so znamenite cremonske violine izdelovalcev družin Stradivari, Guarneri in Amati iz 16. do 18. stol.⁵ Tako naj lak inštrumentov ne bi imel samo zaščitne in estetske funkcije kot pri drugih predmetih, temveč tudi akustično. Mnenja o tem se še vedno krešejo, zaradi svoje skrivnostnosti pa je tema vedno aktualna. Laki na inštrumentih so se v zgodovini spreminjali, njihova sestava v preteklih obdobjih pa kljub sodobnim analitskim tehnikam še vedno ni povsem raziskana. Tako poznavalci kot tudi laiki se sprašujejo o skrivnosti zvoka Stradivarijevih violin in kot eno od možnosti navajajo tudi uporabo lakov neznane (oz. skrivnostne) sestave.⁶

Lakiranje inštrumentov je pomemben postopek pri njihovi izdelavi. Ko je bil inštrument izdelan, so ga v preteklosti za nekaj dni ali tednov izpostavili soncu, da je barva lesa potemnela.⁷ Dandanes za to uporabljajo kemične metode, ki pospešijo proces, npr. premaz s terpentinom ali dušikovo kislino. Tako ohranijo razmerje barv med temnim in svetlim lesom. Okrog leta 1800 pa so nekateri italijanski izdelovalci les premazali s kalijevim ali amonijevim dikromatom; zato so imele violine poseben zelenkast podton.⁸

Violinski laki so, glede na literaturo, pogosto sestavljeni iz več slojev. Spodnji sloj, imenovan osnova oz. grund (*ground layer* ali *primer*) »zapre« površino lesa, da se lak ne vpije vanj. To omogoči lepše vibriranje lesa.⁹ Profesor Vilim Demšar, ljubljanski goslar, je za zapiranje površine uporabljal t. i. beljakovo vodo, tekočino, ki se izloči po stepanju beljaka v sneg.¹⁰ Izolacijski premaz iz

1 Echard in Bertrand 2010, str. 12.

2 Darnton 2009.

3 Schleske 2016.

4 Prav tam.

5 Goldstein 2016, str. iv; Tai 2007, str. 119.

6 Tai 2007, str. 119; Tai 2009, str. 3.

7 Gusset 2016.

8 Darnton 2009, str. 17.

9 Kolneder 1998.

10 Golubov 2014.

INTRODUCTION

String instruments are mostly varnished. Varnish is a layer of organic material that creates a several-(ten)-micrometre thick coating on an object.¹ Its function is to protect the wood from environmental impacts, while also affecting the instrument's appearance and sound.^{2,3}

Violin varnishes and other types of coating have always been somewhat controversial, as some put great emphasis on how they may affect the sound of the instrument.⁴ This is especially true for the Cremona violins, made by the makers from Stradivari, Guarneri, and Amati families between the 16th and 18th centuries.⁵ Therefore instrument varnishes not only have protective and aesthetic functions, as with other objects, but also acoustic ones. The problem is perplexing and therefore still divisive. Instrument varnishes have changed throughout history. However, despite all the modern analytical technology, we have not managed to fully research their structure. Both experts and lay people still wonder about the mystery of sound of the Stradivari violins, ascribing it to the use of varnishes of unknown (or rather mysterious) origin.⁶

The lacquer finish of the instruments is an important part of the violin making process. In the past, when an instrument was finally made, it would be exposed to the sun for several days or even weeks so the colour of wood may darken.⁷ Nowadays makers employ chemical methods in order to accelerate the darkening effect, for example turpentine coating or nitric acid. This way they preserve the balance between the dark and the light wood colours. Interestingly, around the year 1800 some Italian luthiers would coat the wood with potassium dichromate or ammonium dichromate, giving their violins a specific greenish undertone.⁸

Violinski laki so, glede na literaturo, pogosto sestavljeni iz več slojev. According to available literature violin varnishes often comprise several layers. The bottom layer, called the ground layer or primer "seals" the surface of the wood so that the varnish overlay cannot

1 Echard and Bertrand, 2010, p. 12.

2 Darnton 2009.

3 Schleske 2016.

4 Ibid.

5 Goldstein, 2016, p. iv; Tai, 2007, p. 119.

6 Tai 2007, p. 119; 2009, p. 3.

7 Gusset 2016.

8 Darnton 2009, p. 17.

306 beljakov pred lakiranjem omenjajo tudi drugi avtorji.¹¹ Glede na literaturo pa so za osnovni, izolacijski sloj lahko nanесли tudi klej ali neobarvan lak na osnovi organskih topil.¹² Sloj osnove pogosto vsebuje mineralne delce, predvsem silikate in aluminijeve okside, ki ne obarvajo površine inštrumentov.¹³ Nekateri grundi (npr. cremonski) so ostali na površini lesa, drugi (npr. beneški), pa so zapolnili pore lesa.¹⁴

Laki inštrumentov so bili večinoma izdelani iz smol. Razlikujemo smolne lake, pripravljene v organskih topilih (ang. *spirit varnish*), in oljno-smolne lake (ang. *oil varnish*), pri katerih je smola raztopljena v olju, največkrat lanenem ali orehovem.¹⁵ Smola, uporabljena v Stradivarijevih violinah, je bila predvsem kolofonija, smola lokalnih iglavcev, sodobne analize pa so občasno potrdile tudi navzočnost drugih vrst smol: mastiksa, kopala in sandaraka.¹⁶ Uporaba smolsrednje trdote je najprimernejša – premehke smole lesa ne zaščitijo dovolj, pretrde pa omejijo njegovo sposobnost za vibriranje, zato dandanes priporočajo mastiks in kopal.¹⁷ Zaščitni laki so, glede na literaturo, naneseni v več slojih.¹⁸ Zaradi počasnega sušenja in netopnosti predhodnih slojev so številni izdelovalci raje uporabljali oljne lake.¹⁹ Takšni naj bi bili uporabljeni tudi za lakiranje Stradivarijevih violin.²⁰

Za dodatno obarvanje lakov, s katerimi so dosegli temnejše obarvanje violin, kot je bila zgolj potemnitev lesa z oksidacijo na soncu, so uporabljali obarvane smole, npr. šelak ali zmajevo kri.²¹ Nekateri ustvarjalci so za obarvanje uporabljali tudi anorganske pigmente, npr. cinober ali pigment auri, z nekaterimi pa so poleg obarvanja tudi pospešili sušenje olj, npr. svinčev oksid, *litharge*.²²

Ubiralka naj bi bila izdelana iz čvrstega lesa. Dandanes je to ebenovina ali soroden trd in obstojen les, npr. palisander. Pogosto, predvsem pri cenejših violinah, pa gre za cenejši in dostopnejši les, ki ga izdelovalci obarvajo z različnimi barvili (na forumih se pojavljajo informacije o uporabi barvil za lase ali usnje).

11 Darnton 2009, str. 19.

12 Prav tam, str. 19.

13 Darnton 2009, str. 19; Tai 2007, str. 123; Barlow in Woodhouse 1989, str. 4–5.

14 Tai 2009, str. 2.

15 Darnton 2009, str. 2; Tai 2009, str. 3.

16 Tai 2009, str. 6.

17 Kolneder 1998.

18 Darnton 2009, str. 1.

19 Darnton 2009, str. 1; Tai 2009, str. 4.

20 Fountain 2009.

21 Darnton 2009, str. 3.

22 Echard in Bertrand 2010, str. 14.

be absorbed in the wood. This in turn enables the wood to vibrate more beautifully.⁹ Professor Vilim Demšar, a luthier from Ljubljana, used so called egg white water (the liquid that remains behind when whipping egg whites) to seal the wooden surface.¹⁰ Other authors also mention using egg whites as insulating material applied before varnishing an instrument.¹¹ According to professional literature, glue or clear, colourless varnish based on organic solvents could also be used as insulating layer.¹² The ground layer often contains mineral parts, mostly silicates and aluminium oxides which do not stain the instruments' surfaces.¹³ During application some grounds (e.g. Cremonese) would remain on the surface of the wood, while others (e.g. Venetian) would fill in the pores of the wood.¹⁴

Varnishes used on musical instruments used to consist mainly of resins. There is a distinction between spirit varnishes based on organic solvents and oil varnishes, where resin is dissolved in a type of oil, mostly linseed oil or walnut oil.¹⁵ The resin used on Stradivari violins was predominantly rosin, a resin obtained from local coniferous trees. However, contemporary analyses have occasionally confirmed the presence of other types of resin: mastic, copal, and sandarac.¹⁶ The most suitable resins are medium hard ones. Ones that are too soft do not protect wood adequately, while those that are too hard limit the instrument's ability to vibrate. Accordingly, mastic and copal are most commonly recommended today.¹⁷ According to the literature, protective varnishes are applied in several layers.¹⁸ As the drying process is slow and the previous layers insoluble, many luthiers preferred to use oil varnishes.¹⁹ These are believed to have been used in the varnishing of Stradivari violins.²⁰

In order to achieve a darker stain on violins than what could be achieved through oxidation in the sun, luthiers would use coloured

9 Kolneder 1998.

10 Golubov 2014.

11 Darnton 2009, p. 19.

12 Ibid., p. 19.

13 Darnton 2009, p. 19; Tai 2007, p. 123; Barlow and Woodhouse 1989, p. 4–5.

14 Tai 2009, p. 2.

15 Darnton 2009, p. 2; Tai 2009, p. 3.

16 Tai 2009, p. 6.

17 Kolneder 1998.




18 Darnton 2009, p. 1.

19 Darnton 2009, p. 1; Tai 2009, p. 4.

20 Fountain 2009.

Analizirali smo površinske premaze štirih violin in njihove loke (preglednica 1). Poleg klasičnih violin smo analizirali tudi dvojno in žepno violino (*pochette*) ter lutnjo. Čeprav lutnja ne sodi med godala, pa so podatki o premazih na njej enako pomembni, saj je o lakiranju lutenj in sorodnih inštrumentov znanega še manj kot o violinah in drugih godalih,²³ čeprav naj bi se izdelava violin zgledovala prav po izdelavi lutenj.²⁴ Analizirani inštrumenti so bili izdelani v drugi polovici 19. in prvi polovici 20. stoletja, razen *pochette*, ki je bila izdelana konec 17. stoletja (preglednica 1).

Preglednica 1: Seznam pregledanih inštrumentov.

Delovna oznaka	Predmet	Datacija	Inv. št.	Fotografija
VIL01	violina	konec 19. stol.	N 36585/1	
VIL02	dvojna violina	šestdeseta leta 19. stol.	N 37239	
VIL03	violina	šestdeseta leta 19. stol.	N 35382/1	

²³ Tai 2009, str. 18.

²⁴ Tai 2007, str. 119.


resin, such as shellac or dragon's blood resin.²¹ Some makers would also use inorganic pigments, such as cinnabar or orpiment, to achieve the desired colour. Besides colourisation, some resins, e.g. lead oxide (litharge), were used to accelerate the drying process in oils.²²

Fingerboards should be made of hard wood. Today, ebony or a similarly hard and durable types of wood are used, for example rosewood. However, cheaper violins are often made of cheaper, more easily accessible wood, which luthiers stain with various colorants (internet forums include information about the use of hair or leather dyes).

MUSICAL INSTRUMENTS

We analysed the surface coatings of four violins and their corresponding bows (table 1). In addition to the classical violins, we also analysed a double violin, a kit violin – a *pochette*, and a lute. Although lute is a plucked string instrument, information on the instrument's coatings is equally important. We know less about lute varnishing processes than about those of violins and other string instruments,²³ even though violin making was supposedly modelled on the lute.²⁴ The instruments we analysed were made in the second half of the 19th and the first half of the 20th centuries, with the exception of the *pochette*, which was made at the end of the 17th century (table 1).

Table 1: List of the analysed instruments







Code	Object	Date of origin	Inventory no.	Photography
VIL01	Violin	end of 19th ct.	N 36585/1	








21 Darnton 2009, p. 3.

22 Echard and Bertrand 2010, p. 14.

23 Tai 2009, p. 18.

24 Tai 2007, p. 119.

VIL04	lutnja		N 37455	
VIL05	žepna violina – <i>pochette</i>	1679	N 17218	
VIL06	lok violine z žimo	konec 19. stol.	N 36585/2	
VIL07	lok violine	šestdeseta leta 19. stol.	N 35382/2	
VIL08	violina z lokom in ruto v zaščitnem kovčku	dvajseta leta 20. stol.	N 37674/1,2,3	
VIL09	violina z lokom, ruto in notami v zaščitnem kovčku	1945–1947	N 37675/1,2,4	

VIL02	Double violin	1860s	N 37239	
VIL03	Violin	1860s	N 35382/1	
VIL04	Lute		N 37455	
VIL05	<i>Kit violin – pochette</i>	1679	N 17218	
VIL06	Violin bow with horsehair	end of 19th ct.	N 36585/2	
VIL07	Violin bow	1860s	N 35382/2	
VIL08	Violin with bow and scarf in protective casing	1920s	N 37674/1,2,3	

Z inštrumentov smo odvzeli vzorce lakov in barvnih slojev, da bi ugotovili število in zaporedje njihovih plasti ter identificirali njihovo sestavo. Vzorce smo vgradili v poliestrsko smolo in pripravili obruse, tako da smo lahko z optičnim mikroskopom opazovali prečne preseke odvzetih vzorcev. Predvsem nas je zanimala razporeditev slojev premazov. Obrusi so bili preiskani z mikroskopom BX60 (Olympus) v odsevni vidni in ultravijolični (UV) svetlobi pri 20- in 50-kratni povečavi.

Na izbranih vzorcih smo z infrardečim spektrometrom s Fouriero transformacijo (FTIR) Spectrum 100 (PerkinElmer), raman-skim spektrometrom HR800 (Horiba Jobin-Yvon) in vrstičnim elektronskim mikroskopom z energijskim disperznim spektrometrom (SEM EDS) 5500 LV (JEOL) poskušali identificirati uporabljene materiale. Analize FTIR smo izvedli na surovih, nevgrajenih vzorcih, drugi dve metodi pa smo aplicirali na brusih, ki smo jih prej mikroskopirali z optičnim mikroskopom.

Z izbranimi metodami smo poskušali identificirati število in vrsto slojev ter vrsto veziv in pigmentov oz. polnil. Prvo skupino informacij nam je dala optična mikroskopija, veziva smo skušali identificirati z infrardečo spektroskopijo, prav tako vrsto pigmentov in polnil. Pri identifikaciji teh smo si pomagali tudi z ramansko spektroskopijo in vrstično elektronsko mikroskopijo.

Pri izbranih inštrumentih nas je zanimala sestava laka in okrasja inštrumentov, zato smo vzorčili tako lake kot tudi okrasje in temno obarvan les z nekaterih sestavnih delov violine (strunik, kobilica, ubiralka, vijaki).

REZULTATI

Pri prvi izbrani violini (VIL01), izdelani ob koncu 19. stol., smo lak vzeli s stranice violine, ob stiku z njenim hrbtiščem. Na vzorcu sta opazni različni snovi – tanjši sloj smole (kopal ali sorodna smola) in debelejši sloj proteinske snovi, debel nekaj 100 μm . Izdelovalci sestavne dele violin lepijo s klejnim lepilom,²⁵ zato sklepamo, da smo poleg laka v vzorcu zajeli tudi sloj lepila. Dejstvo je namreč, da smo pri drugem vzorcu, odvzetem z okrasne črte na trupu violine, opazili le sloj smole.

25 *Violin*, Wikipedia. Dostopno na: www.en.wikipedia.org/wiki/Violin, obiskano: 15. 1. 2017.

VIL09

Violin with
bow, scarf,
and music
scores in
protective
casing

1945-47

N
37675/1,2,4

METHODS

We took samples of varnish and colour layers from the instruments in order to determine their number and sequence. The samples were introduced into polyester resin and sanded down, which enabled us to observe vertical sections of the samples through a microscope. We were predominantly interested in the way the layers of varnishes were arranged. The sanded samples were analysed with the Olympus BX60 microscope under reflective visible and ultraviolet (UV) light at 20x and 50x magnification.

We analysed the selected samples to determine the applied materials using Fourier transform infrared spectrometry (FTIR) Spectrum 100 (PerkinElmer), Raman spectroscopy HR800 (Horiba Jobin-Yvon) and scanning electron microscopy with energy dispersive X-ray spectroscopy (SEM EDS) 5500 LV (JEOL). The FTIR analyses were performed on raw samples, while the other two methods were applied for the analyses of the samples introduced in polyester resin after having been viewed under optical microscope.

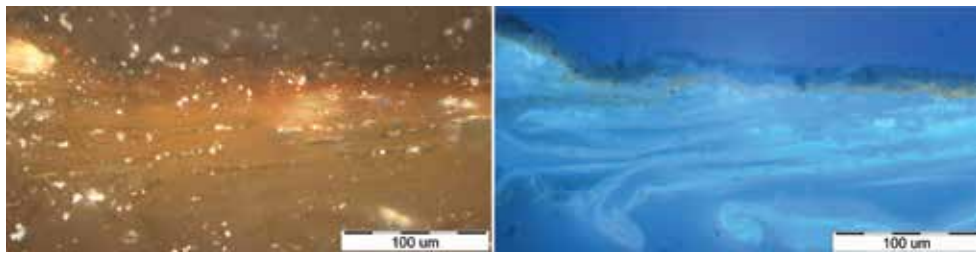
These methods were chosen to help us identify the number and types of layers and the types of binders, and fillers. We obtained the first group of information through the use of optic microscopy, while we sought to identify the binders, pigment types, and fillers with infrared spectroscopy. In order to identify the fillers we also used Raman spectroscopy and scanning electron spectroscopy (SEM).

As we were interested in the composition of varnishes and the instruments' embellishments, we sampled not only varnishes but also the embellishments and darkly coloured wood from several violin components (tailpiece, bridge, fingerboard, tuning pegs).

RESULTS

The varnish from the first violin we selected (VIL01), made at the end of the 19th century, was obtained from the side of the violin,

314 Na trupu pod strunami violine izdelovalca Boštjana ali Antona Riharja iz šestdesetih let 19. stol. (VIL03) smo opazili dva sloja laka, brez sloja osnove. Spodnji sloj je iz šelaka, nad njim pa verjetno poznejši smolni lak, ki vsebuje tudi kalcitno polnilo. Na hrbtni strani trupa je šelak prav tako nanesen neposredno na les, čezenj pa je sloj rdečkaste oz. rjavkaste barve, izdelane iz žganih zemeljskih pigmentov (siena, oker ipd.), vezane s proteinskim vezivom (slika 1).



Sl. 1 / Picture 1

Fotografiji prečnega preseka premazov violine VIL03 v vidni (levo) in UV svetlobi (desno). Nad lesom vidimo sloj šelaka, čezenj pa je nanesen sloj rdečkaste oz. rjavkaste barve (500-kratna povečava). / Two photographs of the cross-section of varnishes obtained from VIL03 under visible light (left) and under UV light (right). Above wood there is a layer of shellac, over which there is a coating of reddish or maroon colour (500x magnification).

Foto / Photo: Katja Kavkler

Analizirali smo tudi violini iz prve polovice 20. stol., ki ju je Narodnemu muzeju Slovenije podarila Zorka Šubic, hči Mirka Šubica. Nanju je igrala njena mama. Laki starejše izmed obeh violin (VIL08) so na prvi pogled podobni prej opisanim. Gre za dvoslojni nanos laka čez sloj osnove, ki je bila izdelana s tempnim vezivom. Lak je bil izdelan iz dveh različnih smol, kot je razvidno iz različnih barv fluorescence (slika 2). Predvidoma je bil spodnji sloj izdelan iz kopala, zgornji pa iz šelaka. Spodnji sloj laka je prodril med celice lesa. Čeprav je v okolici zvočnice in pod strunami površina laka vidno poškodovana (domnevno zaradi uporabe kolofonije na loku, s katerega je padala na violino med igranjem), na stratigrafijah vzorcev ni vidnih večjih razlik med sprednjo in hrbtno stranjo. Vidimo le navzočnost neidentificirane aromatske spojine.

Najnovejša izmed preiskanih violin (VIL09), prav tako dar Zorice Šubic, ima zgradbo slojev drugačno od doslej opisane. Gre za večslojni nanos dveh različnih lakov, ki sta bila izmenično nanesena na površino lesa, čez sloj osnove, ki je nismo identificirali. V parih sta bila nanesena spodnji sloj z oranžno fluorescenco in zgornji, debelejši, z belo fluorescenco. Na podlagi spektrov FTIR sklepamo,

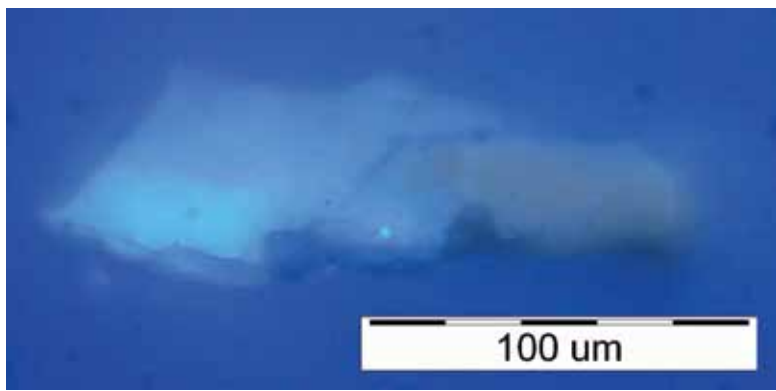
where the rib meets the back of the instrument. The sample shows two different substances – a thinner layer of resin (copal or a similar resin) and a thicker layer of a protein substance, several 100 µm thick.²⁵ We therefore believe that, besides the varnish, we must have also removed a layer of glue when taking the samples from the violin. This is supported by the fact that the second sample, taken from a decorative line on the violin's body, shows only a layer of resin.

On the belly of the violin from the 1860s, made by either Boštjan Rihar or Anton Rihar (VIL03), we found two layers of varnish under the strings, without the ground coating. A layer of shellac underlays a resin varnish, probably from a later date, which also includes a calcite filler. Shellac varnish was applied directly on the wood on the back of the instrument, over which we found a reddish or maroon colour coating made from burnt earth pigments (sienna, ochre, etc.), bound with protein binder (picture 1).

We also analysed two violins from the first half of the 20th century, donated to the National Museum of Slovenia by Zorka Šubic, daughter of Mirko Šubic. The violins were played by Zorka's mother. The varnishes from the older of the two instruments (VIL08) seem to be similar to the varnishes described above, i.e. a two-layer coating applied over the ground coating made from tempera binder. The varnish was made of two different resins, which can be seen from two different colours of fluorescence (picture 2). The lower layer was probably copal, while the upper one was shellac. The lower coating penetrated into the cells of the wood. Although the varnish around the sound hole and below the strings is visibly damaged (supposedly by the use of rosin on the bow, which fell on the violin when it was played), the stratigraphy of the samples does not show considerable differences between the belly and the back of the instrument. We can only see the presence of an unidentified aromatic substance.

The layers' structure of the newest of the analysed violins (VIL09), also a gift from Zorica Šubic, is different from those we have already described. This is a multi-layered coating of two different varnishes that were applied alternately over a layer of ground that we did not determine. The lower varnish (orange fluorescence) and the upper, thicker layer of varnish (white fluorescence) were applied in pairs.

25 *Violin*, Wikipedia. Available at: www.en.wikipedia.org/wiki/Violin, accessed on: 15th January, 2017.



Sl. 2 / Picture 2

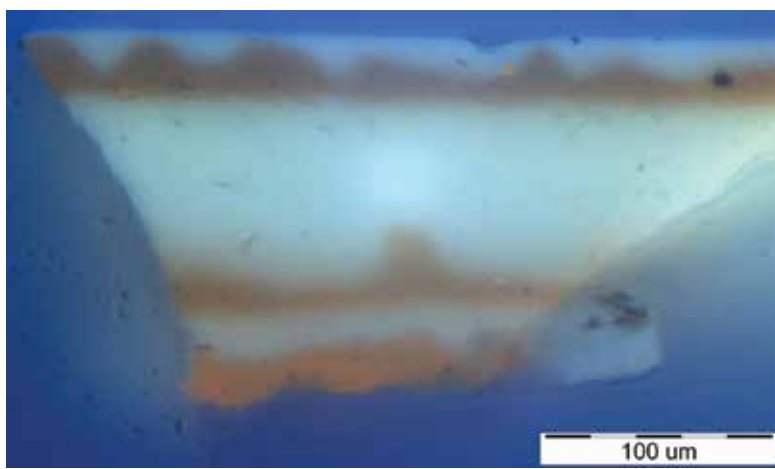
Fotografija preseka premazov hrbtišča violine VIL08 v UV svetlobi. Vidimo sloj osnove (črna fluorescenca), sloj neobarvane smole (modro-bela fluorescenca) in obarvane smole (oranžna fluorescenca), posneta pri 500-kratni povečavi. / Photograph of the cross-section of the back of violin VIL08 under UV light, where a layer of ground can be seen (the black fluorescence), along with a layer of non-coloured resin ((blue-white fluorescence) and coloured resin (orange fluorescence), taken at 500x magnification. Foto / Photo: Katja Kavkler

da gre za izmenično nanašanje slojev šelaka in kopala. Skupno število nanosov na odvzetih vzorcih je bilo tako od pet do sedem slojev, skupaj s spodnjim slojem osnove. Na podlagi oblike slojev v vzorcu, odvzetem s hrbtišča violine, sklepamo, da se spodnji (temnejši) sloj še ni povsem posušil, ko so že nanesli zgornjega, zato se je površina spodnjega nagubala (slika 3). Na licu pa so bili vsi sloji posušeni pred nanosom naslednjega. Gre za en par nanosov manj kot na hrbtišču, sloji temnejšega laka so bili naneseni nekoliko tanjše kot na hrbtu.

Lok prve violine (VIL06) je bil zaščiten s tempnim vezivom, torej mešanico proteinskega in oljnega veziva, in obarvan z zemeljskimi pigmenti. Drugi lok (VIL07) je bil precej obrabljen, zato je bilo vzorčenje težje. Na izpostavljenih površinah nismo opazili premaza, na skritem mestu med dvema deloma loka pa smo identificirali proteinsko snov. To je bil lahko zaščitni premaz ali lepilo sestavnih delov.

Ubiralke violin so bile večinoma izdelane iz tršega lesa, zelo pogosto iz ebenovine ali palisandrovega lesa, saj so med igranjem instrumentov izpostavljene številnim mehanskim vplivom. Vendar pa ima tak les visoko ceno, zato so ga pogosto nadomestili s svetlejšim lesom lokalnega izvora, saj je prav tako trden, npr. javor

Based on the FTIR spectrums we assume these are alternate layers of coating made of shellac and copal. The total number of coatings identified from the samples is from 5 to 7, including the ground coating. Based on the form of the layers obtained from the back of the violin we deduced that the lower (darker) layer was not entirely dry when the next layer was applied. Consequently the surface of the lower layer crinkled (picture 3). Each layer on the violin's belly was dry before the next was applied. The back shows one pair of coating more than on the belly, where the layer of the darker varnish was applied slightly thinner than on the back.



Sl. 3 / Picture 3

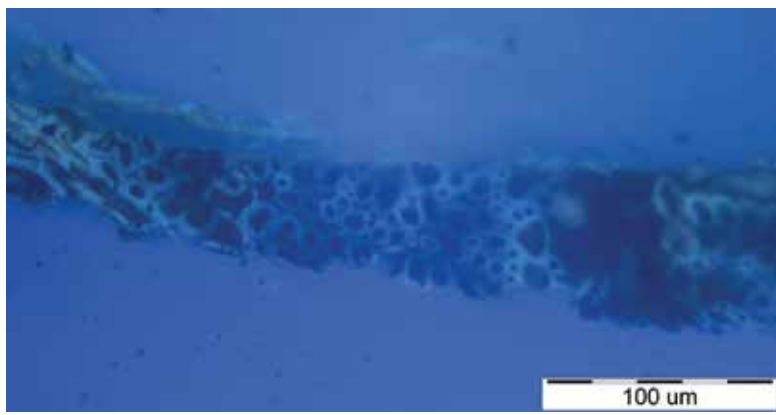
Fotografija preseka premazov hrbtišča violine VIL09 v UV svetlobi. Vidimo veliko število slojev in nagubano površino slojev obarvanega laka (500-kratna povečava). / Photograph of the cross-section of coatings from the back of the violin VIL09 under UV lighting. We can see a large number of layers and the crinkled surface of the coloured varnish layers (500x magnification).

Foto / Photo: Katja Kavkler

The bow belonging to the first violin (VIL06) was protected with a tempera binder, i.e. with the mix of protein and oil binders, and coloured with earth pigments. The second bow (VIL07) was fairly worn out, which made sampling difficult. We did not see any coating on the exposed surfaces, while we were able to identify a protein substance from a hidden part between two parts of the bow. This could be either a protective coating or glue, binding the bow's components.

Violin fingerboards were usually made of harder wood, usually ebony or rosewood, as they were exposed to mechanic influences. However, these types of wood are expensive, so they would be often replaced with a lighter local wood that was similarly hard,

318 ali topol, temnili pa so tudi palisandrov les.²⁶ Ubiralke večine analiziranih violin niso bile izdelane iz ebenovine, saj je barva na delih, kjer glasbenik največkrat pritiska strune, obleдела. To smo potrdili tudi z optično mikroskopijo, saj v trahejah in med celicami vidimo neidentificirano črno barvilo (slika 4). Sodobni izdelovalci, kot je razvidno s spletnih forumov, za obarvanje svetlejšega lesa dandanes uporabljajo kar barvila za lase ali usnje, nekateri pa oljno barvo, obarvano z ogljem ali sajami. Obarvanje strunika z ogljikovim črnim pigmentom (slika 5) smo opazili le pri violini iz šestdesetih let 19. stol. (VIL03).



Sl. 4 / Picture 4

Fotografija slojev strunika violine VIL05 v UV svetlobi. Vidimo, da je les obarvan s črnim barvilom, ki je prodrlo v traheje in med celice lesa (500-kratna povečava). / Photograph of layers on the tailbone of violin VIL05 under UV lighting shows that the wood is stained with black pigment, which penetrated into the trachea and the cells of the wood (500x magnification).

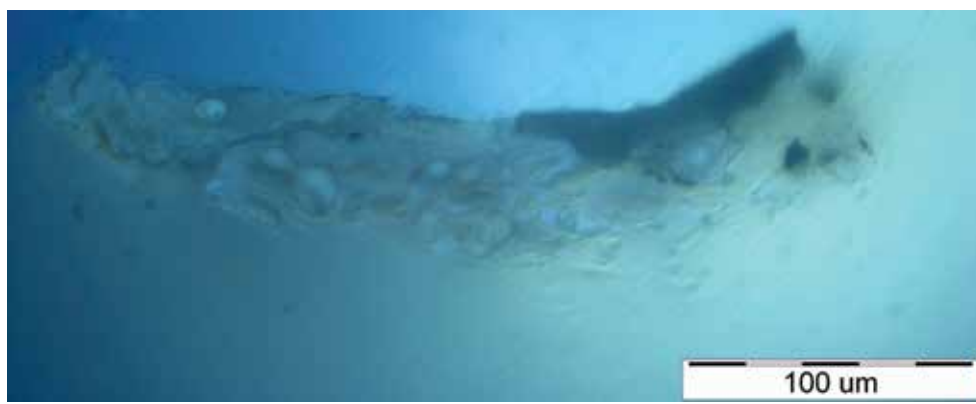
Foto / Photo: Katja Kavkler

Zanimiv primer je dvojna violina (VIL02). Obe violini, ki jo sestavljata, sta bili lakirani z naravno diterpensko smolo, najverjetneje s kopalom.²⁷ Tudi vrat violin je bil najprej premazan z diterpensko smolo. Čeznjo je bilo nanesenih več slojev barvnih plasti, verjetno povezanih z diterpensko in triterpensko smolo, v katere so bili pomešani številni minerali, nekateri (zemeljski pigmenti, npr. siena, oker) so površino obarvali v rdečerjavo, drugi (kalcit, aragonit) pa so bili verjetno dodani kot polnilo. Zaradi vplivov staranja in okoljskih parametrov so se materiali razgradili, pri tem pa so se kalcijeve spojine pretvorile v kalcijev oksalat. V nasprotju s prej predstavljenimi violinami je bil pri tej za temnejše elemente

²⁶ Gusset 2016; *Kennedy Violins* 2014.

²⁷ Azémard et al. 2014, str. 143.

like maple or poplar. Rosewood was also used and then darkened.²⁶ The fingerboards on most of the analysed violins were not made of ebony, we can see that the spots where the player most often pressed the strings are discoloured. This has been confirmed with optic microscopy, which shows an unidentified black colour in the trachea and between the cells (picture 4). Conversations on social media show that contemporary luthiers simply use hair colour or leather dye, while others use oil colours additionally stained with coal or soot. The one tailbone stained with black carbon pigment belongs to the violin from the 1860s (VIL03).



Sl. 5 / Picture 5

Fotografija slojev strunika violine VIL03 v UV svetlobi. Nad lesom vidimo sloj barve, obarvan s slojem ogljikovega črnega pigmenta (500-kratna povečava). / Photograph of the tailbone of violin VIL03 under UV lighting. We can see a layer of colour above the wood, which is stained with a layer of black carbon pigment (500x magnification).
Foto / Photo: Katja Kavkler

The double violin (VIL02) is an interesting artefact. Both violins were varnished with natural diterpenoid resin, most likely copal.²⁷ The violin's neck was coated with diterpenoid resin first. Several layers of colour were then applied over it, probably bound with diterpenoid or triterpenoid resins mixed with various minerals. Some of the minerals (earth pigments like sienna and ochre) coloured the surface maroon, while others (calcite, aragonite) were likely added as fillers. Due to aging and environmental parameters the materials decomposed, converting the calcium compounds into calcium oxalate. Unlike with the violins we have already mentioned, an exotic, more expensive dark wood, most likely ebony, was used for the darker elements.

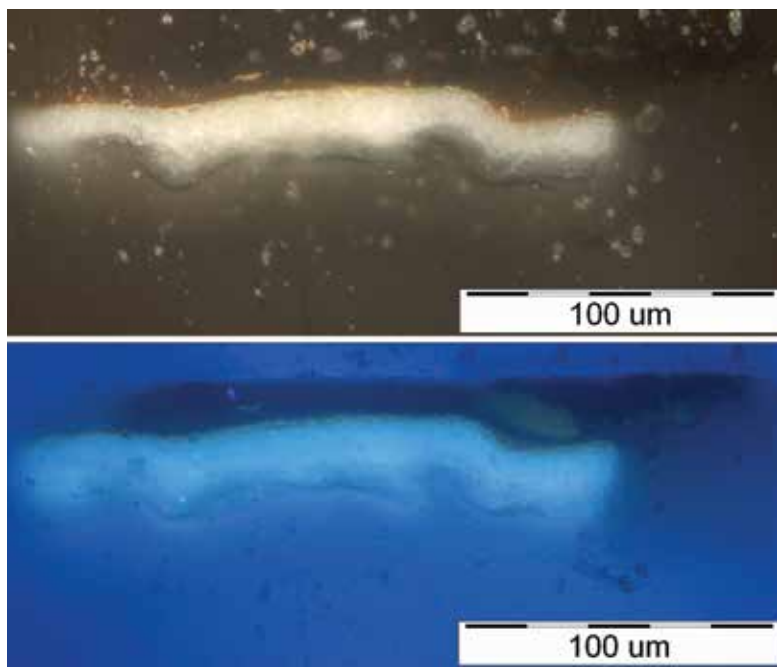
²⁶ Gusset 2016; *Kennedy Violins* 2014.

²⁷ Azémard et al. 2014, p. 143.

320 uporabljen eksotičen, dražji les, tak, ki je že v osnovi temen, verjetno ebenovina.

Žepna violina, imenovana tudi *pochette* (VIL05), je bila lakirana eno- ali dvoslojno. Vrste uporabljenega laka ne moremo povsem z gotovostjo identificirati, najverjetneje pa je bila to kolofonija. Vijaki so bili temneje obarvani z zemeljskimi pigmenti, povezanimi z oljnim ali smolnim vezivom. Les ubiralke je bil temno obarvan z barvili.

Lutnja je bila lakirana dvoslojno. Kot osnovni sloj je nanesen šelak, čezenj pa temnejša snov organskega izvora, ki je nismo mogli identificirati. Bogato okrasje je bilo izdelano s tempnim vezivom ob zvočnici in oljnim vezivom na vratu. Ornament na vratu je bil podložen s slojem bele svinčeve oljne barve (slika 6), rdeča barva ornamenta pa je bila dosežena z uporabo organskih barvil, uporabljenih kot pigmenti. Z uporabo pruske modre so dosegli temnejši odtenek.



Sl. 6 / Picture 6

Fotografiji barvnih slojev ornamenta lutnje v vidni (zgoraj) in UV svetlobi (spodaj). Osnova je izdelana iz svinčeve bele, za rdečo barvo pa je bilo uporabljeno organsko barvilo (500-kratna povečava). / Photographs of coloured layers taken from the lute's ornament under visible (top) and UV light (bottom). The base is made of lead white, while an organic pigment was used for the red (500x magnification).
Foto / Photo: Katja Kavkler

The kit violin, *pochette* (VIL05), has one to two coatings of varnish. We cannot determine the type of varnish with certainty, but it is most likely rosin. The nuts were painted dark with earth pigments bound with oil or resin based binder. The fingerboard wood was stained darker with pigments.

The lute has two layers of varnish, shellac being the base layer with an unidentified darker organic substance layered on top of it. Rich ornamentation was added with tempera binder next to the sound hole and with oil-based binder on the neck. The ornamentation on the neck was first coated in a layer of white lead paint (picture 6), while the red was achieved with organic colourants used as pigments. In order to get a darker shade Prussian blue pigment was used.

COMMENTARY

Infrared spectroscopy is a quick, simple and financially convenient method of identifying organic and some inorganic materials. Properly preparing obtained samples facilitates analyses of a number of coating layers. However, the method is not specific. In several cases we were not able to identify with certainty the types of resin used for varnish as the vibrations of resins from the same group (diterpenoids and triterpenoids) are similar. The aging of the materials is another problem, it changes the composition of a material and consequently its spectrums change as well. We were also not able to identify binders in the resin varnishes and in the colours with a large share of inorganic components. Consequently, the question of whether varnishes with oil-based binders or binders made from organic solvents were used remains unanswered. While organic solvents would evaporate, the spectrum of oil is very much similar to the resin spectrum and cannot be distinguished from the compound. FTIR spectroscopy can show a component in a mixture of resin varnishes only if its minimal share in the compound is 50 %.²⁸

Considering the information in the available literature, it is somewhat surprising that none of the 19th-century instruments had a layer of ground with mineral fillers. Both the FTIR spectroscopy and SEM EDS confirmed this. The only exception was the double violin (VIL02), where the ground layer was made of resin binder, calcite, and aragonite, and further tinted with earth pigments. Both 20th century violins also have a layer of ground under the varnish (VIL08 and VIL09).

28 Derrick 1989.

Infrardeča spektroskopija je preprosta, hitra in cenovno dostopna metoda za identifikacijo organskih in nekaterih anorganskih materialov. Ob primerni pripravi odvzetih vzorcev lahko analiziramo vrsto premazov po slojih. Njena slabost pa je nespecifičnost. V nekaterih primerih nismo mogli z gotovostjo identificirati vrste za lak uporabljene smole, saj so si vibracije smol iste skupine (diterpenske, triterpenske) med seboj podobne. Dodatna težava je tudi staranje materialov, saj se zaradi njega spremeni njihova sestava, torej tudi njihovi spektri. Prav tako nismo mogli identificirati veziv, ne v smolnih lakih ne v barvah, v katerih je bil velik delež anorganskih komponent. Tako še vedno ostaja neznanka, ali so na analiziranih violinah uporabljali lake z oljnim vezivom ali vezivom iz organskih topil. Organska topila bi že izhlapela, spekter olja pa je zelo podoben smolnemu, zato ga ne moremo razločiti iz zmesi. Komponento v zmesi smolnih lakov lahko s spektroskopijo FTIR prepoznamo le, če je njen delež v zmesi vsaj 50-odstoten.²⁸

Glede na obstoječo literaturo nekoliko preseneča, da nobeden izmed inštrumentov iz 19. stol. ni vseboval sloja podloge z mineralnimi polnili. To smo potrdili tako s spektroskopijo FTIR kot tudi s SEM EDS. Izjema je dvojna violina (VIL02), pri kateri je bil sloj grunda izdelan iz smolnega veziva, kalcita in aragonita, obarvan z zemeljskimi pigmenti. Prav tako imata pod lakom sloj osnove tudi obe violini, izdelani v 20. stol. (VIL08 in VIL09).

Število slojev premaza zelo variira, tako med posameznimi predmeti kot tudi na različnih mestih na predmetu. Čeprav izdelovalci²⁹ navajajo, da je po navadi potrebnih več slojev nanosa, v številnih primerih opazimo le enega ali dva sloja laka. Največ slojev laka je vidnih v najnovejši violini (VIL09).

Čeprav v literaturi velja, da je bil najprej uporabljen prosojen, zaščitni lak, čezenj pa nanesen obarvan, smo pri najnovejši violini (VIL09) opazili prav nasprotno. To lahko razumemo, kot da je bil čez obarvan lak nanesen zaščitni sloj prosojnega neobarvanega laka. Pogosta identifikacija kopala v analiziranih violinah ustreza navedbam o njegovih primernosti kot srednje trdne smole.³⁰

28 Derrick 1989.

29 Darnton 2009, str. 1.

30 Kolneder 1998.

The number of coatings varies substantially not only among individual objects, but also in different places on one object. Although luthiers say that usually several layers of coating are needed,²⁹ we can see only one or two coatings of varnish in most cases. The highest number of varnish layers on the most modern violin (VIL09).

Although the literature states that first a transparent protective varnish was used, underlying a tinted varnish, we observed quite the opposite in the newest violin (VIL09). It seems that a protective layer of colourless varnish was applied over a tinted varnish. The analyses of violins frequently showed the presence of copal, which corresponds to the claims of its suitability as a medium-grade resin.³⁰

Although we did not identify the types of wood, we can be certain that, with the exception of the double violin (VIL02), ebony was not used for the fingerboards. Lighter, most likely local wood was stained with black pigments or black carbon pigment (VIL03).

CONCLUSION

Authors who specialise in older violin makers,³¹ as well as modern luthiers,³² can list a number of different recipes for the making of varnishes and violin embellishments. Our study also shows that practices differ both within a certain period and between different periods. Although some questions remain, this study provides a new piece in the mosaic of information on varnishing and decorating of string instruments, especially those made in the 19th and 20th centuries, for which the available literature does not offer much information.

29 Darnton 2009, p. 1.

30 Kolneder 1998.

31 Echard and Bertrand 2010; Tai 2007 and 2009.

32 Kennedy 2014; Darnton 2009; Kolneder 1998; Gusset 2016.

324 Lesnih vrst nismo identificirali, kljub temu pa lahko z gotovostjo trdimo, da, razen pri dvojni violini (VIL02), za izdelavo ubiralke ni bila uporabljena ebenovina. Svetlejši, verjetno lokalni les je bil obarvan s črnimi barvili ali črnim ogljikovim pigmentom (VIL03).

SKLEP

Tako avtorji, ki se osredotočajo na starejše izdelovalce violin,³¹ kot tudi sodobni izdelovalci violin³² navajajo številne različne recepte za izdelavo lakov in okrasja violin. Tudi v naši študiji smo potrdili, da gre za različne prakse, tako med obdobji kot tudi znotraj posameznega obdobja. Kljub nekaterim nerazrešenim vprašanjem je naša raziskava prispevala nov kamenček v mozaiku informacij o lakiranju in krašenju strunskih inštrumentov, predvsem tistih, izdelanih v 19. in 20. stoletju, za katere ne obstaja veliko informacij v širše dostopni literaturi.

31 Echard in Bertrand 2010; Tai 2007 in Tai 2009.

32 Kennedy 2014; Darnton 2009; Kolneder 1998; Gusset 2016.



VIRI IN LITERATURA

RESOURCES AND BIBLIOGRAPHY

VIRI / RESOURCES

Pisni viri / Written Resources

Arhiv Narodnega muzeja Slovenije

Arhiv Narodnega muzeja Slovenije, akt 461/1918 z dne 19. 9. 1918, št. 9444.

Arhiv Narodnega muzeja Slovenije, Začasno poročilo o Grebenčevi zbirki, 9. 8. 1935.

Arhiv Narodnega muzeja Slovenije, Vilim Demšar, Poročilo o restavriranju pochetta 1989, tipkopis.

Arhiv Narodnega muzeja Slovenije, Boris Horvat, Mnenje o klavirju Andreja Bitenca, 26. 9. 1990.

Arhiv Narodnega muzeja Slovenije, Reverz med Narodnim muzejem in Vilimom Demšarjem o restavriranju dvojne violine, Ljubljana, 3.10.1990.

Arhiv Narodnega muzeja Slovenije, Boris Horvat, Pismo Robertu A. Brownu (restavrator iz Salzburga), Ljubljana, 10. 10. 1990.

Arhiv Narodnega muzeja Slovenije, Jasna Horvat, Vloga za odkup gradiva, 9. 10. 1990.

Arhiv Narodnega muzeja Slovenije, Ljubljana, Boris Horvat, Predlog za popis klavirjev iz 19. stoletja na Slovenskem, 1. 2. 1991.

Arhiv Narodnega muzeja Slovenije, Boris Horvat, Prošnja za preučitev klavikordov iz Narodnega muzeja, Ljubljana, 2. 3. 1991.

Arhiv Narodnega muzeja Slovenije, Račun z dne 28. 11. 1996.

Arhiv Narodnega muzeja Slovenije, Reverz Sodražica, 31. 1. 2003.

Arhiv Narodnega muzeja Slovenije, Zahvalno pismo z dne 12. 2. 2003 dr. Jasne

Horvat, kustodinj Zbirke glasbil Narodnega muzeja Slovenije.

Arhiv Narodnega muzeja Slovenije, Milko Bizjak, Poročilo o baročnih sobnih orglah, priloga k prodajni pogodbi, 23. 8. 2004.

Arhiv Narodnega muzeja Slovenije, Zahvalno pismo z dne 9. 9. 2005 dr. Jasne Horvat, kustodinj Zbirke glasbil Narodnega muzeja Slovenije.

Arhiv Narodnega muzeja Slovenije, Pismo Terezije Grobelnik z dne 1. 5. 2016, ki ga je priložila ob predaji harmonike Narodnemu muzeju Slovenije.

Akcesijska knjiga OZUU NMS

Akcesijska knjiga, Oddelek za zgodovino in uporabno umetnost, Narodni muzej Slovenije.

Inventarna knjiga OZUU NMS

Inventarna knjiga 1 do 9424, Oddelek za zgodovino in uporabno umetnost, Narodni muzej Slovenije, 1884–1914.

Inventarna knjiga 2900 do 10999, Oddelek za zgodovino in uporabno umetnost, Narodni muzej Slovenije, 1906–1940.

Inventarna knjiga 15141 do 17443, Oddelek za zgodovino in uporabno umetnost, Narodni muzej Slovenije, 1951–1963.

Inventarna knjiga 20983 do 21789, Oddelek za zgodovino in uporabno umetnost, Narodni muzej Slovenije, 1984–1992.

Erwerbungen 1889–1896

Erwerbungen des Rudolfinum, 23. 12. 1895, št. 58.

Uradni list Republike Slovenije 2010

Pravilnik o seznamu zvrsti dediščine in varstvenih usmeritvah, Uradni list Republike Slovenije, Ljubljana 2010.

Zgodovinski arhiv Ljubljana

Zgodovinski arhiv Ljubljana, Reg. I, fasc. 292 fol. 1286 sl.

Zgodovinski arhiv Ljubljana, Reg. I fasc. 19 fol. 512 si.

Zgodovinski arhiv Ljubljana, *Conscriptions* ... von N. 1–100, šk. 29 (1).

Zgodovinski arhiv Ljubljana, *Imenik* ... 1786–1899, prav tam.

Ustni viri / Oral Sources**Demšar 2017**

Ustno izročilo Blaža Demšarja.

Fink 2017

Ustno izročilo Avgusta Finka.

Firšt 2017

Ustno izročilo Nenada Firšta.

Kocjan 2017

Ustno izročilo darovalca Stanislava Kocjana mlajšega ob predaji violine Narodnemu muzeju Slovenije 2017.

Spletni viri / Online Resources**Accordion**

How Products Are Made, Accordion.

Dostopno na: <http://www.madehow.com/Volume-3/Accordion.html>, obiskano: 11. 3. 2017.

Antique Metronome Manufacturer Information

Antique Metronome Manufacturer Information. Dostopno na: <http://www.antique-metronomes.com/makers.html>, obiskano: 11. 3. 2017.

Glasbila

Glasbila. Dostopno na: <http://www.gcc.si/wp-content/uploads/2006/11/glasbila.pdf>, obiskano: 1. 4. 2017.

Harmoniumnet

Harmoniumnet.nl, Hörugel Hof-Harmonium und Pianofabrik. Dostopno na: <http://www.harmoniumnet.nl/horugel.html>, obiskano: 11. 3. 2017.

Historic Instrumentslist

Dostopno na: http://www.recorderhomepage.net/databases/Historic_Instrumentslist.php?x_Maker_Abbreviation=Gahn&z_Maker_Abbreviation=LIKE&cmd=search, obiskano: 1. 4. 2017.

Hrvatska tradicijska glasbala

Hrvatska tradicijska glasbala. Dostopno na: <http://www.gajde.com/hrvatska-tradicijska-glabala/>, obiskano: 11. 3. 2017.

Internationaler Akkordeonwettbewerb Klingenthal

Internationaler Akkordeonwettbewerb Klingenthal. Dostopno na: <http://www.accordion-competition.de/instrumentenbau.html>, obiskano: 11. 3. 2017.

Kennedy Violins

Kennedy Violins, *Violin Parts: All about Fingerboards.* Dostopno na: blog.kennedyviolins.com, obiskano: 24. 1. 2017.

Klavierbaufirma Rosenkranz

Klavierbaufirma Rosenkranz. Dostopno na: http://www.dresdner-stadtteile.de/Zentrum/Johannstadt/Strassen_Johannstadt/Klavierbaufirma_Rosenkranz/klavierbaufirma_rosenkranz.html, obiskano: 11. 3. 2017.

Schleske

M. Schleske, *Acoustic Analysis of Violin Varnish.* Dostopno na: www.schleske.de, obiskano: 1. 4. 2016.

Slovenska biografija

Anton Rihar, *Slovenska biografija.* Dostopno na: <http://www.slovenska-biografija.si/oseba/sbi507456/>, obiskano: 8. 2. 2017.

Viktor Šonc, *Slovenska biografija.* Dostopno na: <http://www.slovenska-biografija.si/oseba/sbi661855/>, obiskano: 11. 3. 2017.

Ferdo Vesel, *Slovenska biografija.* Dostopno na: <http://www.slovenska-biografija.si/oseba/sbi777795/>, obiskano: 5. 7. 2017.

Standard Spectrum

Standard Spectrum. Dostopno na: <http://www.collectionstrust.org.uk/spectrum>, obiskano: 21. 2. 2017.

Stradivarius Instruments

Stradivarius Instruments. Dostopno na: https://en.wikipedia.org/wiki/List_of_Stradivarius_instruments, obiskano: 22. 1. 2017.

Virtual pianoshop

The Virtual pianoshop. Dostopno na: <http://www.pianoshop.co.uk/info/pianos/l/lauberger.php>, obiskano: 11. 3. 2017.

Wikipedia

Wikipedia. Dostopno na: www.wikipedia.org, obiskano: 15. 1. 2017.

Yahoo

Yahoo. Dostopno na: <https://answers.yahoo.com/question/index?qid=20081106063215A AqIvN1>, obiskano: 1. 4. 2017.

LITERATURA / BIBLIOGRAPHY**Amend 2016**

Christoph Amend (urednik), *Kunst und Auktionen. Die Kunstmarktzeitung der Zeit*, Jahrgang 44, 5. Februar 2016, Nr. 2.

Azémard, Vieillescazes in Ménager 2014

C. Azémard, C. Vieillescazes, in M. Ménager, Effect of Photodegradation on Identification of Natural Varnishes by FT-IR Spectroscopy. *Microchemical Journal*, 2014, št. 112, str. 137–149.

Barclay 1997

Robert L. Barclay, *The Care of Historic Musical Instruments*, Canadian Conservation Institute, 1997.

Barclay 2005a

Robert L. Barclay (urednik), *The Care of Historic Musical Instruments*, CIMCIM 2005. Dostopno na: <http://network.icom.museum/cimcim/resources/the-care-of-historic-musical-instruments-full-text/>, obiskano: 27. 4. 2016.

Barclay 2005b

Robert L. Barclay, *The Preservation and Use of Historic Musical Instruments: Display Case and Concert Hall*, London 2005.

Barlow in Woodhouse 1989

C. Y. Barlow in J. Woodhouse, *Of Old Wood and Varnish: Peering into the Can of Worms*. *JCAS*, 1989, št. 1/4, str. 2–9.

Birsak in Birsak 1996

Kurt in Anneliese Birsak, *Gambe – Cello – Kotrabas und Katalog de Zupf- und Streichinstrumente im Carolino Augusteum*, Jahresschrift 42 – 1996, Carolino Augusteum, Salzburger Museum für Kunst und Kulturgeschichte, Salzburg 1996.

Bizjak in Škulj 1985

Milko Bizjak in Edo Škulj, *Orgle na Slovenskem*, Ljubljana 1985.

Blackburn in Stras 2015

Bonnie J. Blackburn, Laurie Stras (urednici), *Eroticism in Early Modern Music*, Farnham, Burlington 2015.

Blades 1975

James Blades, *Percussion Instruments and their History*, London 1975.

Blagaić Januška 2015

Tea Blagaić Januška, *Muzikalije = Music manuscripts: iz fundusa Muzeja grada Splita = from the holdings of the City Museum of Split*, Split 2015.

Boalch 1995

Donald H. Boalch, *Makers of the Harpsichord and Clavichord 1440–1840*, Oxford 1995.

Bonanni 1964

Filippo Bonanni, *Antique Musical Instruments and their Players: 152 Plates from Bonanni's 18th Century „Gabinetto Armonico“. With a New Introduction and Captions by Frank Ll. Harrison and Joan Rimmer*, New York 1964.

Brandazza in Brandazza 2016

Eva in Marco Brandazza, *Die Orgellandschaft Zug. Ein Projekt des Orgeldokumentationszentrums der Hochschule Luzern zur Ergänzung der Inventarisationsarbeit von Josef Grünenfelder*, v: *Tugium: Jahrbuch des Staatsarchivs des Kantons Zug, des Amtes*

für Denkmalpflege und Archäologie, des Kantonalen Museums für Urgeschichte Zug und des Museums in der Burg Zug, 32/2016, Zug 2016, str. 111–132.

Bucur 2003

Voichita Bucur, *Nondestructive Characterization and Imaging of Wood*, Springer Series in Wood Science, Berlin, Heidelberg, New York 2003.

Bucur 2006

Voichita Bucur, *Acoustics of Wood*, Springer Series in Wood Science, Berlin, Heidelberg 2006.

Bucur 2013

Voichita Bucur, *Nondestructive Characterization and Imaging of Wood*, Springer Science & Business Media, 2013.

Bucur 2016

Voichita Bucur, *Handbook of Materials for String Musical Instruments*, Switzerland, 2016.

The Richard Burnett Collection 2016

The Richard Burnett Collection, Part 1: The Richard Burnett Collection of Early Keyboard Instruments, Wednesday, 11th May 2016, 10am.

Caitling in Grayson 1982

Dorothy Caitling, John Grayson, *Identification of Vegetable Fibres*, London, New York 1982.

Campbell, Greated in Myers 2007

Murray Campbell, Clive Greated in Arnold Myers (uredniki), *Musical Instruments: History, Technology and Performance of Instruments of Western Music*, New York 2007.

Care of Musical Instruments

The Care of Musical Instruments in Canadian Collections, Technical Bulletin 4, Canadian Conservation Institute, National Museum of Canada.

CIMCIM 2014

Collectors at Music Museums – Reasons and means. Abstracts, CIMCIM Conference, 24–31 August 2014, The Nordic Countries, Stockholm, Turku, Copenhagen, Trondheim 2014.

CIMCIM 2015

CIMCIM Conference 2015, *Performers and Performance in a Museum Environment: Global Perspectives*, Moscow, Saint Petersburg 2015.

Čufar, Demšar, Zupančič, Koch in Oven 2007

Katarina Čufar, Blaž Demšar, Martin Zupančič, Gerald Koch, Primož Oven, Anatomija lesa za loke godal, *Zbornik gozdarstva in lesarstva* 83 (2007), str. 23–33. Dostopno na: <http://www.dlib.si/details/URN:NBN:SI:doc-25EF7QQM>, obiskano: 24. 10. 2016.

Čufar, Beuting in Grabner 2010

Katarina Čufar, Micha Beuting, Grabner, Dendrochronological Dating of Two Violins from Private Collections in Slovenia, *Zbornik gozdarstva in lesarstva* 91 (2010), str. 75–84. Dostopno na: <http://www.dlib.si/details/URN:NBN:SI:doc-SSKHDXM5>, obiskano: 24. 10. 2016.

Darnton 2009

M. Darnton, *Varnishing*, 2009. Dostopno na: www.darntonviolins.com, obiskano: 9. 1. 2017.

Das Cembalo 1981

Das Cembalo. Tage Alter Musik in Herne, razstavní katalog Herne, 1981.

Demšar 2006

Vilim Demšar, Goslarjeva izpoved, *Les: revija za lesno gospodarstvo = Wood: Wood Industry & Economy Journal*, letnik 58, številka 7/8 (julij – avgust 2006), str. 257–261. Dostopno na: <http://www.dlib.si/details/URN:NBN:SI:doc-6OE39J4J/>, obiskano: 7. 1. 2016

Derrick 1989

M. Derrick, Fourier Transform Infrared Spectral Analysis of Natural Resins Used in Furniture Finishes. *Journal of the American Institute for Conservation*, 1989, let. 28, št. 1, str. 43–56.

Dimkaroski 2010

Ljuben Dimkaroski, Glasbena raziskovanja najdbe iz Divjih bab I. Neandertalčeva piščal: od domnevne piščali do sodobnega glasbila. *Argo* 53/2, 2010, str. 10–17.

Dolinar 1940

Anton Dolinar, Pregled slovenske cerkvene glasbe IV, v: *CG LXIII* (1940), 130.

Duša 2011

Irena Duša (urednica), *Skriti zakladi slovenskih muzejev*, Geina knjižica, Ljubljana 2011.

Druzovič 1938

Hinko Druzovič, Iz ptujske glasbene preteklosti, v: *Kronika slovenskih mest*, 1, 1938.

Echard in Bertrand 2010

J. P. Echard in L. Bertrand, Complementary Spectroscopic Analysis of Varnish of Historical Musical Instruments. *Spectroscopy Europe*, 2010, št. 22, str. 12–15.

Fontana 1997

E. Fontana, Saitenklavierbau in Ungarn, referat na simpoziju »600 Jahrhundert Cembalobau in Österreich 1397–1997«, Dunaj 1997.

Fountain 2009

H. Fountain, What Exalts Stradivarius? Not Varnish, Study Says. *The New York Times*, 4. december 2009.

Frelih in Koren 2016

Marko Frelih, Anja Koren, *Odmevi Afrike : [Družba sv. Petra Klaverja za afriške misijone in njeno delovanje v Ljubljani v prvi polovici 20. stoletja] = Echoes of Africa : [The St Peter Claver Society for African Missions and Its Activities in Ljubljana in the First Half of the 20th Century]*, Ljubljana 2016.

Gačnik in Gačnik 2003

Aleš Gačnik, Stanka Gačnik, *Zven maske : fotografske mojstrovine Bojana Adamiča = The Sound of the Mask : Photographic Masterpieces of Bojan Adamič*, Ptuj 2003.

Gétreau 1988

Florence Gétreau (urednica), *Instrumentistes et luthiers parisiens : XVIIe–XIXe siècles*, Pariz 1988.

Godala 1989

Godala, *Revija Glasbene mladine Slovenije*, l. XIX, 1988/1989, tematska številka, januar 1989.

Goldstein 2016

C. Goldstein, *The Art Behind the Baroque Violin. Syracuse University Honors Program Capstone Projects*, 2016, paper 986.

Golubov 2014

S. Golubov, Intervju z izdelovalcem violin Vilimom Demšarjem. *Lisa*, št. 18/2014.

Grove 1984 1

Stanley Sadie (urednik), *The New Grove Dictionary of Musical Instruments*, 1, A–F, London, New York 1984.

Grove 1984 2

Stanley Sadie (urednik), *The New Grove Dictionary of Musical Instruments*, 1, G–O, London, New York 1984.

Grove 1984 3

Stanley Sadie (urednik), *The New Grove Dictionary of Musical Instruments*, 1, P–Z, London, New York 1984.

Gusset 2016

D. Gusset, *Varnish Secrets in Violin Making*. Dostopno na: www.gussetviolins.com/varnish.htm, obiskano: 1. 4. 2016.

Haag in Swoboda 2016

Sabine Haag, Gudrun Swoboda (urednici), *Feste feiern : 125 Jahre Jubiläumsausstellung : eine Ausstellung des Kunsthistorischen Museums Wien, 8. März bis 11. September 2016*, Dunaj 2016.

Hagen–Walther 2015

Barbara Hagen–Walther, *Die Sammlung der Musikinstrumente im Salzburg Museum*, Salzburg 2015.

Haine 1989

Malou Haine, *Les instruments de musique dans les collections belges = Musical Instruments in Belgian Collections = Muziek-instrumenten in Belgische Verzamelingen*, Liège 1989.

Heck 2012

Brigitte Heck, *Deutsches Musikautomaten-Museum im Schloss Bruchsal, Außenstelle des Badischen Landesmuseums : [Führer durch die Außenstelle des Badischen Landesmuseums Karlsruhe]*, Karlsruhe 2012.

Horta 1991

Joaquim Horta, *Museu de la Música 1. Cataleg d'instruments*, Barcelona 1991.

Horvat 2009 (2010)

Jasna Horvat, Dr. Josip Mal in njegov trajen spomenik v Narodnem muzeju, v: *Predmet kot reprezentanca: Okus, ugled, moč*, Ljubljana 2009 (2010).

Horvat in Knez 2011

Jasna Horvat, Darko Knez, Pochette ali žepna violina. v: Irena Duša (urednica), *Skriti zakladi slovenskih muzejev*, (Geina knjižnica). 1. natis. Ljubljana: Mladinska knjiga, 2011, str. 14–15, fotogr.

Huntley in Starling 1983

Cristina Huntley, Katharine Starling (urednici), *Restoration of Early Musical Instruments*, London 1983.

ICOM 1984

ICOM, *Recommendations for Regulating the Access to Musical Instruments in Public Collections*, Pariz 1984.

ICOM 2013

ICOM *Code of Ethic for Museums*, Pariz 2013.

ICOM 2016

ICOM *Milano, 24th General Conference*, 3–9 July 2016, Italy, Milano 2016.

Intelligenzblatt zur Laibacher Zeitung 1836

Intelligenzblatt zur Laibacher Zeitung, 13. december 1836, str. 948.

Intelligenzblatt zur Laibacher Zeitung 1838

Intelligenzblatt zur Laibacher Zeitung, 16. junij 1838, str. 485.

Jalovec 1968

Vinko Jalovec, *Encyclopedia of Violin-Makers*, London 1968.

Klaus 1996

Sabine Katharine Klaus, Ein Beitrag zur Geschichte des Saitendrahherstellenden Handwerks in Nürnberg bis zum Beginn des 19. Jahrhunderts Dargestellt nach archivalischen und gedruckten Quellen, v: *Der „Schöne“ Klang, Studien zum historischen Musikinstrumentenbau in*

Deutschland und Japan unter besonderer Berücksichtigung des alten Nürnberg (ur. D. Krickeberg), Germanisches Nationalmuseum, Nürnberg 1996.

Knez 2016

Darko Knez, Andreas Wittenz (Andrej Bitenc) piano maker, v: Valentina Bevc Varl, Oskar Habjanič (urednika), *Evropa v času Franza Liszta = Europe in the Time of Franz Liszt: [zbornik mednarodnega simpozija, 13. – 15. 10. 2016] = The Collected Volume of the Symposium, 13.–15. 10. 2016*, (Zbirka Museoeurope, 3). Maribor: Pokrajinski muzej: = Regional Museum, 2016, f. 132–141, ilustr.

Kociper Vodeb 2011

Aleksandra Kociper Vodeb (urednica), *Sto let, sto generacij, stotine spominov: 1911–2011 / OŠ Franca Rozmana Staneta Ljubljana*, Ljubljana 2011, str. 8–9.

Kolneder 1998

W. Kolneder, *The Amadeus Book of the Violin: Construction, History, and Music*. Portland, Oregon 1998.

Komar 1929

F. Komar, *Gregor Rihar*, v: *CG LII* (1929).

Koter 1994

Darja Koter, *Glasbila na ptujskem gradu. Instrumentarij salonov ter meščanskih in plemiških kapel*, razstavni katalog, Ptuj 1994.

Koter 1996

Darja Koter, *Klavir družine Schiedermayerjevih*, Ptuj 1996.

Koter 1997

Darja Koter, *Musikinstrumente Osterreichischer Klavierbauer im Landesmuseum Ptuj/Pettau* (Slovenien), v: *MZ XXXIII* (1997).

Koter 2000

Darja Koter, Dediščina historičnih glasbil v Pokrajinskem muzeju Maribor, v: *Argo*, 43/1 (2000).

Koter 2001

Darja Koter, *Glasbilarstvo na Slovenskem*, Maribor 2001.

332 Koter 2013

Darja Koter, *Bojan Adamič, Slovenska glasba 1918–1991*, Ljubljana 2013, str. 234–238.

Koter 2014

Darja Koter, *Ekspertiza o stanju in možnostih javne prezentacije glasbil v slovenskih muzejih*, Ptuj 2014.

Kowar 2004

Helmut Kowar, *Mälzel, Brüder*, v: *Oesterreichisches Musiklexikon*, 3. zvezek, Dunaj 2004.

Krevh in Humar 2014

Franci Krevh, Marjeta Humar, *Tolkalni terminološki slovar*, Ljubljana 2014.

Kumer 1983

Zmaga Kumer, *Ljudska glasbila in godci na Slovenskem*, Ljubljana 1983.

Kunej 2016

Andrej Kunej (urednik), *Simfonija novih orgel na Brezovici*, Brezovica 2016.

Ladwig 1993

Dieter Ladwig, *Jukebox. Musik aus dem Automaten*, Dunaj 1993.

Lamb 1995

Andrew Lamb, *To Play or Not to Play: the Ethics of Musical Instrument Conservation*, *Conservation Journal*, April 1995, Issue 15. Dostopno na: <http://www.vam.ac.uk/content/journals/conservation-journal/issue-15/to-play-or-not-to-play-the-ethics-of-musical-instrument-conservation/>, obiskano: 5. 6. 2016.

Ličina 2014

Marko Ličina, Uniforme in nekaj ostalin iz zapuščine »slovenskih« polkov avstro-ogrske armade, v: *Take vojne si nismo predstavljali*, Ljubljana 2014.

Likar 1996

Andrej Likar, Violina in lok, *Presek. List za mlade matematike, fizike, astronome in računalnikarje*, letnik 23, številka 4 (1995–1996), str. 226–228.

Lozar Štamcar 2007

Maja Lozar Štamcar (urednica), *Dragocenosti Narodnega muzeja Slovenije*, Ljubljana 2007.

Lozar Štamcar 2011

Maja Lozar Štamcar (urednica), *Narodni muzej Slovenije. Zgodovinske in umetnostne zbirke*, Ljubljana 2011.

Maene in Leye 2015

Chris Maene, Wolf Leye, *The Next Generation Concert Piano*, v: *COST FP1302 WoodMusICK, Second Annual Conference, Effects of Playing on Early and Modern Musical Instruments*, London 2015.

Melkus 1984

Eduard Melkus, *Die Violine : eine Einführung in die Geschichte der Violine und des Violinspiels*, Mainz 1984.

Močnik 1996

Janez Močnik, Gregor Rihar – I., (1796–1863) ob 200. obletnici rojstva, v: *Naši zbori*, 48 (1996).

Močnik 2013

Janez Močnik, Gregor Rihar. prenovitelj, v: *Cerkveni glasbenik = Church Musician*. 106, št. 6, 2013, str. 15–16.

Montagu 2007

Jeremy Montagu, *Origins and Development of Musical Instruments*, Lanham, Toronto in Plymouth 2007.

Motte-Haber, de la 1996

Helga de la Motte-Haber, *Klangkunst (Katalog zum »Sonambiente – Festival für Hören und Sehen« Berlin 1996)*, Berlin 1996.

Museum 1985

Museum, No. 146 (Vol. XXXVII, No. 2, 1985, *Show-cases*, Pariz 1985.

Musical Instruments 1996

Musical Instruments from the Renaissance to the 19th Century. 70 Plates in Full Colour, Milano 1996.

Nelson 2016

David Erik Nelson, *Junkyard Jam Band : DYY Musical Instruments and Noisemakers*, San Francisco 2016.

Novice 1858

Novice, 16 (1858), št. 17, Oglasnik št. 13.

Paine 1995

Crispin Paine (urednik), *Standards in the Museum Care of Musical Instruments*, Museums & Galleries Commission, London 1995.

Pokorn 1999

Danilo Pokorn, Goslar Blaž Demšar (Prispevek za zgodovino slovenskega glasbilarstva), v: *Traditiones : zbornik Inštituta za slovensko narodopisje in Glasbenonarodopisnega inštituta ZRC SAZU : = acta Instituti ethnographiae et Instituti etnomusicologiae Slovenorum*, letnik 28, številka 2 (1999), str. 305–310. Dostopno na: <http://www.dlib.si/details/URN:NBN:SI:DOC-LG1HXIU9>, obiskano: 7. 1. 2016.

Pollens 2009

Stewart Pollens, Some Misconceptions about the Baroque Violin, *Performance Practice Review*, Volume 14, Number 1, Article 6, 2009.

Pollens 2015

Stewart Pollens, *The Manual of Musical Instrument Conservation*, Cambridge 2015.

Predolin 2013

Paola Predolin (urednica), *Il pianoforte della contessa*, Gorica 2013.

Pulkert 2000

Oldřich Pulkert et al. (uredniki), *Bertramka – Memorial to W. A. Mozart and the Dušeks : [A Guide to the Exposition]*, Praga 2000.

Ridler 2016

Gerda Ridler (urednica), *Schlossmuseum Linz : Schätze aus Oberösterreich*, Weitra 2016.

Riot 1995

Claude Riot, *Chants et instruments. Trouveurs et jongleurs au Moyen Age*, Pariz 1995.

Rouillé 1987

Philippe Rouillé, *Musée d'instruments de musique mécanique*, Pariz 1987.

Russell 1973

Raymond Russell, *The Harpsichord and Clavichord. An Introductory Study by Raymond Russell*, London 1973.

Sachs 2006

Curt Sachs, *The History of Musical Instruments*, Mineola 2006.

Saluz 1996

Eduard C. Saluz, *Klangkunst : 200 Jahre Musikdosen : Sonderausstellung des Schweizerischen Landesmuseums, 18. Juli bis 27. Oktober 1996 : Katalog*, Zürich 1996.

Slokar

Ivan Slokar, *Rokodelstvo in industrija v Ljubljani od konca srednjega veka do leta 1732*, n. d.

Slokar 1977

Ivan Slokar, Zgodovina rokodelstva v Ljubljani od leta 1732 do leta 1860, v: *Ljubljanska obrt od začetka 18. stoletja do srede 19. stoletja, Razprave MAL*, zvezek 4, Ljubljana 1977.

Slovenec 1916

Slovenec, leto XLIV., št 274, 29. november 1916, str. 2.

Slovenec, leto XLIV., št 278, 4. december 1916, str. 1.

Standards 1995

Standards in the Museum Care of Musical Instruments, Museums & Galleries Commission, 1995.

Stephens 2016

Simon Stephens (urednik), *Museums Journal : For Everyone Working in Museums and Galleries, Teenage Kicks. Making Music Come Alive in Museums*, London, april 2016.

Strukić 2015

Kristian Strukić, *Odjeci s bojišnice. Zagreb u Prvom svjetskom ratu*, razstavni katalog, Zagreb 2015.

Šali 2002–2005

Samo Šali, O kitari – od drevesa do zvoka, *EPTA bilten / Društvo slovenskih klavirskih pedagogov = European Piano Teachers Association*, Ljubljana 2002–2005.

Tai 2007

B. G. Tai, Stradivari's Varnish: A Review of Scientific Findings – Part I. *Journal of Violin Society of America: VSA Papers*, 2007, št. XXI/1, str. 119–144.

Tai 2009

B. G. Tai, Stradivari's Varnish: A Review of Scientific Findings – Part II. *Journal of Violin Society of America: VSA Papers*, 2009, št. XXII/1, str. 1–31.

Tarbuk 2007

Nela Tarbuk, *Glazbeni instrumenti iz fundusa Muzeja za umjetnost i obrt*, Zagreb 2007, str. 5.

Torelli 2005

Niko Torelli, Violina I: Najdragocenejši les ali kremonska glorijska, *Les : revija za lesno gospodarstvo = Wood : Wood Industry & Economy Journal*, letnik 57, številka 9 (2005), str. 229–238.

Torelli 2006

Niko Torelli, Violina II: Zvočna barva lesa, *Les : revija za lesno gospodarstvo = Wood : Wood Industry & Economy Journal*, letnik 58, številka 5 (2006), str. 140–151.

Turk 2007

Ivan Turk, Divje Babe I. Paleolitsko najdišče mlajšega pleistocena v Sloveniji (1. del: Geologija in paleontologija) / Upper Pleistocene palaeolithic site in Slovenia (Part 1: Geology and Palaeontology). *Opera Instituti Archaeologici Sloveniae* 13, Ljubljana 2007.

Turk 2014

Ivan Turk, Divje Babe I. Paleolitsko najdišče mlajšega pleistocena v Sloveniji (2. del: Arheologija) / Upper Pleistocene Palaeolithic site in Slovenia (Part 2: Archaeology). *Opera Instituti Archaeologici Sloveniae* 29, Ljubljana 2014.

Valenčič

V. Valenčič, *Pregled ljubljanskega obrtništva v 17. stoletju*, n. d.

Vandervellen 1994

Pascale Vandervellen, *Le piano de style en Europe des origines à 1850. Étude des éléments décoratifs et mécaniques*, Pariz 1994.

Vannes 1979

Renne Vannes, *Dictionnaire Universel des Luthiers, Les amis de la Musique*, Bruxelles 1979.

Väterlein in Burkharth 1987

Christian Väterlein, Axel Burkharth

(urednika), *Baden und Württemberg im Zeitalter Napoleons : Ausstellung des Landes Baden-Württemberg [im Stuttgarter Kunstgebäude, 16. Mai – 15. Aug. 1987]*, razstavniki katalog, Stuttgart 1987.

Vesel Mušič 2003

Polona Vesel Mušič, *Magdalena, fara naša. Predstavitev, zgodovina in življenje župnije Sodražica*, Ljubljana 2003.

Virdung 1970

Sebastian Virdung, *Musica getutscht: A Treatise on Musical Instruments (1511)*, Kassel 1970.

Vodušek 1997

Nada Vodušek (urednica), *Ambient*, številka 14, poletje 1997, Ljubljana 1997.

Wackernagel 1999

Bettina Wackernagel, *Musikinstrumente des 16. bis 18. Jahrhunderts in Bayerischen Nationalmuseum*, München 1999.

Wali 2010

Kameshwar C. Wali, *Cremona Violins : a Physicist's Quest for the Sectar of Stradivari*, New Jersey 2010.

Waterhouse 1993

William Waterhouse, *The New Langwill Index, A dictionary of Musical Wind Instrument Makers and Inventors*, London 1993.

Woodcock 1965

Cyril Woodcock, *Dictionary of Contemporary Violin and Bowmakers*, Brighton 1965.

Zepf in Schaper 2010

Markus Zepf in Christian Schaper (urednika), *Vom Minnesang zur Popakademie : Musikkultur in Baden-Württemberg / Herausgegeben vom Badischen Landesmuseum Karlsruhe*, Karlsruhe 2010.

Zyl, van 2015

Miezan van Zyl (urednik), *Glasba. Velika slikovna enciklopedija*, Ljubljana 2015.

Žirovnik 1903

Janko Žirovnik, *Letno poročilo štirirazredne ljudske šole in z njo združene obrtno – nadaljevalne šole v Št. Vidu pri Ljubljani, šolsko leto 1902/03*, Ljubljana 1903, str. 6.

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