BRIJUNSKA KOČIJA TIPA MILORD, POVIJEST I KONZERVACIJA

THE MILORD CARRIAGE FROM BRIJUNI, HISTORY AND CONSERVATION

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ABSTRACT

Kočija tipa Milord, koja je u vlasništvu Nacionalnog parka Brijuni, preteča je kočije tipa Viktorija s kojom se zbog svojih sličnih obilježja zna ponekada poistovjetiti. U ovom radu dan je kratak povijesni prikaz razvoja kočije Milord i njezinih najvažnijih karakteristika. Naglasak je u radu ponajviše stavljen na postupke konzervacije i restauracije u sklopu kojih se zahvaljujući analizi materijalne građe došlo do podataka o podrijetlu kočije, njezinu izvornom izgledu, kao i kasnijoj sudbini. Podatci do kojih se došlo ukazuju na to da se kroz materijalnu građu i bez dopunske dokumentacije može doći do važnih informacija o predmetu.

Ključne riječi: **kočija Milord, Nacionalni park Brijuni, restauracija i konzervacija**

ABSTRACT

The Milord (Mylord) carriage in possession of the National Park Brijuni is a forerunner of the Victoria carriage. Owing to their similar characteristics, they can easily be mixed up. This work presents short overview of the development of the Milord carriage and its most important characteristics. The work focuses on the procedures of conservation and restoration which involved analyses of the material evidence resulting in valuable information about the carriage origin, its original appearance and later destiny. Obtained information indicates that important insights about a certain object can be gained through analysis of material evidence without additional documentation.

Key words: **Milord carriage, National Park Brijuni, restoration and conservation**

1. Uvod

Tijekom 2013. godine započet je postupak obnove jedne od neidentificiranih kočija iz zbirke u vlasništvu Nacionalnog parka Brijuni. Dobivena kočija je kroz konzultiranje literature i slikovnog materijala prvotno okarakterizirana kao kočija tipa Viktorija. Međutim, kustos bečkog Muzeja povijesti umjetnosti M. Döberl[1] tijekom pregleda fotografija kočije objavljenih na *web* stranici http://www.industrijska-arheologija.com/ upozorio nas je da obnovljenu brijunsku kočiju nije pogrešno identificirati kao Viktoriju jer je ona jednim dobrim dijelom zapravo Viktorija, ali da ta identifikacija ima i svojih manjkavosti. Zahvaljujući tome je prvotna klasifikacija korigirana, te je brijunska kočija označena kao tip Milord, odnosno preteča Viktorije, a u čemu je razlika između dviju navedenih kočija objasnit će se u tekstu koji slijedi.[2]

Podatci o kočiji tipa Milord su šturi, no može se pretpostaviti da spomenuti tip kočije ima svoje početke u 19. stoljeću, vjerojatno na teritoriju Ujedinjenog Kraljevstva, kada je niskom Phaetonu (George IV. Phaeton) dodano sjedalo za kočijaša.[3] Tim je činom izgrađen tzv. Cab-Phaeton koji je kasnije,

1 Ovom prigodom najtoplije zahvaljujemo na svesrdnoj pomoći koju nam je pružio dr. sc. Mario Döberl.

2 U dostupnoj literaturi o kočijama zapravo se ne navodi jasna razlika između Milorda i Viktorije te se samo napominje da je Milord doživio određene modifikacije u svom razvoju prije izgradnje Viktorije, bez da se specificiraju točne razlike (v. D. H. BERKEBILE 1978: 64). Bečki stručnjak za kočije koji je svoju profesionalnu karijeru izgradio na kočijama smatra da je glavna razlika između razmatranih kočija upravo u sjedalu za vozača, što će se u daljnjem dijelu teksta dodatno pojasniti, a čije je mišljenje ovdje uvaženo. U različitoj literaturi prisutna su i različita stajališta o mjestu razvoja ovih kočija, no ovdje je povijesni razvoj prikazan kroz logičan slijed praćenja Cab-Phaetona kao preteče Milorda, a koji započinje u Ujedinjenom Kraljevstvu. Kočija Viktorija javlja se u znatno većem broju varijanti od Milorda (Grand Victoria, Panel-boot Victoria, Victoria Hansom), a što je posljedica njezine veće popularnosti, ali i činjenice da je kočija Viktorija kasnija razvojna faza Milorda, te da je kao takva očito savršenija verzija svoje prethodnice. Ono u čemu se svi slažu je da su se ove kočije razvile u 19. stoljeća te da su bile dobro prihvaćene u Francuskoj, Ujedinjenom Kraljevstvu, ali i drugdje, osobito u Americi.

3 Prema predaji kralj George IV. u mladosti se vozio u kočiji tipa Perch-high Phaeton koja je zahtijevala da se putnik penje po ljestvama da bi došao do visoko položenog sjedišta svoje kočije. U kraljevim kasnijim godinama, zbog njegove loše kondicije i zdravlja, visoka kočija postala je nepraktična za Georgea IV. zbog čega je došlo do njezina snižavanja i do razvoja nove kočije prozvane George IV. Phaeton (opš. D. H. BERKEBILE 1978: 151).

1. Introduction

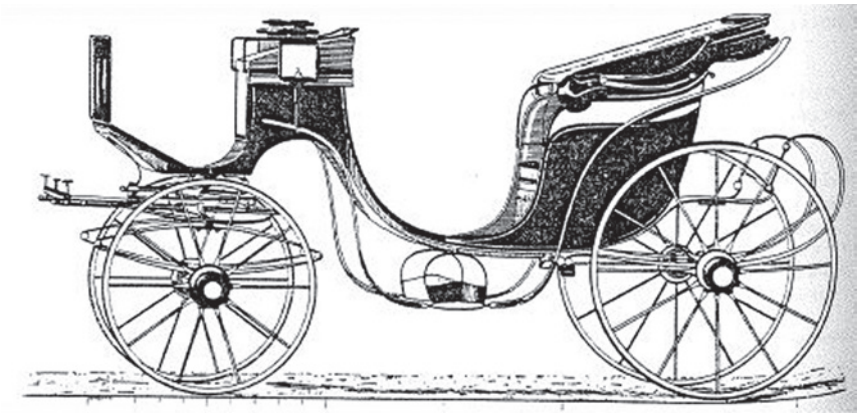
The renovation procedure of one of unidentified carriages from the collection in possession of the National Park Brijuni started in 2013. The carriage was at first, after consulting literature and illustrations, classified as the Victoria type carriage. However, after seeing photographs of the carriage published on the web page http://www.industrijska-arheologija.com/, curator of the Vienna Museum of Art History M. Döberl[1] informed us that although the renovated carriage from Brijuni could be identified as the Victoria type, there are some shortcomings in this identification. Owing to this intervention, original classification was corrected and the carriage from Brijuni was classified as the Milord type, i.e. the forerunner of Victoria. The difference between the two carriages will be explained later in the text.[2]

Information on the carriage of the Milord type is scarce, but it can be presumed that the mentioned carriage appeared in the 19th century, probably in the territory of the United Kingdom, when low Phaeton (George IV Phaeton) got a coachman's seat.[3] In that way the so-called Cab-Phaeton was created,

1 We would like to extend our warmest gratitude to Mario Döberl, PhD, for his assistance.

2 In the available literature we found no explicit mention of the difference between the Milord and Victoria types but only the remark that Milord went through certain modifications in its development prior to formation of Victoria without specifying those differences (e.g. D. H. BERKEBILE 1978: 64). We follow the opinion of the carriage expert from Vienna who believes that the main difference between the two types is in the driver's seat, which will be explained in the main text. Various texts offer different standpoints about the origin of these carriages, but here we present a historical development through a logical sequence starting from Cab Phaeton as a forerunner of Milord which started in the United Kingdom. The Victoria carriage appears in more variants than the Milord type (Grand Victoria, Panel-boot Victoria, Victoria Hansom), which is a consequence of its greater popularity, and of the fact that the Victoria carriage was a late developmental phase of Milord and as such evidently perfected version of its predecessor. All researchers agree that these carriages developed in the 19th century and that they were well accepted in France, United Kingdom, and elsewhere, particularly in America.

3 Legend has it that young King George IV had ridden in the Perch-high Phaeton carriage which had a ladder for passengers to reach high seats. As the king grew older, his health deteriorated so the high carriage became impractical and it was altered into a new low-hung form called George IV Phaeton (more extensively in D. H. BERKEBILE 1978: 151).



Sl. 1. **Kočija tip Milord (D. H. BERKEBILE 1978: 200).**

Fig. 1. **Carriage of the Milord (or Mylord) type (D. H. BERKEBILE 1978: 200).**

smatra se, na području kontinentalne Europe doživio preinake i dobio novo ime Milord (v. Sl. 1).[4] Iz spomenute se kočije, čini se, kasnije uz određene preinake razvila kočija poznata pod imenom Viktorija.[5]

Sam naziv Milord ukazivao bi na izvorno englesko podrijetlo vozila jer su spomenuti naziv koristili kontinentalni Europljani, ponajviše Francuzi, za oslovljavanje muških pripadnika viših slojeva engleskog društva.[6] Dakle, naziv kočije u sebi nosi barem dijelom podatke o svom razvojnom putu.

2.
Karakteristike kočije Milord

Kočija Milord je, kao i kasnija Viktorija, imala nisko tijelo, sa sjedalima za dvije osobe koje su gledale u smjeru vožnje te sjedalo za vozača, smješteno malo iza prednje osovine. Kod Milorda sjedalo za vozača bilo je fiksno i nije se moglo ukloniti, dok kod Viktorije sjedalo za vozača najčešće nije postojalo (v. Sl. 2), a kada je bilo prisutno, onda se moglo po potrebi pomicati.[7] Upravo je ova često nedovoljno istaknuta razlika uzrokovala da je obnovljena kočija prvotno identificirana kao Viktorija. Kočija tipa Milord je po svojim obilježjima kabriolet s pomičnim krovom,

which, as it seems, in the region of continental Europe underwent changes and was renamed Milord (Fig. 1).[4] It seems that the carriage known as Victoria developed from that carriage.[5]

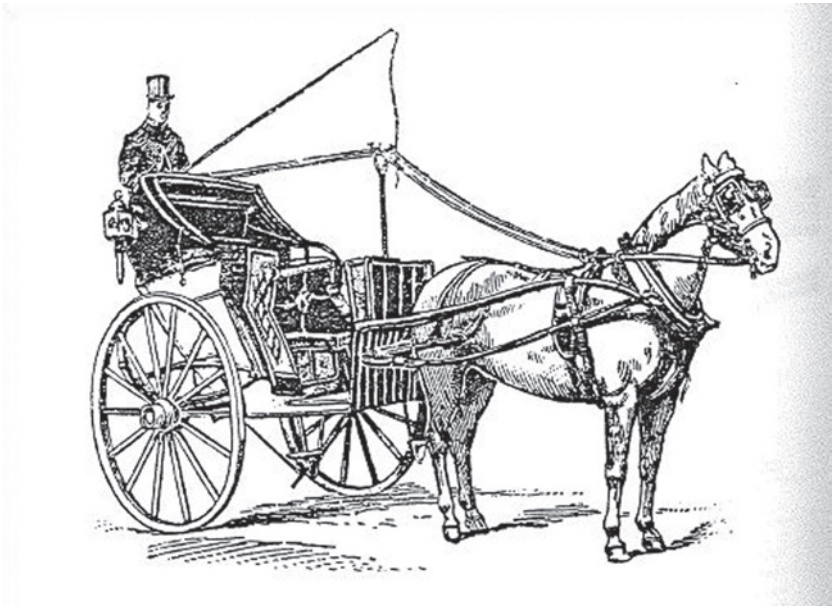
The name Milord indicates to the English origin of the carriage as it was used by the Europeans from the continent, mostly the French, when referring to male members of the upper strata of the English society.[6] Therefore, the name of the carriage indicates at least some aspects of its development.

2.
Characteristics of the Milord carriage

The Milord carriage, similarly to the later type Victoria, had a low body with the forward-facing seats for two persons and a driver's seat, behind the front axle. On the Milord type the driver's seat was fixed and it could not be removed while on Victoria most often there was no driver's seat (fig. 2), and if there was one, it was removable.[7] It was exactly this slight difference which led to the initial misidentification of the renovated carriage as Victoria. The Milord type of carriage is a cabriolet with calash top, four elliptic springs, low seat and

4 J. W. BURGES 1881: 18.
5 D. H. BERKEBILE 1978: 289.
6 Riječ je potekla od engleskog termina *my lord*, v. http://www.oxforddictionaries.com/definition/learner/milord (pregledano 2. 5. 2015.).
7 M. DÖBERL 2014.

4 J. W. BURGES 1881: 18.
5 D. H. BERKEBILE 1978: 289.
6 The word originated from the English term *my lord*, cf. http://www.oxforddictionaries.com/definition/learner/milord (May 2, 2015).
7 M. DÖBERL 2014.



Sl. 2. **Kočija Viktorija, tip Victoria Hansom (D. H. BERKEBILE 1978: 292).**

Fig. 2. **Carriage Victoria, the Victoria Hansom type (D. H. BERKEBILE 1978: 292).**

četiri eliptične opruge, niskim sjedalom i zaštitnom ogradicom koja je štitila vozača i putnike s frontalne strane.[8] Naime, kočije koje su prvotno bile visoke svojim su snižavanjem postale popularne među ženskim svijetom, prvotno onim iz visokog društva.[9] Zahvaljujući niskom tijelu vozila žene su mogle bez problema ulaziti i izlaziti iz kočija. Poteškoće pri ulasku i izlasku predstavljala je ženska nepraktična, duga i slojevita odjeća koja je karakterizirala žensko odijevanje sve do otprilike prve polovice 20. stoljeća.

Kočija Milord bila je iznimno popularna u Francuskoj, a toj je popularnosti doprinosila činjenica da je bila prvotno prihvaćena od strane francuske elite. Naime, trendove u nekom društvu uvijek diktira elita; tako je primjerice u Ujedinjenom Kraljevstvu kasniju Viktoriju popularizirala princeza od Walesa koja je i sama vozila ovu kočiju.[10] Kočija Milord je, kao i uostalom Viktorija, imala blatobrane koji su u vrijeme neuređenih putova bili izuzetno praktični jer su štitili putnike od blatnih površina, a kako su otvorene kočije velikim dijelom prometovale po ladanjskim imanjima, ako je putnik želio doći do odredišta više-manje čist, bilo je poželjno imati kočiju s takvim štitnicima.

railing protecting the driver and the passengers on the frontal side.[8] Namely, carriages were originally rather high and their lowering made them popular among women, primarily from high society.[9] Owing to low body of the vehicle, women could get in and out of the carriage without any trouble. Problems were caused by female impractical, long and layered dresses which were typical for female fashion until the first half of the 20th century.

Milord carriage was very popular in France, which had to do with the fact that it was originally accepted by the French élite. Trends in a certain society are always imposed by the élite; for instance later Victoria carriage was popularized by the princess of Wales who drove this carriage herself. [10] The Milord carriage as well as Victoria had fenders which were very practical in the period when the quality of roads was poor as they protected passengers from dirt, and since open carriages were mostly driven on the country estates, it was preferable to ride in a carriage with such features if a passenger wished to reach the destination more or less clean.

8 J. W. BURGES 1881: 18.
9 D. H. BERKEBILE 1978: 151.
10 R. STRAUS 1912: 266-267.

8 J. W. BURGES 1881: 18.
9 D. H. BERKEBILE 1978: 151.
10 R. STRAUS 1912: 266-267.

Postojanje mjesta za vozača na kočiji Milord, kao i još neki drugi čimbenici koji će kasnije biti spomenuti, omogućili su vlasniku vozila da pokaže svoj uvažen status. Međutim, Viktorija je postigla veću popularnost od Milorda, vjerojatno jer je, između ostalog, nudila mogućnost vlasniku da se vozi samostalno ili pak s vozačem, što je ovisilo o danoj situaciji. Izgledno je za pretpostaviti da je Viktorija zbog svoje multifunkcionalnosti bila ne samo popularnija već i skuplja od Milorda.

3.
Opis brijunske kočije Milord

Kočija Milord zapravo je kočija otvorenog tipa koja se zbog svojih karakteristika nazivala i kabrioletom.[11] Nisko podvozje kočije omogućavalo je putnicima dobru vidljivost, kao i viđenost.[12] Iza prednje osovine nalazilo se jednostavno sjedalo za vozača izrađeno od crnogoričnog drveta presvučeno umjetnom kožom s dva sjedeća mjesta uz koje se nalazila i ručna kočnica, smještena s desne strane. Ova je kočija bila nijansirana u smeđe uslijed korištenja firnisa, a na pojedinim mjestima, poput podvozja i kotača, urešena je tanko izvučenim zlatnim linijama.

Iako je kočija Milord bila najpopularnija krajem 19. stoljeća, obnovljena kočija je, kako se čini, izgrađena početkom 20. stoljeća. Na takvo datiranje upućuje žig na osovini. Naime, jedini natpis koji je evidentiran na ovdje obnavljanoj kočiji nađen je na metalnim dijelovima, odnosno podvozju kočije, gdje su pribilježeni sljedeći podatci: LIENHART WOLFSBERG KÄRNTEN 26526 (v. Sl. 3).

Taj nam natpis pokazuje da je kočija proizvedena najvjerojatnije u Austriji te da je u njezinoj izradi sudjelovao i Leopold Lienhart iz grada Wolfsberga u pokrajini Karnten (Koruška). Isti proizvođač izradio je i podvozje austrijske pogrebne kočije koja je građena u radionici ''Peregrin Kern" u Grazu u Austriji 1912. godine. Kod potonje spomenute pogrebne kočije pribilježeno je više osoba koje su sudjelovale u njezinoj izradi, a jasno je da su u izradi i drugih kočija sudjelovali ljudi različitih zanimanja: stolari, kovači, a po potrebi i umjetnici. Ovdje spomenuta pogrebna kočija poslužila je kao usporedni

Presence of a driver's seat in the Milord carriage as well as some other factors which will be mentioned later on enabled vehicle owner to show his high status. However, one of the possible reasons why Victoria became more popular than Milord was because, among other things, it offered a possibility to the owner to drive it either on his own or with a driver, depending on the situation. It is reasonable to assume that Victoria was not only more popular but also more expensive than Milord owing to its multifunctionality.

3.
Description of the Milord carriage from Brijuni

Milord carriage is actually an open type carriage which was, due to its characteristics, also called a cabriolet.[11] Low undercarriage provided passengers with the opportunity to see and be seen.[12] Behind the front axle was a simple driver's seat with two seatings made of coniferous wood and covered with artificial leather; on the right side, next to it, was a hand brake. This carriage was in brown nuance owing to the use of varnish, and it was decorated with thin golden lines in certain areas such as undercarriage and wheels.

Although the Milord carriage was most popular at the end of the 19th century, it seems that the renovated one was built at the beginning of the 20th century. Such dating is suggested by the stamp on the axle. Namely, the only inscription recorded on the renovated carriage was found on the metal parts, i.e. undercarriage, where we find the following information: LIENHART WOLFSBERG KÄRNTEN 26526 (Fig. 3).

This inscription indicates that the carriage was most likely produced in Austria and that Leopold Lienhart from the city of Wolfsberg in the county of Kärnten participated in its production. The same producer also made the undercarriage of an Austrian funeral carriage which was built in the workshop ''Peregrin Kern" in Graz in Austria in 1912. On the latter funeral carriage several participants in its production were mentioned, and it is clear that people of various professions took part in the production of carriages: carpenters, blacksmiths, and

11 Opš. D. H. BERKEBILE 1978: 65.
12 R. STRAUS 1912: 233-234.

11 More extensively in D. H. BERKEBILE 1978, 65.
12 R. STRAUS 1912: 233-234.

Sl. 3. **Natpis na osovini (aksi) kotača (snimio: Z. Kirchhoffer).**

Fig. 3. **Sign on the wheel axis (photo by Z. Kirchhoffer)**

materijal u datiranju jer je imala na sebi zabilježeno ime istog proizvođača. Međutim, pogrebna kočija imala je zabilježen znatno niži broj na osovini (14943)[13] u odnosu na ovdje razmatranu kočiju Milord, iz čega bi se moglo zaključiti da je brijunska kočija vrlo vjerojatno izgrađena kasnije. Uz navedeno, razmatrana je kočija imala svjetiljke sa svijećama (lojanicama) koje je opruga potiskivala prema gore. Njezini su fenjeri izrađeni od čeličnog lima i stakla, a one svojim stanjem zajedno s kotačima najbolje svjedoče da su nezgode u prometovanju kočija bile učestale.

Obnovljena kočija svojom otvorenošću i pomalo ruralnim izgledom, upotrijebljenom smeđom kožom i grubo obrađenim drvenim površinama ukazuje da je konkretno vozilo najčešće korišteno za lijepog vremena i to, čini se, češće u izvangradskim sredinama.[14]

artists if needed. Mentioned funeral carriage was used as a comparative example in dating because it bore the name of the same producer. However funeral carriage had much smaller number on the axle (14943)[13] in comparison to our Milord carriage suggesting that the example from Brijuni was made later. Carriage in question had lamps with tallow candles pushed upwards by a spring. Its lamps were made of steel sheet and glass, and the state they are in is the best testimony together with the wheels that accidents in carriage traffic were frequent.

Renovated carriage indicates by its openness and somewhat rural appearance, brown leather and coarse wooden surfaces that it was used most often in fine weather, in out-of-town environment.[14]

13 *Pogrebna kočija iz 1912. godine* – http://uph.hr/zanimljivosti/pogrebna-kocija-iz-1912-godine/ (pregledano 25. 6. 2015.).
14 Usp. *Conservation and restoration* ... 1997: 138.

13 *Pogrebna kočija iz 1912. godine* – http://uph.hr/zanimljivosti/pogrebna-kocija-iz-1912-godine/ (viewed on June 25, 2015).
14 Cf. *Conservation and restoration* ... 1997: 138.

4.
Restauracija brijunske kočije tipa Milord

Kako nikakvu dokumentaciju nismo dobili s kočijom, a što je uobičajeno kada je u pitanju tehnička baština, ovdje ne donosimo nacrt kočije. Međutim, u stručnoj literaturi nalazi se tehnički prikaz Viktorije (točnije, njezina tipa Pannel-boot), koja je vrlo slična Milordu, kako je već ranije istaknuto, pa taj tehnički crtež može poslužiti kao dobra osnova za daljnji rad (v. Sl. 4).

Stanje zaprimljene kočije bilo je loše jer su bili oštećeni svi njezini dijelovi (v. Sl. 5a). Najveća oštećenja bila su prisutna na drvenim dijelovima u vidu pukotina, crvotočina i prizmatične truleži (v. Sl. 6a-d). Uz drvene dijelove oštećeni su bili i dijelovi pokriveni kožom poput krova (v. Sl. 10a) i sjedalica načinjenih od kože. Osim navedenih oštećenja na kočiji su korodirali i svi metalni dijelovi.

Kočija je po primitku u radionicu prvo u cijelosti rastavljena, a nakon rastavljanja slijedilo je čišćenje svih drvenih dijelova kočije pranjem, pri čemu je prvo kočija oprana običnom vodom od najgrublje nečistoće (blato). S obzirom na to da nakon pranja nečistoće nije bilo potrebe za novim čišćenjem, prišlo se sušenju i brušenju, pri čemu je korišten brusni papir različite finoće, od br. 80 do 800 u različitim etapama brušenja. Prvo se predmet brusio na grubo, a pri kraju se koristio brusni papir sve finije granulacije. Nakon čišćenja i brušenja truli dijelovi kočije sanirani su dvokomponentnim kitovima i ljepilima za drvo klase D3/D4 prihvatljivim u suvremenoj konzervatorsko-restauratorskoj praksi tehničke baštine.[15] Trule daske su, gdje je to bilo nužno jer nikakva konsolidacija nije mogla vratiti mehaničku čvrstoću i nosivost, zamijenjene novim (drugim) daskama, a tom se prigodom vodilo računa o vrsti korištenog drveta kako bi ono bilo identično originalno korištenim materijalima, pa su tako podne daske zamijenjene jelovinom, a one na sjedalici bukovinom. Na crvotočnim dijelovima injektiran je drvocid, a potom su ti dijelovi premazani dvokomponentnim brzosušivim epoksidnim ljepilom (araldit). Nakon ovih temeljnih zahvata uslijedila je obnova firnisa u dva sloja radi očuvanja i zaštite izvorne boje drveta (usp. Sl. 7a-b).

15 Usp. npr. C. V. HORIE 2002: 174, 203, 223; *Science for Conservators ... 2004:* 51, 70, 77, 79.

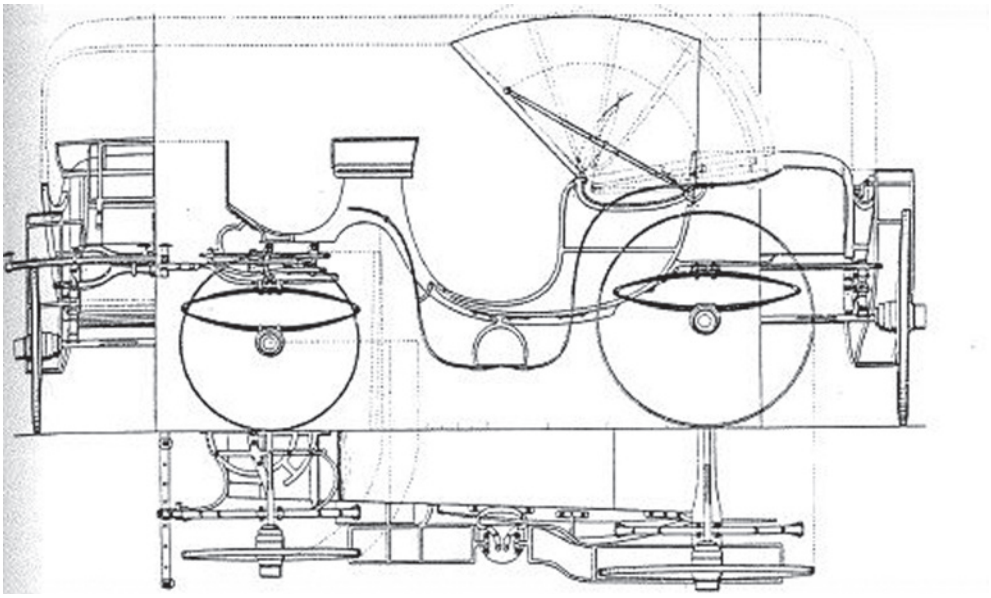
4.
Restoration of the Milord carriage from Brijuni

We will not present drawing of the carriage as it was received without any documentation, which is common practice regarding technical heritage. However, in the professional literature we can find technical drawing of the Victoria model (more precisely of its Pannel-boot type) which is very similar to the Milord type, as already mentioned, so that this representation can be used as good basis for further work (Fig. 4).

The carriage was received in a bad condition, damaged on all its parts (Fig. 5a). Wooden parts were damaged most heavily with cracks, woodworm and mine fungus (*fibroporia vaillantii*) (Fig. 6a-d). Parts covered with leather were also damaged, such as the calash (Fig. 10a) and seats made of leather. All metal parts of the carriage were corroded.

After it was received in the workshop, the carriage was disassembled completely. Wooden parts were washed with water to remove coarse impurities (mud). Since no additional cleaning was necessary, carriage parts were dried and polished with sandpaper with grits from 80 to 800 in various phases of polishing. First an object was roughly sanded, and at the end sandpaper of fine granulation was used. After cleaning and sanding, decaying parts of the carriage were treated with two-component putty and D3/D4 wood glues acceptable in modern conservation-restoration practice for technical heritage.[15] Decayed planks were replaced with new ones in cases where no consolidation could have restored their mechanical hardness and transport capacity. Attention was paid to wood types used in order to achieve absolute correspondence to the original materials so the floor planks were replaced with fir, and beechwood was used for the seat. Wood preservative (insecticide and fungicide) was injected in the worm-eaten parts, and then they were coated with two-component quick-dry epoxy adhesive (araldite). After these basic procedures varnish was renewed in two layers to protect and preserve original wood colour (Fig. 7a-b).

15 Cf. e.g. C. V. HORIE 2002: 174, 203, 223; *Science for Conservators ... 2004:* 51, 70, 77, 79.



Slika 4. Tehnički nacrt kočije Viktorija, tzv. Panel-booth Victoria kočije (D. H. BERKEBILE 1978: 291).

Figure 4. Technical documentation for a carriage of the so-called Panel-boot Victoria type (D. H. BERKEBILE 1978: 291).

Po završetku poslova na drvenim dijelovima kočije uslijedilo je čišćenje metalnih dijelova od nečistoća, starih slojeva boje, masnoće i korozije. Čišćenje se radilo raznim ručnim alatima kao što su turpije, skalpeli, strugači, dlijeta, špahtle, brusni papiri na modificiranim podmetačima posebno prilagođenima obrađivanim površinama i ručnim električnim alatima (razni tipovi vibracijskih i tračnih brusilica) koji su omogućili uklanjanje svih korozijskih produkata gdje god su se pojavili. Nakon njihova konzerviranja inhibitorima prišlo se sanaciji oštećenja laka te lakiranju cjelokupnog podvozja i okova u sjajnu crnu boju. Naime, metal je originalno bio premazan crnom bojom na bazi celuloznih i nitro otapala u više slojeva koji su otkriveni mehaničkim struganjem, pa je takva boja izabrana i za obnovu. Na podvozju je evidentiran dodatak u vidu ukrasnih tankih zlatnih crta koje su izvorno krasile kočiju, pa su one onda zlatnom bojom retuširane, odnosno izvučene na podvozju i glavčini (šiška)[16] kotača (Sl. 8b), odnosno na mjestima gdje je utvrđeno da su izvorno postojale.

Kotači ove kočije nemaju gumu, a postojanje gume ponekad može pomoći u identifikaciji starosti kočije. Treba uvijek imati na umu da su se kotači

After works on the wooden parts of the carriage were finished, metal parts were cleaned from impurities, old paint, grease and corrosion with various hand tools such as files, scalpels, scrapers, chisels, spatulae, sandpapers on modified mats specially adjusted to treated surfaces and electrical hand tools (various types of vibratory grinders and belt sanders) which enabled removing all corrosive products wherever they appeared. After they were conserved with inhibitors, varnish damage was repaired and entire undercarriage and fittings were coated with glossy black. This colour was chosen according to the original coating of black paint based on cellulose and nitro solvents, discovered in several layers after the mechanical scraping. Thin golden lines decorated the undercarriage. They were retouched with golden paint i.e. drawn on the undercarriage and wheel hub[16] (Fig. 8b), at places where they originally were.

Wheels of this carriage had no tyres, and their presence or absence can be helpful in identification of the carriage age. We have to keep in mind that wheels could have been changed primarily due to frequent use and their worn out state. Tyres start-

16 O tradicionalnoj terminologiji zaprežnih kola opš. v. *Narodna zaprežna kola* – http://narodni.net/narodna-zaprezna-kola/ (pregledano 1. 12. 2013.).

16 About traditional terminology of carts more comprehensively on *Narodna zaprežna kola* – http://narodni.net/narodna-zaprezna-kola/ (viewed on December 1, 2013).

tijekom vremena mogli mijenjati, napose zbog učestalog korištenja i njihove trošnosti. Gume se počinju primjenjivati za oblaganje kotača kočije otprilike sredinom 40-ih godina 19. stoljeća.[17] Nedostatak gume kod ove kočije mogao bi pokazivati da su kotači, a onda i kočija, izrađeni prije sredine 19. stoljeća. Međutim, unatoč relativno ranoj pojavi gume, ona se nije često aplicirala na kotače do početka 20. stoljeća. U skladu s tim, očito je da gume nisu uvijek mjerodavne u određivanju starosti kočije. Ovdje obnovljena kočija Milord imala je četiri drvena kotača, a izrađena je najvećim dijelom od bukova drveta. Prednji kotači bili su manji od stražnjih za otprilike 20-ak cm te su svi bili bez guma (v. Sl. 9; usp. Sl. 1).

Restaurirana kočija imala je dva fenjera izrađena od čeličnog lima s dodatkom dvaju profiliranih stakala. Iako se na prvi pogled tako ne čini, ova dva fenjera različita su svojim dimenzijama i izgledom (v. Sl. 11a-b). Fenjeri su u osnovi kružnog oblika s određenim razlikama u ''poklopcima", pri čemu je jedan profiliran, a drugi zaobljen (v. Sl. 11c-d). Sustav rasvjete u fenjerima morao je biti isti, ali ispada da je drugačiji jer se jedan ''rog" za svijeću-lojanicu rastavlja od tijela fenjera, a drugi ne, što je samo posljedica preinaka.[18] Najbolji pokazatelj starijih intervencija na kočiji, a koje nisu bile stručno izvedene, vidljiv je u činjenici da je u jednom od dva fenjera umjesto ''ogledala" upotrijebljeno kromirano dno konzerve, a ne konkavna metalizirana površina (v. Sl. 11e). O nestručnom zamjenjivanju ili, bolje rečeno, kompenziranju nedostataka svjedoči i podatak da su oba fenjera izvorno bila namijenjena istoj strani kočije pa je definitivno jedan fenjer naknadno zamijenjen drugim. Spomenuto neadekvatno popravljanje i zamjena fenjera pokazuju da su se ovi popravci i preinake zbivali u fazi dok je kočija još bila u upotrebi.

Tijelo fenjera je crne boje, a uokolo stakla izvučene su tanke crte dok je srebrnom bojom premazan vanjski rub prednjeg dijela fara fenjera. Na njima nažalost nema nikakvih oznaka, a oba su oštećena (v. Sl. 11a-b). Fenjeri su detaljno očišćeni ultrazvučnim čišćenjem, konzervirani i sanirana su prisutna oštećenja ravnanjem lima gumenim batićima i raznim drvenim alatom pogodnim za takve precizne limarske zahvate, a potom je na njima obnovljena boja.

ed to be used on carriage wheels approximately in the mid-1840s.[17] Absence of tyres on this carriage may indicate that wheel and consequently carriage were built before the mid-19th century.[18] However, despite the relatively early emergence of tyre, until the beginning of the 20th century it was not used often on the wheels. Accordingly, tyres are not reliable indicators in determining the age of a carriage. The renovated Milord carriage had four wooden wheels, and it was made mostly of beechwood. Front wheels were approximately 20 cm smaller than the rear wheels and they were all without tyres (Fig. 9; cf. Fig. 1).

Restored carriage had two lamps made of steel sheet with added two profiled glasses. Although at first it does not seem so, these two lamps differ in dimensions and appearance (Fig. 11a-b). Lamps are basically round with certain differences on "lids", one of them being profiled, and the other rounded (Fig. 11c-d). Lighting system had to be identical on both lamps, but it is different because one protrusion for the tallow candle can be detached from the lamp body, and the other cannot, which is a consequence of alterations.[19] The best indicator of old interventions on the carriage which were not performed professionally is evident in the fact that on one lamp chrome plated bottom of a can was used as a "mirror" instead of concave metallized surface (Fig. 11e). Unprofessional replacements or, more accurately, compensations of shortcomings are testified by the fact that both lamps were originally intended for the same side of the carriage, which proves that definitely one lamp was replaced. Mentioned inadequate repair and replacement of the lamp indicate that these repairs and alterations happened while the carriage was still in use.

Body of the lamp is black, and thin lines surround the glass while silver paint was used for covering outer edge of the front part of the lamp headlight. Unfortunately there are no marks on them, and they are both damaged (Fig. 11a-b). Lamps were cleaned in detail with ultrasound cleaning, they were conserved and existing damage was repaired by flattening the sheet by small rubber mallets and various wooden tools suitable for such precise sheet metal works, and finally paint was renewed.

17 J. OSBORNE 1981: 555.
18 Voštanica u fenjeru koja je bila smještena u cijevi koristila se i mijenjala se uz pomoć spiralne opruge. *Conservation and restoration* ... 1997: 177-180.

17 J. OSBORNE 1981: 555.
18 J. OSBORNE 1981: 555.
19 Tallow candle in the lamp was in a tube, and mainspring was used to handle and replace it. *Conservation and restoration* ... 1997: 177-180.

Kočija ima profilirane blatobrane (dva prednja i dva stražnja) povezane čeličnim gazištem u sredini (v. Sl. 5a-b; usp. Sl. 1). Drveni profilirani blatobrani imaju metalne (čelične) okove kao nosače, a sami su rađeni od parene ili kuhane bukve. Drvo je prvo oprano, osušeno i očišćeno mehanički (brušenjem i četkanjem) i kemijski (alkoholom i otapalima) od starog premaza, potom je kemijski tretirano drvocidom radi konzerviranja, a rupe koje su posljedica crvotočine i prizmatične truleži popunjene su dvokomponentnim epoksidnim kitom. Dio koji je nedostajao na lijevom zadnjem kutnom dijelu blatobrana nadomješten je, pri čemu je nedostajući dio načinjen od iste vrste drva. Potom je cijela površina blatobrana brušena i premazana firnisom (lanenim) koji je iskustveno prepoznat jer se taj način zaštite koristio na tehničkom drvu izloženom atmosferilijama i mikroklimatskim uvjetima. Cijeli blatobrani, prednji i zadnji, zajedno su s metalnim okovima u cijelosti vraćeni na svoje mjesto. Spomenuti nosači mehanički su očišćeni, konzervirani i lakirani temeljnom bojom za metal i izabranom sjajnom crnom bojom.

Prilikom zahvata slojevi premaza i boja nisu u cijelosti uklonjeni, već su konsolidirani mehanički (fino brušenje kao priprema) i kemijski (pranje, odmašćivanje, odsoljavanje, konzerviranje, kemijska priprema za retuširanje te retuširanje i obnova premaza i boja).

Tijekom restauracije nabavljeni su veliki nedostajući mesingani poklopci kotača kupljeni na sajmištu, ali su nažalost zbog neodgovarajućih navoja neiskorišteni, dok su oštećeni vijci i matice djelom sanirani, a dijelom kupljeni. Sve su četiri ručke (dvije su rukohvati za penjanje u kočiju, a dvije su rukohvati na pomoćnom sjedalu) na kočiji nakon čišćenja lakirane u boji kroma.

Od drugih poslova za izdvojiti je i šivanje mehaničkim šivaćim strojem novog platna za unutrašnjost krova kod kojega se vodilo računa da izabrana tkanina (zelena pamučna tkanina) odgovara što je moguće više onoj izvornoj po vrsti materijala i nijansi, dok se o broju čvorova po jedinci površine nije vodilo računa. Sjedalo vozača presvučeno je umjetnom kožom prema zatečenom stanju, dok je sjedalo za putnike restaurirano (ručnim šivanjem) i konzervirano premazom za impregnaciju i zaštitu na bazi lanolina, otapala, voska i cedrovog ulja (v. Sl. 10b). Tamna goveđa koža na krovu nije mijenjana jer je bila cjelovita, ali s puno sitnih oštećenja i zakrpa te su ista samo sanirana popunjavanjem pukotina poliuretanskim ljepilom, nakon čega je krov sklopljen. Pod kočije prekriven je zalijeplje-

The carriage has profiled fenders (two front and two rear fenders) connected with steel tread in the middle (Fig. 5a-b; cf. Fig. 1). Wooden profiled fenders have metal (steel) fittings as props, and they were made of steamed or cooked beech. First the wood was washed, dried and cleaned mechanically (by sanding and brushing) and chemically (with alcohol and solvents) to remove the old coat, then it was treated chemically with wood preservative in order to conserve it, and holes resulting from woodworm and mine fungus were filled with two-component epoxy putty. Missing part from the left rear fender edge was repaired with same type of wood. Then the entire surface of fender was polished and coated with (linseed oil) varnish, which is recognized empirically to be the type of protection that was used on technical wood exposed to atmospheric agents and microclimatic conditions. The complete fenders, front and rear, were returned to their positions together with metal fittings. Mentioned props were cleaned mechanically, conserved and lacquered with primer for metal and selected glossy black paint.

During the procedure varnish layers and paint were not removed completely but were consolidated mechanically (fine sanding as preparation) and chemically (washing, degreasing, desalinization, conservation, chemical preparation for retouch, and retouch, renewal of varnish and paints).

During the restoration large brass lids for wheels were acquired at a flea market, but unfortunately they could not be used owing to inadequate thread. Damaged screws and nuts were repaired, and some new ones were bought. All four handrails (two for entering the carriage and two on the auxiliary seat) on the carriage were cleaned and lacquered in the chrome colour.

Other interesting procedures include using the mechanical sewing machine for sewing of new textile for the roof lining. Special attention was paid to the fabric (green cotton textile) which would correspond best to the original both in type and colour nuance while number of knots per unit of surface area was not taken into consideration. Driver's seat was covered with artificial leather in accordance with existing condition. Passenger's seat was restored (by manual sewing) and conserved with a coating for impregnation and protection based on lanolin, solvent, wax and cedar oil (Fig. 10b). Dark neat's leather on the roof was not replaced as it was complete but it had a lot of small damages and patches which were consolidated with polyurethane adhesive after which the calash was folded. Floor of the carriage was covered with glued linen cloth which was cove-

nim lanenim tkanjem koje je premazano katranom, prema zatečenom stanju, a zbog impregnacije pri korištenju mokre i blatne obuće.

5. Zaključak

Kočija Milord svojim obilježjima predstavlja vozilo koje si je mogla priuštiti imućnija obitelj. Naime, ova je kočija mogla u obitelji biti samo dodatno sredstvo prijevoza, a ne i jedino, zbog dizajna koji svojom otvorenošću nije omogućavao svakodnevnu upotrebu, što je bilo jedno od obilježja koja su sugerirala prestiž. Tijekom obnove ove kočije svjetiljke su svojim nestručnim popravcima najočitije pokazale da je u upotrebi ovog vozila tijekom vremena došlo do promjene u vlasničkim odnosima ili društvenom statusu vlasnika i namjeni kočije. Naime, neadekvatno kompenziranje nedostataka po pitanju svjetiljki može ukazivati na to da je onaj u čijem je vlasništvu kočija bila tijekom vremena zapao u financijske probleme jer se o kočiji nije brinulo na adekvatan način, pri čemu se u saniranju oštećenja problem nastojao riješiti na što jeftiniji način. Zabilježeni podatci na podvozju, odnosno osovini kočije omogućuju, s obzirom na dostupnu usporednu građu, da se vrijeme izrade ove kočije pomakne na početak 20. stoljeća, što ukazuje na to da je ovaj tip kočije dugo zadržao svoju popularnost. Obnavljanje kočije dobar je pokazatelj da se iz same materijalne građe unatoč nedostatku dokumentacije može doći do važnih podatka ne samo o podrijetlu i vremenu izrade kočije već i njezinu razvojnom putu. Međutim, važno je istaknuti da i sama obnova materijalne građe podliježe određenim zakonitostima, a kod nas su one velikim dijelom financijske prirode, pa se tako kemijske analize nisu provodile jer je kočija kompleksan proizvod koji se sastoji od velikog broja različitih materijala, pa bi za takav idealan postupak trebalo imati i idealne uvjete rada neograničene financijama i vremenom. Iskustveno se može reći da analiza materijala na tehničkim predmetima u većini slučajeva potvrđuje da površinski izgled nije izvoran jer ta vrsta predmeta ima svoj uporabni vijek s uputama o korištenju i održavanju tijekom kojega zbog osiguranja funkcionalnosti i tražene estetike dolazi do obnove slojeva preslojavanjem ili ponekad kompletnim uklanjanjem i obnovom u cijelosti. U tim se slučajevima na skrivenim mjestima (ispod vijaka

red with tar, in accordance with the existing condition, and in order to create protection when wet and muddy shoes are worn.

5. Conclusion

Characteristics of the Milord carriage suggest that it was a vehicle affordable to a wealthy family. Namely, this carriage could only be used as additional means of transport and not the only one because it was open, which would also suggest prestige. During the renovation of this carriage, lamps have indicated by their unprofessional repairs that during the use of the vehicle there were changes in ownership or social status of the owner and function of the carriage. Inadequate reparation of the lamp malfunction may indicate that the owner of the carriage had financial problems or he did not take care of the carriage properly so he tried to get it repaired in the cheapest way possible. Recorded information on the undercarriage, i.e. carriage axle, alongside available comparative material, enabled dating of the carriage to the beginning of the 20th century indicating that this type of carriage retained its popularity for quite a while. Renovation of the carriage is a good indicator that important insights about the carriage origin and time of production, and even its developmental course can be obtained through analysis of material evidence despite the lack of its documentation. However, it is worth mentioning that renovation of such object follows certain regularities, which are primarily of financial nature in our conditions, so chemical analyses were not done because the carriage is a complex product consisting of great number of diverse materials. Ideal procedure would demand ideal working conditions unlimited in terms of finances and time. Empirically we can say that analysis of material on technical objects in most cases confirms that surface appearance is not the original one because this type of object has its life span - as well as instructions on usage and maintenance - during which layers were renovated in order to maintain functionality and aesthetics either by reupholstering or occasionally by their complete removal and renovation. In these cases original appearance can be tested at hidden places (under the screws etc.). Technical drawings of carriage and lamps were not made for the same reasons (financial). Due to aforementioned limitations often we can only "scratch on the sur-

i sl.) utvrđuje izvornost. Iz istih (financijskih) razloga nisu rađeni tehnički nacrti kočije i fenjera. Zbog ranije spomenutih ograničenja često možemo samo "zagrebati po površini" neke teme i čekati da dođe bolje vrijeme u kojem će netko nastaviti ondje gdje smo mi stali.

face" of a certain theme and wait for better times when someone else will pick up where we left off.

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Sl. 5. a) Brijunska kočija prije obnove; b) Brijunska kočija poslije obnove (snimio: Z. Kirchhoffer).

Fig. 5. a) Carriage from the Brijuni archipelago before restoration; b) Carriage from the Brijuni archipelago after restoration (photo by Z. Kirchhoffer).

Sl. 6a-d. **Detalji oštećenja na drvu (snimio: Z. Kirchhoffer).**

Fig. 6a-d. **Details of damages to the wood (photo by Z. Kirchhoffer).**

Sl. 7a-b. **Detalji postupka obnove drva (snimio: Z. Kirchhoffer).**

Fig. 7a-b. **Details of the wood restoration process (photo by Z. Kirchhoffer).**

Sl. 8. a) Kotač prije obnove; b) Kotač tijekom obnove (snimio: Z. Kirchhoffer).

Fig. 8. a) Wheel before restoration; b) Wheel during restoration (photo by Z. Kirchhoffer).

Sl. 9. Prednji kotač tijekom obnove (snimio: Z. Kirchhoffer).
Fig. 9. Front wheel during restoration (photo by Z. Kirchhoffer)

Sl. 10. a) Unutrašnjost kabine prije obnove; b) Unutrašnjost kabine poslije obnove (snimio: Z. Kirchhoffer).

Fig. 10. a) Cabin before restoration; b) Cabin after restoration (photo by Z. Kirchhoffer).

Sl. 11. a-b) Fenjeri prije obnove; c-d) Razlike poklopca fenjera; e) Dno konzerve umjesto ogledala; f) Fenjer poslije obnove (snimio: Z. Kirchhoffer).

Fig. 11. a-b) Lanterns before restoration; c-d) Differences between lantern caps; e) Bottom of the tin can used instead of the mirror; f) Lantern after restoration (photo by Z. Kirchhoffer).