Indira Šamec Flaschar

Ivana Gržina

Strossmayer Gallery of Old Masters,
Croatian Academy of Sciences and Arts, Zagreb

THE DIGITIZATION OF PHOTOGRAPHIC NEGATIVES FROM SCHNEIDER'S PHOTO-ARCHIVE IN THE STROSSMAYER GALLERY OF OLD MASTERS

Abstract

The goal of this article is to present the recently completed digitization of negatives from the so-called Schneider photo-archive in the Strossmayer Gallery of Old Masters. The valuable assemblage of photo-documentation comprises over two and a half thousand photographs taken during a fieldwork campaign aimed at creating an inventory of Croatia's artistic heritage in the 1930s. This years-long project was devised and spearheaded by Artur Schneider, the Gallery's Director at the time. Along with around sixty boxes of photographic – mainly glass plate – negatives, the Archive includes eighteen albums of contact copies, various lists of recorded objects, and an array of other finding aids. Considering that this body of material, in all its characteristics, is different from the one that forms the central subject of interest of the institution, it is not included in the institution's holdings, but exists as part of the Gallery's library. This turned out to be a "lucky" occurrence in the consideration of ways to modernize its presentation. Since the care for the Archive has recently been entrusted to an informational expert (a librarian), apart from epistemic and material features of the assemblage, the design of the digitization process also needed to take into account its informational potential and possibilities of presentation in a network setting. This article will comprehensively explicate the course of the digitization process of the photo-negatives, as a first step in the wider strategy of the digitization of the entire Archive. Special attention will be given to the elaboration of the planning process itself, and its preparatory steps that were realized in cooperation with colleagues from other institutions concerned with national heritage, as tried and tested experts for particular aspects of digitizing specific and fragile material. Subsequently, the issues of including digitized material into the Academy's digital repository will be taken on. Finally, we will discuss plans for the continuation of digitization as a pioneering project in the scope of Croatia's national heritage community.

Keywords: photo-archive, photographic negatives, digitization, Artur Schneider, Strossmayer Gallery

The founding creed of the Strossmayer Gallery is the preservation, expert scientific analysis, and popularization of artworks from its holdings: the collection of Old Masters and other collections comprised of paintings, drawings, and sculptures, which date from the 19th and 20th century. However, the Gallery also cares for valuable material of a documentational, cultural and historical significance, a considerable part of which is taken up by photographic material. The so-called Schneider Photo-Archive stands out from this multifarious corpus with its content, origins, and provenance, with its specific quantity and type of material, and the fact that it has been preserved in its entirety and in its original form. Schneider's Photo-Archive includes over two and a half thousand photographs, taken during a field-work campaign aimed at creating an inventory of Croatia's artistic heritage in the 1930s. This years-long project – developed under the patronage of the Academy at a time when the institutionalization of care for cultural heritage was coming of age, as the first attempt of its systematic documentation process – was devised and spearheaded by Artur Schneider, the Gallery's Director at the time.[1] These photographs are an invaluable resource in the research of art historians, as well as in the work of restorers and conservationists, as they present records of historical heritage prior to the Second World War. These records are sometimes the only visual evidence about objects that have, since then, changed appearance, location, or original context, or have even disappeared completely. Moreover, they represent valuable photographic material that, belonging to a corpus of now already historic photographic techniques and processes from the beginning of the 20th century, has in itself become part of the national artistic heritage. It has been preserved in the Strossmayer Gallery since the time when its collections were formed. Along with around sixty boxes of photographic – mainly glass plate – negatives, the Archive includes eighteen albums of contact copies, 3206 "dispersed" photographs of different formats, and various lists of recorded objects, supporting finding aids, and documentation on the start and progress of the campaign. Considering that it is different from the material that forms the central subject of interest of the institution, in all its characteristics, this assemblage of objects is not included in the institution's holdings. Neither is it allocated to the museum's documentation, nor to an informally organized gallery archive; it exists as a part of a special museum library, which turned out to be a "lucky" occurrence in the consideration of ways to modernize its presentation. Since the care for Schneider's Photo-Archive has recently been entrusted to an informational expert (a librarian), apart from epistemic and material features of the assemblage, the design of the digitization process also needed to take into account its informational potential and possibilities of presen-

---

1   On the genesis of the inventory campaign under the Academy's patronage, and on Schneider's role in the entire process, see: Indira Šamec Flaschar, "Schneiderov fotografijski arhiv – projekt registracije i zaštite hrvatske spomeničke baštine", in *Artur Schneider 1879.–1946.: zbornik radova znanstveno-stručnog skupa Hrvatski povjesničari umjetnosti*, ed. Ljerka Dulibić (Zagreb: Društvo povjesničara umjetnosti Hrvatske, 2016), 99–109. Details in: Ivana Gržina and Indira Šamec Flaschar, *Tragom baštine: Schneiderov fotografijski arhiv* (Zagreb: Hrvatska akademija znanosti i umjetnosti, 2016).

tation in a network setting. The following text will describe the digitization process of the negatives, after which the issue of including digitized content into the Academy's digital repository will be taken on. Finally, plans for the continuation of the digitization process, as a pioneering project within Croatia's national heritage community, will be discussed. This article brings together presentations to date on the digitization process of Schneider's Photo-Archive, which approached these issues partially and from specific perspectives (like from the point of view of a consumer's structural analysis),[2] modifying their conclusions with hindsight, and in the light of new theoretical findings.

Since the year 2011, the Strossmayer Gallery has been actively included in the development of its umbrella organization's repository, the Digital Collection of the Croatian Academy of Arts and Sciences (Digitalna zbirka Hrvatske akademije znanosti i umjetnosti – DiZbi.HAZU), continuously complementing it with its digital materials (The Collection of Old Masters, Hemerotheque, and catalogues). Therefore, it was completely understandable and justified to undertake the digitization process of Schneider's Photo-Archive, especially considering the provided "in-house" basic computational infrastructure. The wide interest of consumers in photographs from Schneider's Photo-Archive lead us to conclude that their inclusion into the institution's repository was necessary, in order to provide democratic access to this valuable visual resource. The considerable financial means required to scan the material, and process and deliver the attained content, were procured through applications to many programs for financing cultural activities, for which extensive application documentation was compiled. Most financing acquired this way came from the leading national corporative foundation, while the rest was procured from purpose-specific budgets from the national and local government administration, with a symbolic part covered by the institution itself. We wanted to highlight this because propositions for applications announced within the private sector are far more rigorous than the ones under the patronage of public institutions, which means that they require meticulous planning starting with the application process. In practice, this entails the employment of considerable intellectual and creative resources, as well as time, with no guarantee that the project will ever be realized. Therefore, the envisioned project needed to be thoroughly explicated,

---

2   The digitization of Schneider's Photo-Archive, or more precisely, its thus far digitized part, has been problematized or mentioned in: Indira Šamec Flaschar, "'Schneiderov fotografijski arhiv' – digitalizacija 'vizualne memorije' hrvatske povijesnoumjetničke baštine", in *Četvrti festival hrvatskih digitalizacijskih projekata: programska knjižica*, ed. Renata Petrušić et al. (Zagreb: Nacionalna i sveučilišna knjižnica u Zagrebu, 2014), 49–50; Indira Šamec Flaschar, "Od staklene ploče do digitalnog zapisa: značenje i dostupnost 'Schneiderovog fotografijskog arhiva' u Strossmayerovoj galeriji starih majstora HAZU", in 2. *Skup muzejskih dokumentarista Hrvatske: Dokumentacija i korisnici*, ed. Borut Kružić, Jadranka Belevski and Natali Čop (Rijeka: Hrvatsko muzejsko društvo, 2015), 25; Šamec Flaschar, "Schneiderov fotografijski arhiv – projekt registracije i zaštite hrvatske spomeničke baštine", 112–113; Šamec Flaschar, "Djelatnost knjižničara u Strossmayerovoj galeriji starih majstora Hrvatske akademije znanosti i umjetnosti – Od bibliografije do izložbe, od obrade specijalne knjižnične građe do digitalne prezentacije", 340–342.

all the while following the national guidelines for digitization,[3] national literature relevant for all kinds of material,[4] as well as national literature relevant especially for glass plate negatives.[5] According to these sources, there are several incontestable reasons for the conduction of digitization. The first reason is the preservation of the original in a way that makes it available to consumers as a digital surrogate, instead of the original glass plate negative. This greatly minimizes the handling of fragile originals. Moreover, the digital surrogate can also serve as a backup copy in case the original is somehow damaged or destroyed.[6] The second reason is increasing accessibility: the negatives are reformatted as positive images, which are "easier to read than the original", allowing the positive digital version "to ease access to information".[7] Furthermore, while the original photograph can only be viewed by one consumer at a time, the digital version enables the possibility of multiple and simultaneous viewing. The third reason is the creation of new offers and services: translating the original photograph into a digital format facilitates the search and analysis of the material, and enables the exchange of information and virtual linking of various sources.[8]

The initial phase of the project included the execution of preparatory activities, realized through consultations with colleagues from other institutions concerned with national heritage, as tried and tested experts for particular aspects of digitizing specific and fragile material. The analysis of this material showed that it was mostly comprised of standard format glass plates (18x24, 13x18 and 10x15 cm) created by the gelatin silver process, while a smaller part of the material is made up of negatives on a flexible base (nitrocellulose film), of 6x6 cm. As these negatives had been stored in unsuitable packaging for around eighty years – individually inserted in glassine envelopes and laid horizontally on top of each other, in boxes of chemically inadequate material – some originals, mainly glass plates, showed signs of physical and chemical damage: abrasions, cracks on the glass

3   *Nacionalni projekt "Hrvatska kulturna baština"*: *Digitalizacija arhivske, knjižnične i muzejske građe*: *Smjernice za odabir građe za digitalizaciju (radna verzija)*, https://bib.irb.hr/datoteka/590089.sm-jernice_odabir.pdf

4   Hrvoje Stančić, *Digitalizacija* (Zagreb: Zavod za informacijske studije, 2009), 15–24.

5   Hrvoje Gržina, "Prolegomena digitalizaciji negativa na staklu", (presentation, *Četvrti festival hrvatskih digitalizacijskih projekata* from Nacionalna i sveučilišna knjižnica u Zagrebu, Zagreb, April 10, 2014), http://dfest.nsk.hr/2014/wp-content/uploads/2014/04/Hrvoje%20Grzina. pdf

6   Gržina, "Prolegomena digitalizaciji negativa na staklu." When referring to the digitization of photographic negatives, the usability of the digital surrogate as a backup for the original depends on whether the original is reformatted as a negative or a positive image. The authors have dealt with these issues in more detail at the symposium *Photographic heritage in museums* (*Fotografska baština u muzejima*), held in Zagreb from 25th to 26th October, 2017. See: Indira Šamec Flaschar and Ivana Gržina, "Digitalizacija fotografske baštine u Strossmayerovoj galeriji starih majstora HAZU: prednosti, nedostaci i perspektiva", in: *Fotografska baština u muzejima*: *Zbornik sažetaka*, ed. Lada Dražin-Trbuljak (Zagreb: Muzejski dokumentacijski centar, 2017), 87–88. Proceedings in preparation.

7   Gržina, "Prolegomena digitalizaciji negativa na staklu".

8   Stančić, *Digitalizacija*, 10–11.

plate, fissures in the gelatin emulsion, etc.[9] Essential protective measures for the handling of the material during the working process were promptly established. This was followed by determining the technical parameters for digital images, and the equipment that would be used in the digitization process, all of which was outsourced to an IT company.

After preparatory test scans of representative samples, the digitization process was started in situ, in the Gallery's storeroom, where Schneider's Photo-Archive has been stored for the last several years. The process of scanning negatives was executed in such a way that each individual sample was positioned on a flatbed scanner with a light source, and pre-scanned in order to get a preview. This was followed by adjusting the parameters for a digital image, after which the sample was scanned in high resolution of 600 dpi on a 16-bit grayscale[10] and stored in TIFF and JPG formats. The rich digital master in the TIFF uncompressed format (up to 50 Mb), as well as the JPG format files for distribution, were – for security reasons – stored on an external HDD storage device, on versatile optical discs, and on the VPS of Zagreb's University Computing Centre (Srce).

Upon completion of the digitization process and the allocation of metadata to the digital entries, some of the digital images were included in the Academy's Digital Collection (Digitalna zbirka HAZU),[11] which enables their visibility within the Europeana platform. With hindsight, apart from the unquestionable benefits that arise from the greater visibility of these materials, we have also noticed the limitations of their publishing within a huge repository that brings together a very diverse concoction of materials from around fifteen of the Academy's organizational units. Although the metadata profiles, based on the UNIMARC standard, have been adapted to the specific types of materials,[12] the lack of standardization results in a faulty or imprecise description of the digitized object.[13] This is accompanied by discrepancies in conceptualizations of descriptive categories by different custodians concerned with the same kind of material. These facts point to the necessity for improving existing metadata profiles, in order to create a more unified consideration of concepts that constitute the elements of description.

---

9   More on the damage and conducted measures of preservation in: Gržina and Šamec Flaschar, *Tragom baštine: Schneiderov fotografijski arhiv*, 17–18.

10 Hindsight has revealed certain shortcomings of scanning in grayscale in some of the samples. More on this issue in: Šamec Flaschar and Gržina, "Digitalizacija fotografske baštine u Strossmayerovoj galeriji starih majstora HAZU: prednosti, nedostaci i perspektiva".

11 "Schneiderov fotografijski arhiv", DiZbi.HAZU: Digitalna zbirka Hrvatske akademije znanosti i umjetnosti, Hrvatska akademija znanosti i umjetnosti, 2017, http://dizbi.hazu.hr/?object=list&find=Schneiderov+fotografijski+arhiv.

12 More on the subject, and on the *DiZbi* repository in general, see: Dina Mašina, "Digitalna zbirka Hrvatske akademije znanosti i umjetnosti − nove funkcionalnosti", in *14. Dani specijalnih i visokoškolskih knjižnica: Knjižnice: kamo i kako dalje?: zbornik radova*, ed. Dina Mašina and Kristina Kalanj (Zagreb: Hrvatsko knjižničarsko društvo, 2017).

13 More on the subject in: Šamec Flaschar and Gržina, "Digitalizacija fotografske baštine u Strossmayerovoj galeriji starih majstora HAZU: prednosti, nedostaci i perspektiva".

In line with the global tendencies to democratize access to cultural heritage, the Gallery devised an exhibition focused on two goals. The first was to popularize Schneider's Photo-Archive, with all its material features, as well as its epistemic and epistemological characteristics, as a specific part of the Museum's holdings invisible to the general public. The second goal was to introduce the general public to the process of digitization: its course, purpose, and results. The digitized negatives are only a part, although the main part, of a complex assemblage of material for which there is theoretical grounding to be named a photo-archive.[14] The first important step in its protection and promotion has been taken. Appropriate packaging and storage conditions will enable the preservation of the physical integrity of the most important part of the assemblage – the negatives – while the digitization and inclusion of digital material into the Academy's virtual repository will enable the images to be publicly available. In line of a broader strategy, as a pioneering project in Croatia's heritage community we aspire to continue this project and digitize the remaining material (photo albums with contact copies, old photo enlargements, and accompanying finding aids). The results of this continuation would be presented in a different context, on a particular IT platform (thematic web portal, etc.), and would include the publication of digital photo-negatives, and the possibility of synchronous and diachronous viewing of photo albums and old finding aids. A digitization process envisaged this way may seem utopian due to the restricted financial and infrastructural resources of the institution, but it would comparatively supplement previously digitized content, enabling a more exhaustive insight into the complexities of Schneider's Photo-Archive.[15]

References

Caraffa, Costanza. "From 'photo libraries' to 'photo archives'. On the epistemological potential of art-historical photo collections". In *Photo Archives and the Photographic memory of Art History*, edited by Costanza Caraffa, 11–44. Berlin: Deutscher Kunstverlag, 2011.

Gržina, Hrvoje. "Prolegomena digitalizaciji negativa na staklu". Presentation, *Četvrti festival hrvatskih digitalizacijskih projekata* from Nacionalna i sveučilišna knjižnica u Zagrebu, Zagreb, April 10, 2014. http://dfest.nsk.hr/2014/wp-content/uploads/2014/04/Hrvoje%20 Grzina.pdf

Gržina, Ivana, and Indira Šamec Flaschar. *Tragom baštine: Schneiderov fotografijski arhiv*. Zagreb: Hrvatska akademija znanosti i umjetnosti, 2016.

---

14 Gržina and Šamec Flaschar, *Tragom baštine: Schneiderov fotografijski arhiv*, 11. Cf. Costanza Caraffa, "From 'photo libraries' to 'photo archives'. On the epistemological potential of art-historical photo collections", in *Photo Archives and the Photographic memory of Art History*, ed. Costanza Caraffa (Berlin: Deutscher Kunstverlag, 2011), 23–25.

15 Cf. Gržina and Šamec Flaschar, *Tragom baštine: Schneiderov fotografijski arhiv*, 12. More in: Šamec Flaschar and Gržina, "Digitalizacija fotografske baštine u Strossmayerovoj galeriji starih majstora HAZU: prednosti, nedostaci i perspektive".

Mašina, Dina. "Digitalna zbirka Hrvatske akademije znanosti i umjetnosti − nove funkcionalnosti". In *14. Dani specijalnih i visokoškolskih knjižnica: Knjižnice: kamo i kako dalje?: zbornik radova*, edited by Dina Mašina and Kristina Kalanj, 169–184. Zagreb: Hrvatsko knjižničarsko društvo, 2017.

Stančić, Hrvoje. *Digitalizacija*. Zagreb: Zavod za informacijske studije, 2009.

Šamec Flaschar, Indira. "Djelatnost knjižničara u Strossmayerovoj galeriji starih majstora Hrvatske akademije znanosti i umjetnosti – Od bibliografije do izložbe, od obrade specijalne knjižnične građe do digitalne prezentacije". In *14. Dani specijalnih i visokoškolskih knjižnica: Knjižnice: kamo i kako dalje?: zbornik radova*, edited by Dina Mašina and Kristina Kalanj, 333–344. Zagreb: Hrvatsko knjižničarsko društvo, 2017.

Šamec Flaschar, Indira. "Schneiderov fotografijski arhiv – projekt registracije i zaštite hrvatske spomeničke baštine". In *Artur Schneider 1879.–1946.: zbornik radova znanstveno-stručnog skupa Hrvatski povjesničari umjetnosti*, edited by Ljerka Dulibić, 97–113. Zagreb: Društvo povjesničara umjetnosti Hrvatske, 2016.

Šamec Flaschar, Indira. "Od staklene ploče do digitalnog zapisa: značenje i dostupnost 'Schneiderovog fotografijskog arhiva' u Strossmayerovoj galeriji starih majstora HAZU". In *2. Skup muzejskih dokumentarista Hrvatske: Dokumentacija i korisnici*, edited by Borut Kružić, Jadranka Belevski and Natali Čop, 25. Rijeka: Hrvatsko muzejsko društvo, 2015.

Šamec Flaschar, Indira. "'Schneiderov fotografijski arhiv' – digitalizacija 'vizualne memorije' hrvatske povijesnoumjetničke baštine". In *Četvrti festival hrvatskih digitalizacijskih projekata: programska knjižica*, edited by Renata Petrušić et al., 49–50. Zagreb: Nacionalna i sveučilišna knjižnica u Zagrebu, 2014.

Šamec Flaschar, Indira, and Ivana Gržina. "Digitalizacija fotografske baštine u Strossmayerovoj galeriji starih majstora HAZU: prednosti, nedostaci i perspektiva". In *Fotografska baština u muzejima*: *Zbornik sažetaka*, edited by Lada Dražin-Trbuljak, 87–88. Zagreb: Muzejski dokumentacijski centar, 2017.

Sažetak

Digitalizicija fotografskih negativa iz Schneiderova fotoarhiva u Strossmayerovoj galeriji starih majstora HAZU

Temeljno je poslanje Strossmayerove galerije očuvanje, stručno-znanstvena obrada i popularizacija umjetnina iz njezina fundusa: zbirke starih majstora te ostalih zbirki, koje okupljaju slike, crteže i skulpture koje datiraju iz vremena 19. i 20. stoljeća. Galerija međutim skrbi i o vrijednome gradivu dokumentacijskog i kulturno-povijesnog značenja, unutar kojega značajan udio zauzima fotografski materijal. Unutar tog se sadržajem, podrijetlom i provenijencijom raznovrsnog korpusa izdvaja tzv. Schneiderov fotoarhiv, specifičan po količini i vrsti građe te po činjenici da je očuvan kao cjelina u svojemu izvornom obliku. Schneiderov fotoarhiv okuplja više od dvije i pol tisuće snimaka, zabilježenih tijekom terenske kampanje inventariziranja hrvatske umjetničke baštine 1930-ih godina. Taj je višegodišnji projekt – izrastao pod okriljem Akademije u vremenu stasavanja institucionalne skrbi o kulturnom naslijeđu, kao prvi pokušaj njegova sustavnijeg dokumentiranja – osmislio i operativno vodio ondašnji upravitelj Galerije, Artur Schneider. Bilježeći spomeničku baštinu prije Drugoga svjetskog rata, ponekad i kao jedino vizualno svjedočanstvo o objektima koji su otada promijenili izgled, lokaciju ili izvorni kontekst ili su pak posve nestali, te su snimke dragocjen resurs u istraživačkom radu povjesničara umjetnosti, kao i u konzervatorsko-restauratorskoj praksi. Osim toga riječ je o vrijednoj fotografskoj građi, koja je, pripadajući korpusu sada već povijesnih fotografskih tehnika i procesa s početka 20. stoljeća, sama po sebi postala dio domaće stvaralačke baštine. Od vremena formiranja cjelina se čuva u Strossmayerovoj galeriji. Uz šezdesetak kutija fotografskih – mahom staklenih – negativa, Arhiv uključuje osamnaest albuma s kontaktnim kopijama, 3206 „rasutih" fotografija različitih formata te razne popise snimljenih objekata, popratna obavijesna pomagala i dokumentaciju o začetku i tijeku kampanje. Budući da se po svim karakteristikama razlikuje od građe koja je središnji predmet interesa institucije, cjelina nije uvrštena u njezin fundus. Nije međutim priključena ni muzejskoj dokumentaciji ni neformalno ustrojenom galerijskom arhivu, već egzistira u okviru specijalne muzejske knjižnice, što se pri promišljanju osuvremenjivanja prezentacije građe pokazalo kao „sretna" okolnost. Kako je skrb o Schneiderovu fotoarhivu povjerena informacijskom stručnjaku (knjižničaru), u koncipiranju procesa digitalizacije, osim o epistemičkim i materijalnim značajkama cjeline, povelo se računa i o njezinu informacijskom potencijalu te o mogućnostima njezine prezentacije u mrežnom okruženju. U radu se potanko izlaže tijek provedbe digitalizacije negativa, kao prve faze šire strategije digitalizacije cjelokupnoga Arhiva. Osobita se pažnja posvetila razlaganju samog planiranja procesa te poduzetih pripremnih radnji, realiziranih u suradnji s kolegama iz drugih baštinskih institucija, kao osvjedočenih stručnjaka za pojedine aspekte digitalizacije specifičnog i krhkog materijala. Potom se progovara o problematici vezanoj uz uvrštavanje digitaliziranog sadržaja u Akademijin digitalni repozitorij. Naposljetku se govori o planiranom nastavku digitalizacije, kao pionirskog projekta u okvirima hrvatske baštinske zajednice. Ovaj rad okuplja dosadašnja izlaganja o digitalizaciji Schneiderova fotoarhiva, koja su problematici prilazila parcijalno i iz specifičnih perspektiva, modificirajući njihove zaključke s vremenskim odmakom i u svjetlu novih teorijskih spoznaja.

Ključne reči: foto-arhiv, negativi, digitalizacija, Artur Šnajder, Strossmayer galerija