ARCHIVING THE IN-BETWEEN

ONB-Labs Art Program – Artists engaging with digital collections of the Austrian National Library

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Abstract

ONB-Labs is the platform of the ONB (Österreichische Nationalbibliothek/Austrian National Library) for scientific and creative use of digital collections. In addition to the general opening of selected digital collections as images, texts and metadata, the ONB-Labs actively seek the exchange with young as well as established artists since the beginning of the ONB-Labs in 2018. Currently, in collaboration with the University of Arts Linz, Austria, ONB-Labs is now going a step further by critically questioning the artistic/scientific engagement with digital collections and archives as well as their potential of expanding knowledge spaces through and with the work on data. This paper analyzes and highlights recent results of artistic-scientific processes and contextualizes the potential of working on the processes of "archiving the in-between" via artistic/scientific means and therefore highlighting relations and connections between data, objects and spaces in archives in order to gain new knowledge and open new ways of understanding and engaging with digital collections. Based on the archiving strategies and experiences of the Interface Cultures Department at the University of Arts Linz in relation to forms of representation of an artistic oeuvre in digital space (as presented last year by Tiago Martins, Christa Sommerer and Laurent Mignonneau [1]), this paper refers to the digital original in the digital inter-spaces and critically examines the procedural, artistic and scientific gain of knowledge in the process of ordering, connecting, translating and contextualizing the in-between of the digital archive realm.

Keywords

Austrian National Library, open digital collections, artistic/scientific abstraction, critical data reflection, hidden knowledge, translation processes, archive and experiment

Introduction

Access to archives is of particular importance in times of artificial intelligence and automated processes of information handling. It is probably even more important than ever that so-called originals can be viewed, even visited and understood anew, as contextualization and interpretation are increasingly taken over by trained algorithms. Digital archives and collections, with their digitized originals, provide such sites of engagement. In particular, with this paper we present the digital archive of the ONB (Austrian National Library/Österreichische Nationalbibliothek) and those collections that are made available for further processing and use within the framework of ONB-Labs, the Austrian National Library's platform for digital collections. In November 2022, the ONB-Labs through an open call invited students from the University of Arts Linz, the Academy of Fine Arts Vienna and the University of Applied Arts Vienna to engage artistically with the four dedicated digital collections and create artworks from historical postcards, newspapers, travelogues or botanical illustrations [2]. For resulting artworks, neither form nor medium or material have been predefined, the only prerequisite for the artwork was a final presentation in a web browser, namely the ONB-Labs Artspace [3].

Based on the open call, four artistic/scientific approaches to working with the digital collections were selected. Criteria for the selection were, in addition to an outstanding artistic concept in relation to the specific collections, the possibility of implementation within the framework of a three-month project duration and a process that, above all, takes the digital component of the collections into account accordingly. Workshops introduced artists to the specifics of the collection and accompanied them in the development of their work. Additional experts were consulted as needed, building an interdisciplinary team towards exploring the future potential of archives.

> "The urge towards the future is intrinsic to the archive - as a ressouce for shared narratives that need to be rewritten again and again."[4]

Library Labs as Environments for Innovation

The ONB Labs were established at the Austrian National Library as a platform for scientific as well as artistic engagement with open digital collections of historical library holdings [4]. The Labs environment is since then a

core pillar of the library's Digital Humanities strategy [5]. For at least a decade libraries all around the world provide environments that are designed to support digital research at different stages of the research cycle from digitization to data acquisition, data cleaning or data analysis. Some libraries offer physical Labs or maker spaces usually including staff support [6]. Others, like the ONB-Labs are virtual platforms offering datasets, tools and service support. What is pivotal for both, physical as well as virtual labs, is the engagement with the user community. Concepts like embedded librarianship or datasteward define an understanding of librarianship that goes beyond the role of mere data providers by closely collaborating with researchers throughout the entire lifetime of projects [7]. While in the traditional scenario of library use, users had to understand the library system in order to fulfill their needs, libraries shifted from rule based services to user centered services. Understanding the user community's needs implies also the libraries willingness to be open for critical perspectives on the library system as well. Although terms such as "laboratory" and "experimental" are criticized as being mere metaphors, they represent labels for a specific episteme of digital workflows, namely the openness of the scientific process as a tentative search for incremental solutions [8]. A Labs environment is thus meant to be a physical or virtual space for experimentation, for innovation or simply testing something unusual. For research libraries such as the Austrian National Library the traditional core user group are researchers. The creative use of library material for most research libraries is still unusual.

Open Digital Libraries for Creative Use

The Open Glam Labs movement brings together Labs from different cultural heritage institutions sharing the idea of openness. The ONB Labs have followed the pathways of others, especially the British Library Labs, which opened a "treasure trove for creative industries" [9] by forwarding an open content policy. At the ONB-Labs kickoff presentation in 2018 the team invited an audiovisual artist for a performance based on data from the ONB's digital newspaper collection (ANNO) underlining the co-presence of artistic perspectives. In 2020 the ONB/Austrian National Library joined efforts with the National Libraries of the Netherlands (KB) and the Estonian National Library (ENL) for fostering creative usage of library data in the EU-cofunded project "Open Digital Libraries for Creative Use" (ODL) [10].

The project aims for experimenting with formats of collaboration between artists/ art students and library staff and at the same time building a knowledge base to be shared with other libraries. The project includes a work package for artistic experiments, initially meant to be physical exchange residencies for art students. Due to COVID-19 the ONB-Labs decided to go for the format of web residencies. In spring 2021 and 2022 two calls were announced for artistic web residencies. The call offered artists funding for the production of a web based artwork. While for the first web residency artists were invited to select from all datasets available, the Labs team offered a curated selection of newspaper issues from the Wiener Zeitung and aerial photographs from the 1930ies for the second residency. Both residencies were accompanied by an advisor, who also supported the selection.

For the first web residency the artist Rosemary Lee created an endless scroll of countermoving shapes she took from the Austrian National Library's digital postcard collection (AKON) and text snippets related to the phenomenon of crypto art. In the second web residency two young artists produced artworks that although very different in their content share the interest for gestures of web interaction. Sînziana Pǎltineanu took text and image snippets from the Wiener Zeitung in order to construct a multipathed narrative as a "limping walk" over the corridors of the imagined newspaper office. Every click opens a new pathway. The urge of going back by simply pressing the "back" button of the browser remains unfulfilled. The artwork reflects on the explorative gestures of walking and clicking. Ida Westh-Hansen took copies of digital postcards, printed and literally cut out shapes of landscapes and combined them with snippets from her personal image archive. The gesture of the scroll creates new samples randomly. Again, the aesthetic experience gained from interaction with the artwork remains ephemeral, thus outside the archive. Her artwork named "Boon Scrolling" marks a counterpoint to the phenomenon of doom scrolling, by intentionally slowing down the speed of the scroll. Ida's artwork makes aware of the fact that the massive digital archives may have made access to information easier, but quite often substituted doom flipping with doom scrolling.

All three artworks represent artist's perspectives on archives. Since the second half of the twentieth century artists have shown increasing interest in archives and archival order especially [11]. The crossing of institutional archives with personal archives is as much a common topic for artists engaging with archives as much as the dialectics of order and randomness. These artworks touch core topics of the library system. The ONB offers different platforms for exploration of its vast collections. These platforms are mainly designed for information retrieval. In order to offer an aesthetic experience of the artworks created in course of the programs the ONB-Labs team set up a special artspace within the ONB-Labs platform. The aim was to keep the frame of the artspace as simple as possible and let the artworks stand for themselves.

Labs Art Program for Art Students

Regarding a new edition of the ONB-Labs Art Program in 2022, the cooperation with Univ.-Prof. Dr. Irene Posch and Univ-Prof. Mag. Manuela Naveau PhD of the University of the Arts Linz was sought. The starting point for the discussion was an Open Call, which was primarily intended to enable young student positions and approaches to the topic and the new digital collections. Whereas the first two calls were designed as web residencies addressing artists of different genres and different career levels, the target group for the Art Program were students of Austrian art universities and academies. From the perspective of the library it is crucial to search for mediators. The ODL

partner library KB had already run student art programs in collaboration with the KBK Delft [10]. Main learnings that resulted from an exchange meeting among project partners were the challenges of fitting the programs schedule with the students curriculum and the need for introduction to the library materials. Librarians tend to expect users to have sufficient knowledge about the library system, how the library works and how the collections are structured; people not closely familiar with a librarian's work on the other hand often lack basic understanding of the organization, tasks, and data structures involved in (digital) librarian work.

The ONB-Labs team members Martin Krickl and Sophie Hammer therefore decided to run a call among a more specific target group, plan for more exchange and have more guidance especially in the beginning of the course. For the library it is important to learn more about artistic workflows, which differ from workflows in research projects. A challenge to be faced is balancing the need for planning in order to achieve viable outcomes within the limited time frame of the course by giving the artists as much freedom as possible. The ONB-Labs team accounts for bringing the expected outcomes into the ONB-Labs Artspace, a kind of curational act, for which the effort has to be estimated as accurately as possible while taking into account that the production of art does not follow the pattern of linear product development. Although the students were asked to hand in a concept of the artwork, the outcome is not clear at all in the beginning. Therefore the ONB-Labs team together with the two advisors Irene Posch and Manuela Naveau planned for early feedback and guidance on a regular basis.

Digital Library Data as Basis for Artistic Exploration

Four collections were selected for the ONB-Labs Art Program, representing the rich diversity of the ONB's digital collections. Each of the collections consists of different types of media and originally served specific purposes in the fields of media, communication, or in a social context. The required data sets were prepared individually for the selected participants at the beginning of the art program.

The **AKON platform** contains postcards from all parts of the world and is the ONB's postcard portal. From the beginnings of the illustrated postcard at the end of the 19th century to the early 1940s, a total of about 75,000 digitized postcards with topographical image motifs can be found both via the names of the depicted places and by means of navigation via a digital world map. Some of the postcards also contain messages from distant destinations.[12]

The second collection were the historical issues from the **Wiener Zeitung**, one of the oldest newspapers worldwide, which was already provided for the second web residency. The public domain collection contains approximately 34.000 issues published between 1703 and 1882. The fulltext search implemented in the ANNO platform [15] offers a good starting point for the exploration of this vast corpus [16].

Botanical illustrations from the first half of the nineteenth century, made for the former Habsburgian emperor Franz I. (II.) by the court botanical artists Mathias Schmutzer and Johann Jebmayer, were chosen as a third collection [13]. 1.800 digitized gouaches from the Austrian National Library's graphic collections are browsable in the ÖNB Digital [17].

Additionally, the Labs team chose a selection of **travelogues** to the former Ottoman Empire, published in German, English and French between 1501 and 1850. The corpus was set up in the course of a research project about multimodal representations of Ottoman Nature(s) in travel accounts from the Early Modern period to the mid of the Nineteenth century, including full texts as well as many illustrations and maps. The corpus is accessible via the public access catalogue by entering the search term "projectONiT*" [18].

For the Art Program the Labs team decided to offer introductory information about the collections, their structure, history and how to access them. Therefore, a kick-off meeting took place bringing the students together with the advisors and collection experts who provided rich contextual information for a better understanding of the archival material. Though the students are expected to work with digital material only, the experts nevertheless presented physical objects so that the students may also take into account the original materiality of the resources.

For the first step the Labs teams decided to present user interface access points as most usable start for an exploration. The Labs teams also introduced the art students to programming interfaces provided by the ONB, like the IIIF-API SACHA (Simple Access to Cultural Heritage Austria) [14]. What is crucial is to offer technical support from the very beginning of the project. It may have been an option to invite the students to use everything they could get via the APIs, but we agreed on providing individual solutions as the better way to go. The scope of the midterm workshop is to have another feedback loop and to gain a concrete plan for the implementation of the artistic concept from each participant.

Artistic curiosity vs. vast amount of data

All of the final selected artistic positions are characterized on the one hand by a huge amount of curiosity, with which they tried to open up this actually unknown terrain of concentrated knowledge, and on the other hand by a certain feeling of helplessness, because of the vast amount of data and information that is available. In a first step, the advisors and the ONB-Labs team therefore not only had to recognize whether the artistic concepts were feasible in the sense of a conventional assessment such as the quality of the submission, skills for implementation, or budget issues, but also had to recognize the extent to which it would be possible to process the archive and selected collections or parts of it within the projected time frame. In the following we briefly want to introduce the works selected for realisation as part of the program.

Score of visual connection research

Lisa Puchner (AT) comes from the field of sculpture and is a film sound technician and radio producer. In her artistic work, there is a particular focus on the connection between sound and image and the ideas associated with sounds, as well as on working with found structures and everyday materials. As part of the ONB-Labs Art Program, the artist works with the digital collection of postcards from the AKON platform to abstract sound lines. In her words: "In *Horizon Noise* the horizon of postcards sets the tone, the view remains abstract. As the horizon stands for distance, traveling, desires, postcards as well are screens of projections for the idea of a place, staging the view and horizon accordingly. *Horizon Noise* visits and re-imagines different places with help of the horizon pictured on postcards and the acoustic translation of this thin line between earth and sky. Skies and horizons pass by, the missing views of the actual built or natural landscape of the place on the postcards is replaced by the melody of the horizon – or skyline in cities –, sometimes only interrupted by a postcard's frame. Scrolling between mountain and seaside, one can listen to the differences between the horizons' melodies ringing out from a distant, undifferentiated noise as well as between natural and man-made horizons."
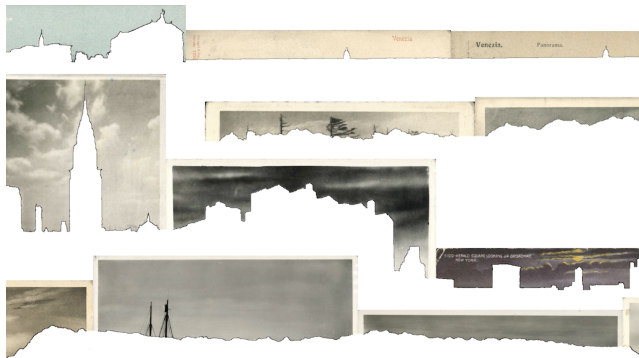
Horizon Noise by Lisa Pucher. Image by the artist.

Archive as memory palace

Katharina Birkmann (DE/AT) works on theories and practices of cross-disciplinarity with focus on moving images, documentary theatre and narrative multimedia installations. As part of the ONB-Labs Art Program she uses the archive of the Botanical Illustrations, ANNO and Postcards, as well as the physical archive space to develop her piece **Blumenstadt Venedig oder die Elektrische Stadt. Exterritorial** (eng: Flower City Venice or The Electric City. Exterritorial). In her words: "Tying memory to places and organizing it spatially is a system with a long tradition. The idea that documents need some kind of accommodation is already reflected in the term archive itself: archeíon ‚office, building'. In contrast to fictional memory architectures, these 'office buildings' hide their fictional as well as fantastic nature behind a facade of neutrality. Virtual archives, by simultaneously "being in space", re-animate hybrid impressions of space, time, memory and knowledge. The Würstelprater and its historical development since 1895, between real places and fictional architectures, introduces concepts and stories of locality, fiction, simulation and virtuality. The potential to make archives spatially experienceable as scripts for storytelling - documentary or fictional - enables experiencing and actualizing history as story."

Blumenstadt Venedig oder die Elektrische Stadt. Exterritorial by Katharina Birkmann. Image by the artist.

Hyperconnectivity

Miguel Rangil (ES/AT) focuses both his research and artistic production on new contemporary strategies to address through art the hybrid condition of the human being and the awareness of the current problems between humanity, technology and nature. Questioning how so-called Artificial Intelligence (AI) will not only affect the way we see, understand and interact in the future, but also how we understand our past, is the basic topic of his work for ONB-Labs Art program. In his words: "Can artificial intelligence be a tool that speaks to us about the essence of things? Can we extract "something" that unifies a heterogeneous dataset? To address these questions, *Hyperconnected Past* uses various image generation and recognition methods based on machine learning (StyleGAN2, Computer Vision) and the digital collections of AKON and Botanical Illustrations, to configure a brief web essay about the essence of the image through a retrospective look into the past."

Hyperconnected Past by Miguel Rangil. Image by the artist.

Statics animated

Valentina Rodríguez Morales (CO/AT) through her creative methodology seeks to reinterpret the archival image in different techniques and media as a study of the

image as a historical object, either as a document of a specific moment or as a node that are repeated in time and allow fictionalizing between different realities and temporalities, opening new possibilities within unconventional narratives and establishing a dialogue between the present and the past. She describes her work ***Echoes of Experience*** in the ONB-Labs Art Program as follows: "This project presents a digital open letter using the Travelogues and AKON archive from the library's digital collection. This work arises primarily from a sentimental relationship with the archive and personal experiences as a migrant. The starting point was the reconfiguration of the collected text for the creation of a new metafictional archive that relates the feeling of foreignness and exoticism linked to the arrival in a new territory, and of course the stereotypes that this entails. The visitor can go through the narration without any specific order and submit oneself to the exercise of empathy and of finding oneself in what is foreign."

Echoes of Experience by Valentina Rodríguez Morales. Image by the artist.

Archiving the In-between

The complexity of our world by no means excludes archives, nor does it stop at them. On the contrary, questions arise whether archives could be understood as a mirror of our world, since they collect important information from the past and present, but contextualize and try to organize it anew in the now. This form of contemporary organization and representation is strongly questioned on the part of the artistic works, and methodologies such as, on the one hand, visual scores or virtual space as a model of order and reference (memory theater). On the other hand, questions about the hyperconnectivity and linking of (moving) information in the archive and beyond (up to and including other forms of archives or data collection) are of importance to and questioned by young artists. For the art students involved, the access to these data sets provides an intriguing provocation to explore interdependencies of notes from the past with current artist interests and contemporary concerns. In this setting, the scientific knowledge base provided by the library and dataset experts as part of the workshops, as well as the artistic guidance by the invited advisors are weaving a net that supports the creative process of art work creation.

Thinking further about these processes of connection is about relationships between people, data, and their spaces. It is about the in-between that represents these connections and gives meaning to the state of being in-between. In the in-between, time and space connect, and data can be "re-located" and thus expressed in new contexts and artworks.

The results from the ONB-Labs Art Program will be presented in the ONB Labs Artspace as part of a finissage, scheduled for May 2023. The Labs team will also organize a webinar and a workshop among library staff members within the Austrian National Library and the Austrian library community in order to encourage other libraries to run art programs as well. The first step definitely is building awareness about the value of artistic use of library archives. We are convinced that project advisors and mediators play a crucial role in connecting library staff with artists or art students, with data, objects and with the respective online and offline spaces and vice versa.

Conclusions

As mentioned at the beginning of this paper: VR technologies and the virtual environment as a space for organizing and displaying archival data have already been tackled by artists and researchers such as Tiago Martins, Christa Sommerer and Laurent Mignonneau [19]. With this research we move on and are questioning not only the virtual space but moreover how contemporary forms of organization and online representation have influence not only on the way the archive can be read but also which new contexts and connections can be found within the data provided. Archiving the In-betweeen, making the in-between readable, connectable, contextable and open for participation in the digital archive realm. The ONB-Labs Artspace in this setting holds the very unique position of making artworks that originate from digitized analog archive data accessible through a digital native platform, and simultaneously growing into a dedicated New Media Art Archive itself.

Acknowledgements

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Authors Biographies

Manuela Naveau, is a university professor of Critical Data/Interface Cultures, an independent curator and an art-based researcher. She worked as curator and project director at Ars Electronica Linz, where she co-developed the Ars Electronica Export department together with Artistic Director Gerfried Stocker and led it operationally since its inception. Since 2020, Manuela Naveau has been university professor for Critical Data at the Interface Cultures Department at the University of Arts Linz. She has held teaching positions at the Paris Lodron University in Salzburg, the Danube University Krems among others and was invited as a guest professor at the Technical University in Vienna (Future.Lab 2021). Her monograph "Crowd and Art - Kunst und Partizipation im Internet" was published in 2017 by Transcript Verlag, Germany. Manuela Naveau is an advisor within the ONB-Labs Art Program.

Irene Posch is a researcher and artist with a background in media and computer science and Professor of Design & Technology at the University of Arts Linz. Her work explores the integration of technological development into the fields of art and craft, and vice versa, and social, cultural, technical and aesthetic implications thereof. Her research and practice has been presented internationally at conferences and museums, among them the ZKM Karlsruhe (DE), V&A London (UK), Ars Electronica Linz (AT), Loboratore Arte Alameda Mexico City (MX), Biennale International Design St. Etienne (FR), Works Gallery San Jose (US), Istanbul Design Biennial and the MAK Vienna (AT). Irene Posch is an advisor within the ONB-Labs Art Program.

Martin Krickl, is a research data librarian and project manager for the Austrian National Library's Labs at the department Research and Dataservices. He worked as a metadata librarian in the department for old books as well as in a research project on historical travelogues (Travelogues - Perceptions of the Other, 2018-2021). He studied German and Italian literature at the University of Vienna. He is author/co-author of papers related to classification of library documents by means of Machine Learning or the phenomenon of objets trouvés in books. Martin Krickl is part of the ONB-Labs team and initiator/organizer of the ONB-Labs Art Program.

Sophie Hammer is developer at the Department Research and Dataservices. She mainly works in frontend development and is responsible for the implementation of the ONB Labs Art Space. She studied comparative literature at University of Vienna and sculpture at the Academy of Fine Arts Vienna. Sophie Hammer is part of the ONB-Labs team and co-initiator/organiser of the ONB-Labs Art Program.