

Data Circulation between Archives and Citizen Science: Case of Budapest100

A Best Practice Guide

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Content

I. Executive Summary
II. Role of civic activity in the collection of knowledge and preservation of the built heritage
II.1. Budapest100, an architectural-cultural festival and a celebration of communities7
II.2. Definition of citizen science in Budapest1008
II.3. The role of research and the archival material relevant for Budapest10011
II.4. Training and motivation of volunteers12
III. Cooperation between BCA and KÉK/Budapest10013
III.1. Evolution of the cooperation between KÉK/Budapest100 and BCA14
III.2. Detailed description of cooperation:14
IV. Archiving and publishing of the digital content created by volunteer researchers of Budapest100
IV.1 Concept and issues of long-term archiving of citizen science products26
IV.2. Transfer of the data and digital content into OAIS-bases preservation system27
IV.3. Archival description and metadata. Problems of searchability, findability and accessibility
V. Transferability of the method and potential for adaptation and reuse



I. Executive Summary

The main objectives of the *City memories: visualizing change in three European capitals* project are to develop new ways of serving demands and usages for historical building drawings preserved in archival collections, in order to make them more available, well interpretable and enjoyable for different kinds of users. By developing innovative methods for interpretation, communication and presentation of building drawings, the City Archives of Stockholm, Copenhagen and Budapest contribute to the CULTURE strand Objective 2-Innovation: to enhance the capacity of European cultural and creative sectors. In the project, innovation is understood in a broad way and includes the development and experimentation of new practices and/or new models, also transfer and dissemination of good practices. In the project archive professionals and researchers to learn from each other, but also from their audiences and stakeholders. City Archives of Stockholm, Copenhagen and Budapest work with different target groups using different methodologies, but with an overall outside-in perspective on the collections and a focus on how to serve the needs of users.

The Budapest City Archives (BCA) built on the already well-established cooperations in pilot projects with the Ybl Miklós Architectural Faculty of Óbuda University (ÓE YBL) in the framework of which digitized plans are used in the training of 3D Digital Modelling of Historic Buildings and also with the Hungarian Contemporary Architecture Centre (KÉK) which is the main organizer of Budapest100, a yearly recurring urban community festival of built heritage, an integral part of which are archival research (a special form of citizen science) as well as the usage and presentation of the drawings in on-site public events.

City Memories gave the opportunity and incentive to reflect on the methodology of cooperations with these two highly different types of user groups in a systematic way, analyse and summarize the tracks of user scenarios and the potentials embedded in the outcome products. Owing to this analysis it became apparent that both projects are occurrences of the same phenomenon from the Archive's point of view, which phenomenon can be labelled as "Data Circulation".



Thanks to digitization archives provide massive amounts of data and documents to different user groups. Some of these usage projects result in new databases, publications, digital reconstructions, newly created digital content and various types of metadata. These results and products can be reused or repurposed, that's why it is a recently occurrent task to build up tracks for acquiring them into the archival holdings and making them accessible and reusable for other stakeholders. This sort of Data Circulation is a new way of enriching and exploiting archival material specific to the digital age.

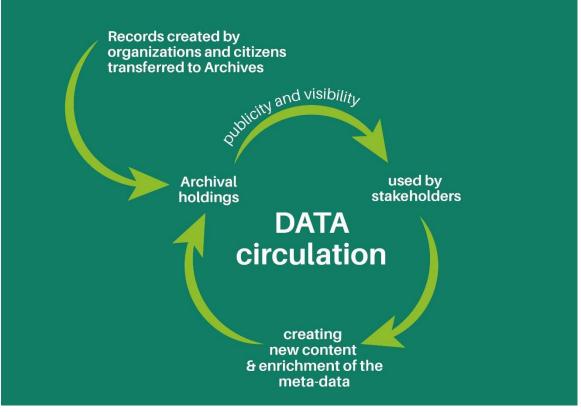


Fig. 1.

Model of Data Circulation at Budapest City Archives

In this Best Practice Guide we present and explain the cooperation between BCA and KÉK in Budapest100 as a case study of Data Circulation. This being a new and experimental way of usage of archival drawings, lots of questions arose, and in the following we are elaborating on the ones we regarded most important for transferring the findings for future cooperations.



To make this kind of cooperation mutually fruitful for archives and users it's of paramount importance to understand in detail the needs, questions and working methods of the specific user group and the hurdles which make the use and interpretation of archival material difficult. That's why we describe the cooperation process and work of Budapest100 with the drawings in detail.

The working methods of the specific user groups have great impact on the features of new digital contents created by these projects which are purposed to archival acquisition and reuse. The concept of citizen science is applied in a somewhat "unorthodox" way in Budapest100. The research volunteers often come from research-oriented university backgrounds, such as studying architecture or art history so they can be regarded in Archives as a kind of "expert users". While they may not yet be skilled in archival research, research itself is part of their education. Additionally, Budapest100 operates offline, not using mobile applications or the internet as platforms or tools for citizen science. Instead, it provides on-site, analogue, and offline guidance for volunteers to collect and analyse data in archives. Citizen scientists are encouraged to finalize their findings, create summaries, and publish the results in the form of data sheets on the festival's website. While the result may not be a peer-reviewed academic paper and quality assurance is crucial, the outreach is quite significant.

The elements and structure of the new digital content – house data sheets and photo documentation of the recent condition of the buildings – requires special examination. It can't be merely regarded as new representation of "originals" and it is quite different from the outcomes of standard record creation processes. That's why we describe in detail the decisions made by the BCA on archiving house data sheets and photo documentation of the recent condition of the buildings created by "citizen scientists" in Budapest100. The main goal is to preserve the content guaranteeing authenticity, interpretability, accessibility and reusability. Imagery and publication should be approached as by-products, which at the same time needs to be regarded as important tools to strengthen the BCA's role in



collaborative knowledge construction through alternative learning experiences and increased social cohesion.



II. Role of civic activity in the collection of knowledge and preservation of the built heritage

II.1. Budapest100, an architectural-cultural festival and a celebration of communities

Budapest100 is a weekend of open houses celebrating the communities, the city itself, and the built and intangible heritage of Budapest. It has been one of the most successful civic urban festivals in Budapest, highlighting the everyday values around us and bringing residents, neighbours, and generations closer together. The program was launched in 2011 as an initiative of the Blinken OSA Archivum and the Hungarian Contemporary Architecture Centre (KÉK), aiming to celebrate the 100th anniversary of various houses around Budapest. Since 2016, the focus has shifted to different themes or geographical units, and even to jubilees or significant decades or architecture. Over the 13 years of practice and evidence-based experience, the festival has opened more than 650 buildings in Budapest with the help of over 2,200 volunteers, attracting more than 160,000 visitors.

The main method has developed over the years while the original goal remained: to showcase the buildings from basement to attic, connect with residents, listen to their stories, and catalyze the formation of new communities. "Every single building is interesting and important" is the timeless motto of the festival. The two-day event is co-organized by local residents and a group of volunteers to broadcast the values of the built environment and the significance of micro-communities in an urban setting.

The broader mission of Budapest100 is to inspire the reform of co-existence by strengthening residential communities and to take action against urban social isolation by using cultural heritage and the built environment as tools. The primary driving force was to change the relationship between the city and its residents through civic engagement and to celebrate the built environment in a nonconventional way. This idea in its simplicity came from the lead historian of OSA, whose character and proactiveness has laid the foundation of the festival.

Over the course of festivals through experience and learning by doing the mission of the Budapest100 evolved and enriched gradually yet organically based on the discovered needs and niches. Since the festival proved its success new challenges, methodological approaches and problem areas emerged resulting in a more complex mission.

In other words the essence of Budapest100 is to encourage residents to literally open their buildings' doors to visitors, to team up with neighbors, organize programs in their backyard, and share their stories with other locals who become tourists of their neighborhood or city for a weekend. Ideally, residents are motivated to start a dialogue about how to make their neighborhoods better places, becoming more responsible citizens who are willing to shape their micro-surroundings to foster urban regeneration and revival.

A grassroots initiative like Budapest100 activates both emotional and factual elements, combining historical research with storytelling, emotional engagement, and place identity with architectural data and spatial planning. Research is a critical element of Budapest100, with a dual aim: to uncover unknown or lesser-known information about the buildings of Budapest



and share it with the public, while also creating more personal relationships between the buildings and their residents.

Volunteering is just as important in the initiative as the built environment and its communities. Budapest100 is a platform for transgenerational meetings since the volunteer group is very diverse in terms of age and profession. Volunteers can choose to conduct architectural or art historical background research or participate in field activities like program organizing and resident engagement while team leaders as mentors coordinate them throughout the processes yet reassure their significant freedom for realising their own ideas and research.

Since the beginning, the core partner in the research has been the Budapest City Archives, where assigned volunteers can access and process data following a protocol developed over the years, initially through learning by doing and later through conscious process design. A detailed description of the structure and composition of the volunteer program, as well as the role and type of research conducted by volunteers, will be presented later in the text.

The easiest way to achieve social mobilization is by creating emotional engagement, supported by facts and research findings, exploring hidden treasures, and sharing personal histories and urban stories. Overall, it can be concluded that the original idea is very simple and it has been proven to work in different European contexts and territorial settings as well: volunteers work together with residents under coordinated guidance to make the built environment accessible and available, disseminate local heritage, and build communities through intercultural, transgenerational, and intersectoral dialogue and exchanges.

II.2. Definition of citizen science in Budapest100

Over the years, Budapest100 has embraced the concept of citizen science long before it became recognized in qualitative research and non-natural science fields. This approach has evolved organically, and citizen science has become an integral part of our method. In the early years of the festival, we developed a system where volunteers conducted research in collaboration with the Budapest City Archives, as briefly described above. Our practice of working with volunteers was not initially inspired by the theoretical notion of citizen science. Instead, our practice-based approach informed our theoretical framework, allowing us to incorporate the emerging concept of citizen science into our work.

The term "citizen science" originated in the mid-1990s and was first mentioned by Alan Irwin, who defined it as science that serves the interests of citizens while involving them in scientific activities. Richard Booney further described citizen science as scientific projects where "amateurs" contribute observational data to scientists, gaining new scientific skills in return and creating a reciprocal exchange, a "two-way street". This traditional and historical definition of citizen science has evolved over the decades, with new expressions like community science emerging to reflect slight shifts in focus.



Typically, citizen science is data-centered and contributes to big data, originally applied in the natural sciences. Over the past three decades, it has become a more widespread and recognized way of engaging the public in gathering significant quantitative data. Although even small and medium-scale citizen science projects can be resource and technology-intensive, they offer an exceptional way to democratize science. As citizen science has become accepted and expected in the scientific community, criticisms have arisen regarding exploitation, authorship, and data-driven approaches.

In the context of Budapest100, the following citation is crucial as it highlights a post-citizen science or community science approach that involves qualitative research beyond mere data collection, acknowledged authorship, and a participatory process: "... citizen science projects can become more meaningful and useful to both professional scientists and citizen scientists by developing research that is important to citizen scientists, by identifying citizen scientists' motivations for participating, by identifying citizen scientists' priorities for the research outputs, *by engaging and respecting citizen scientists' expertise and local knowledge*, and by iteratively incorporating citizen scientists' insights into the project."¹

Budapest100's profile is already unorthodox for a citizen science project, which is frequently applied in biological or environmental projects, though the built environment can also be a target. In Budapest100, volunteers, referred to as researcher volunteers, are personally or professionally motivated to contribute. The unique structure of the volunteers, their naming and the role of research in Budapest100 will be explained in detail later. As Damon M. Hall states and it is perfectly applicable for the situation in Budapest100: "Citizen science projects are relational. The quality of the data improves with reciprocity — when the community gets something meaningful from participating. Citizen scientists choose to volunteer their time because a project is meaningful to them in some way."² They are involved in the feedback loop of the scientific process and conduct their own research, resulting in defined outputs. Based on the level and type of involvement, the definition of citizen science varies.

To capture the perception of citizen science in Budapest100, it is crucial to distinguish its unique characteristics: "...the fundamental and simplest definition characterizes it as scientific research conducted in whole or in part by members of the broader public, typically amateur non-professional scientists. Participants collect, share, analyze, or transcribe data and observations [...], generally utilizing mobile applications and the internet. Citizen science is also known as community science [...], or simply public participation in scientific research. Citizen science participants have the opportunity to participate in various aspects of the

¹ Damon M Hall, Pedro M Avellaneda-Lopez, Darren L Ficklin, Jason H Knouft, Christopher Lowry. (2024).Citizen silence: Missed opportunities in citizen science.BioScience, Vol. 74(5), 319–321. <u>https://doi.org/10.1093/biosci/biae020</u> (Access 07.07.2024)
² Ibid.



scientific process, including formulating research questions, collecting data, analyzing information, making conclusions, and sharing findings."³

For the Budapest100 architectural-cultural festival, the definition of non-professional scientists does not always apply. The research volunteers often come from research-oriented university backgrounds, such as studying architecture or art history. While they may not yet be skilled in archival research, research itself is part of their education. In other words the research volunteers / citizen scientist are expert but not professional users of archival databases. Additionally, Budapest100 operates offline, not using mobile applications or the internet as platforms or tools for citizen science. Instead, it provides on-site, analog, and offline guidance for volunteers to collect and analyze data in archives. Citizen scientists are encouraged to finalize their findings, create summaries, and publish the results in the form of data sheets on the festival's website. While the end result may not be a peer-reviewed academic paper, the outreach is significant due to the festival's popularity and its undeniable impact on both residents and researchers through the collected and revealed information about specific buildings or neighborhoods. For quality assurance, research coordinators, who are active researchers, verify the outputs before publishing.

In the article "Dark Citizen Science," Riley and Mason-Wilkes discuss the exploitation of citizen science, noting: "Citizen science is personal. Participation is contingent on the citizens' connection to a topic or to interpersonal relationships meaningful to them. By virtue of their interests and experience within their local environments, citizen scientists have expertise that, if engaged, can improve research methods and product design decisions. To boost the value of scientific outputs to society and participants, citizen-science research teams should rethink how they engage and value volunteers".⁴

Regarding the Budapest100 festival, personal and emotional engagement is key for both residents and volunteers, categories that often overlap. The research process and methodology of the initiative follow the principles of participatory action research, where volunteer scientists contribute to designing the research methodology and creating step-by-step guidance for future participants in cooperation with the Budapest City Archives. When a participating resident is also eager to conduct research, their local expertise becomes indispensable, resulting in tangible insights for the research findings.

Citizen science in collaboration with libraries has already been explored, but the potential for collaboration with archives is a relatively unique endeavor, despite its parallels and cross-references to libraries. "Libraries play a role in handling and preserving research data and metadata, enabling the organization, skills, and collaboration necessary for citizen science".⁵

³ Mumelaš, Dolores, and Alisa Martek. (2024). "Benefits of Citizen Science for Libraries"

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⁴ Riley, J., & Mason-Wilkes, W. (2024). Dark citizen science. Public Understanding of Science, Vol. 33(2), 142-157. <u>https://doi.org/10.1177/09636625231203470</u>

⁵ Mumelaš, Dolores, and Alisa Martek. (2024). "Benefits of Citizen Science for Libraries"

PublicationsV Vol. 12, no. 1: 8. https://doi.org/10.3390/publications12010008



The following points made for library projects can also apply to archives (1)"With the help of citizen science, libraries could enrich their collections and make them more accessible (2)Libraries have the potential to take a leading role in citizen science (3) involvement my contribute to collaborative knowledge construction through alternative learning experiences and increased social cohesion (4) external benefits include the library's impact on the broader community, partnerships with other organizations, attracting new users, and creating visibility in the media".⁶

In the case of Budapest100, citizen science is more akin to post-community science, providing a ready-made framework for research, clear instructions, prior education, and training for citizen scientists / research volunteers, combined with people management and nurturing the motivation of the volunteer scientists. "...with prior education and clear instructions, [citizen scientists] can swiftly and effectively supplement and enhance, for example, digitized collections by participating in their description and tagging. In addition to raising awareness about the sources and collections the library possesses, citizen scientists also assist in the execution of library processes"⁷. Post-community science means the concept of citizen science has transcended citizen science based on its community and process participatory nature turned towards community science but has gone beyond that by creating a mentoring system and a guiding framework for volunteering researchers / research volunteers.

Overall, Budapest100 has a unique understanding of citizen science. It focuses on qualitative data over quantitative data, does not rely on technology for data collection, involves research volunteers with preliminary qualifications, and includes them in the process design. The emphasis is on the structured and guided nature of contribution, providing step-by-step instructions to help volunteer citizen scientists navigate archives, find relevant information, analyze it, and publish their findings. This approach equips participants with useful research skills and keeps them motivated.

II.3. The role of research and the archival material relevant for Budapest100

Since the festival originated in a building with a vastly interesting history and it was initiated by the employees of an archival institution, it was only natural that the history of the participating buildings would be an integral part of the event. There are many neighborhood festivals and even open house festivals around the world, but the specialty of Budapest100 comes from the method of combining building history, volunteering and community engagement.

By encouraging and showing volunteers and visitors ways to get to know their neighborhood better, they build connections to both its past and its present. Through the stories of past and current inhabitants, they gain a better understanding of a neighborhood's atmosphere and character, and its connections to larger events in our country's and even world history.

⁶ Ibid.

⁷ Ibid.



Discovering a neighborhood or a building with a microhistorical approach gives us a more personal perspective and instantly makes it more relatable.

People are always proud to showcase their city's spectacular monuments; however, Budapest100 also aims to feature buildings that may not be in the best condition or may be lacking in architectural value, but could be brought back to their former glory with careful renovation or should be preserved because of their historical value. The conducted research also serves as a tool to support these discussions and initiatives.

The research materials available open source on the Budapest100 website (https://budapest100.hu/en/ contribute to a shared knowledge society and preserving the collective memory connected to built heritage. The Budapest100 website functions as the main dissemination tool, a constantly growing community-managed archive that collects photos, general information, architectural and art historical research and socio-cultural aspects of participating buildings.

Since the volunteers come from different backgrounds, the texts are varied in detail and quality, but the aim remains to teach professional research methods to anyone interested. Over 13 years, volunteers have created data sheets of more than 3,000 buildings with basic metadata of which more than 600 contain more or less detailed text illustrated with photos also taken by volunteers. Besides searching on the website, visitors can also browse the data sheets on a map, and the buildings are also listed by the year they participated in the program.

The changing themes of the event has provided different challenges for the research process each year, and in many cases, organizers and volunteers were dealing with buildings that haven't really been published anywhere before. The BCA's collections of building plans have been a key source of essential information in these cases, and even if a well-known building is being researched, research coordinators always encourage volunteers to go back to these primary sources. In many cases, they have been able to correct or amend often incorrectly published data. Since a building's history is inherently connected to the people who built it and lived in it, various other documents are also used by the volunteers to gather a more personal insight into a house's story. A vast amount of notarial deeds, flat data sheets and land registers from the BCA has been digitized and published on the Hungaricana Cultural Heritage Portal in recent years, making it widely accessible.

II.4. Training and motivation of volunteers

Budapest100 relies heavily on the dedication of its volunteers to carry out research (and other tasks essential for a successful implementation). Success of volunteer-driven research is ensured through the mutual confidence that is built up during the process and a handful of other key elements.

Volunteers not only contribute valuable research but also acquire new knowledge and skills in the process. Therefore they receive comprehensive training that equips them with essential skills for conducting research – mostly in architectural, social and cultural topics. The training



is designed to be both engaging and informative, increasing confidence and the feeling of preparedness in the volunteers. It covers a wide range of topics, including archival research methods, online research methods, data collection techniques, and effective communication with residents and stakeholders. The festival uses various methods for training such as lectures, workshops, walking tours, etc. The whole training process takes about four months and focuses on enhancing the volunteers' research capabilities and developing a greater appreciation and knowledge of the city's built heritage. This educational aspect is highly motivating, as volunteers take pride in their personal growth and the contributions they make to the festival.

In addition a significant incentive for volunteers is the unique opportunity to visit buildings and sites that are typically not open even during the festival. This exclusive access serves as a powerful motivator, as everyone is eager to explore and learn about these hidden stories.

Through collaborative efforts, volunteers build relationships with residents, fellow researchers, and festival organizers, fostering a strong sense of community and shared purpose. This sense of belonging and teamwork enhances the overall experience. Recognizing that some volunteers may be less socially inclined, Budapest100 addresses this problem by organizing volunteers into groups and providing opportunities to overcome their difficulties. This group dynamic helps to balance the differences of in situ and desk research components. Coordinators play a crucial role in guiding and supporting volunteers, ensuring that everyone contributes effectively and discover the tasks that suit them to gain a fulfilling experience. They provide continuous feedback, facilitate communication, and encourage collaboration among team members. This supportive and structured environment ensures that even less socially active volunteers can produce high-quality research material enriched with citizen science content.

This of course, takes a lot of time and dedication, and as is, it is highly important to draw a clear schedule in the beginning that is feasible for everyone. There are four informative meetings held by the project leaders that address all volunteers, but in the meantime smaller groups meet regularly, about four times during the preparation, organized by zones, lead by zone coordinators. Among these meetings thematical workshops are organized specifically dedicated for each task area, including research. (See Fig. 5-6. pp. 32–33)

III. Cooperation between BCA and KÉK/Budapest100

How has Data Circulation (see I. Executive Summary) influenced archival practices, and what are its implications for future collaborations?

In the case of Budapest100, a pioneer in collaboration, it was discovered that their achievements present new opportunities. One outcome of their research process is the creation of house data sheets. These sheets feature a metadata which may be harvested for Archival Information System (AIS) and contain detailed texts that capture the essence of documents, along with additional sources and photos depicting the current state of buildings. These factors collectively led to the belief that preserving these datasheets would mutually benefit both parties, fostering what can be termed as Data Circulation. (see above Fig.1.)



III.1. Evolution of the cooperation between KÉK/Budapest100 and BCA

A substantive cooperation has developed through the years between Budapest100 and the BCA. The cooperation is manyfold, and it took almost a decade to develop.

One of the main challenges that the parties have to deal with is the relatively high number of volunteers (in total, cca. 120–200 volunteers participate each year of which cca. 50 volunteers do research primarily). At the beginning there were less volunteer researchers and many of them were somewhat trained in architecture history, so the need for organized research was not as essential as in the following years when the program became more and more popular, embracing volunteers from all walks of life. In the first years of the festival, each volunteer could take on the research of 3-4 buildings at a time, visiting libraries, the BCA and other public collections as well as using the available online resources. However, in the past ten years, the amount of digitized source materials have vastly increased which is both a blessing and a bit of a burden. The fact that it's readily available online and volunteers do not necessarily have to comb through seemingly endless streams of information. This results in much more detailed data sheets, but it also means that each volunteer usually has the capacity to research a maximum of 1-2 buildings due to this abundance in available data.

We observed over the years that there is a high number of returning researchers of Budapest100. We also realized that the groups and their needs (requests for documents) should get organized, so that the common workflow becomes predictable. Following a closer monitoring and coordination of the work process, the BCA managed to gain a better understanding of the end product, i.e., the research materials that are partially based on the archival records. In the case of Budapest100 these end results are made accessible on the project's website and become the so-called "house data sheets" (see II.3) Besides the BCA's materials, various other sources and documents are compiled in the data sheets, which partly contributed to the realisation that these digital-born documents are not only using/processing the BCA's materials, but adding value to it. Another valuable addition of Budapest100 that the present state of the buildings is shown by photo documentation. The BCA came to the conclusion that these data sheets would be a valuable addition to their collections, so they started to develop ideas on how to preserve them in their archival system.

Archiving, publishing and resharing this type of material cand expand the work conducted by the research volunteers of Budapest100 whom we could also call citizen scientists. In this whole process, the BCA's materials become part of a Data Circulation course and they "return" to the archive in a different, "upgraded" form, and then they can be forwarded again.

III.2. Detailed description of cooperation:

III.2.1. Decision on the theme and focus of the yearly Budapest100 festival

In the beginning, from 2011 to 2015 the list of houses each year consisted of hundred-year-old buildings in Budapest. Due to the outbreak of World War I and the following years of economic



decline, from the mid-1910s hardly any new buildings were built in Budapest. For this reason, in 2016 the Budapest100 team was not able to target enough 100-year-old houses, so they started to think in terms of thematic years. Each year, around 2-300 houses are invited and 50-60 participate in the event.

Each year a decision is made by the Budapest100 team, consisting of the curators of KÉK, as well as various experts, volunteer coordinators, photographers and researchers, who come together to decide on the theme of the following year. They do not select buildings based on their historical significance, aesthetic value, or their current condition, but rather choose a theme and try to open as many houses as possible from different urban areas, thus showcasing a variety of neighborhoods and aesthetics. The decision is easily made when there is a memorable event or anniversary, but it is always important to address and respond to current architectural and urban issues, thus linking Budapest100 to the other programs of KÉK as well. It is alwow they are available for research, so that they can reach out to the collections and archives who they are already in a good relationship with, like the BCA, or more recently, the <u>Construction Documentation and Information Center</u>.

III2.2. Compilation of the preliminary list of houses

The compilation of each year's list of invited buildings is coordinated by the appointed research leader with the help of other team members and invited experts in order to ensure that none of the relevant buildings related to the annual theme are left out. The process is determined by the extent to which a particular period or area has been researched and published, the amount of information available about it, and the extent to which we need to turn to primary sources, i.e. archival material, for basic information such as the identity of the architect, the exact date of construction or the various alterations that shaped the building.

In this preliminary research phase, the team primarily gathers information available in online databases and media, books and various publications, social media and even thematic blogs as well as field research, i.e. walking around the city and coming by buildings that seem to fit our theme. The Budapest100 team usually reaches out to the BCA in cases where there is very limited available information on a building in the aforementioned sources and we want to confirm whether we can include the house in question in the preliminary list.

Providing collaborative document sharing and editing, the list of houses is collected in a Google sheet, together with the basic data and any additional information that comes up during the preliminary research. The list is then shared with the volunteers during the organization process as a base as well as the BCA.

The main challenge in the early years of dealing with 100-year-old houses was that there were not really any summary books that specifically covered buildings by year. Traditional architectural historiography is based on architectural styles, biographies, an area (city, district, etc.), or a major historical period. Although quite well researched, the 1910s is not a clearly separable period, and there was a mixture of styles at that time, so a large number of publications and plans had to be consulted to compile the list. When we were dealing with



certain areas (the Grand Boulevard, the quays, the squares, or the Buda Castle District), the research team started from the addresses and had to collect the basic information related to them (e.g. date of construction, name of the architect, etc.), so the process was reversed in that way. In 2023 we celebrated the 150th anniversary of the unification of Pest, Buda and Óbuda. This year was special in the sense that the pre-1873 building plans from the Budapest City Archives are fully available digitally on Hungaricana, making preliminary research much easier.

III.2.3. Communication and invitation of buildings

The communication and invitation process of buildings to participate in Budapest100 is a simple and well-structured community-driven process that contains the following key stages. The announcement of the festival's theme is followed by an open call for volunteers who are eager to participate and take on tasks of research, photo documentation and program organization. The four-months-long volunteer training starts in the beginning of January, providing participants with the necessary skills and knowledge to effectively contribute to the festival. The volunteers' first task is reaching out to buildings. This outreach involves going out to the field, delivering flyers to their postboxes, and engaging directly with residents to invite them to participate. In addition to this direct approach, there is also an open call for houses on the festival's website, encouraging anyone with knowledge of a potential Budapest100 house to get in touch with the organizers.

Besides the residential buildings that are invited by the volunteers, institutions occupying public buildings are invited by the project leaders, who later on dedicate these buildings to volunteers if they are willing to participate. This ensures a focused and personalized approach to involving significant and representative buildings and institutions.

In February, a first residential meeting is held to discuss participation details with residents and gather preliminary information which is crucial to gain trust. This meeting is an essential step in building relationships and securing commitments from building owners and residents. Then the research phase – described earlier – takes place (usually from February to May), during which volunteers conduct in-depth research on the buildings that join the festival. Beyond the direct invitations, the festival's website serves as a continuous communication platform, inviting ongoing input from the public about potential Budapest100 houses and additional information to the research. This open channel ensures that the festival remains inclusive and responsive to community contributions.

III.2.4. Finalization of the list of open houses and program planning

Finalizing the list of open houses for Budapest100 begins with the volunteers as described in the previous chapter. Engagement with residents is a key aspect of the process as they are the ones deciding on participation. Although initial turnout at the first meetings may be very modest, they serve as valuable platforms for addressing residents' inquiries and generating



enthusiasm for the event. To ensure effective coordination and communication, project leaders establish a simple centralized tracking system. This system includes a detailed Google sheet where updates, contact information, and the participation status of each house are recorded by volunteers and coordinators.

Respect for residents' comfort and involvement levels is highlighted throughout the process. While participation in Budapest100 is encouraged, no resident is obliged to take part if they feel uncomfortable by being "in the spotlight". However, it's crucial to emphasize the importance of aligning with the festival's requirements, such as opening their homes (i.e., their courtyard, garden, or any shared space in a house, and not their personal living spaces aka their apartments) to the public hosting programs. Once the houses confirm their participation, volunteers specializing in research and program organization dedicate their skills to organize a successful event, engage as many residents as possible, present their research and collect the residents' stories in addition to their findings. Volunteers and residents are encouraged to reflect on the history of the building which can not only be inspired by architectural features, but the persons and miscellaneous events connected to the building as well. The simplest form of doing this is creating a quiz or a scavenger hunt (often suitable for children as well) through the building history exhibitions, but the occupation of previous dwellers can also serve as a base for such programs. One of the most successful examples of this was when volunteers built a cycling obstacle course for visitors (with a small prize in the end) in the courtyard of a residential building that used to house a cycling school at the turn of the 19th century. Since another aim of the program is to showcase present residents, they are also encouraged to present their hobbies, collections, and interests. As the deadline for program submissions approaches, typically set for mid-March, project leaders use an online form to collect program details submitted usually by volunteers, and employees in the case of institutions. This streamlined process helps in organizing and standardizing submissions, ensuring that all necessary information is gathered for publication on the Budapest100 website and in a printed program booklet.

The final list of open houses comprises those that have confirmed their participation and submitted their programs. These are the buildings, usually 50-60 in number, that are researched in detail by the volunteers including their construction history, as well as the stories of former and current residents.

III.2.5. Preparation of research and training of the volunteers

The volunteer program of Budapest100 started as a wide group of friends and acquaintances (historians, art historians, architects, urbanists, cultural managers etc.) who were all interested in urban history and Budapest's architecture in one way or another. In the first year, this small group almost naturally snowballed into the sufficient working group responsible for research and program organizing as well as building and event photography. Since the majority of researchers were professionals or university students from fields related to architecture history



and urban studies, they were mostly familiar with the workings of archives as well as the appropriate source materials.

From 2012, in order the ensure a sufficient number of volunteers and open the opportunity to as many people as possible, the organizers have been posting an open call where anyone can apply for the different tasks. Each year, around 200 people from widely different backgrounds apply, and around 120 of them remain until the realization of the event. The application process typically starts at the end of December, during which candidates complete an online questionnaire that includes both general and task-specific questions, e.g. volunteers who apply for photo-documenting buildings are asked to upload a portfolio. When the application form closes a few days before the first volunteer meeting, the applications are exported to a Google sheet and organizers have a few days to review them and, if they cannot accommodate someone, let them know in good time.

During the application process, research volunteers are asked to send a short text from their previous work as reference which can be a paper, a thesis, an article or any other material that shows their ability to provide a coherent text, which is essential for a better quality result. If one does not meet the expectations, the team offers them to participate in more suitable tasks.

While the volunteers responsible for organizing the programs have to possess or learn mainly soft skills such as approaching strangers, communicating with communities or finding creative solutions for the realization of their ideas, the researchers clearly needed more specific methodological training, especially when it came to research in the BCA. Volunteers are provided each year with at least two research methodology workshops, and a written research guide which includes a list of useful sources (books, periodicals, databases, library and museum collections, etc.) and tips as well as format guidelines. From 2016, a more conscious approach was embraced to enhance the quality of the research materials by providing a more detailed content and format guideline including the format of citations. Additionally, they can participate in thematic lectures by experts of the annual topic. Since 2022, urban walks by architects and city historians have been added to the training program where volunteers can not only gain knowledge about the year's theme, but also learn professional presentation skills from experts.



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Helyszínbejárás - a ház KÍVÜLRŐL

- hány emeletes a ház?
- sarokház? zártsorú beépítésben áll?
- lábazat: kő? tégla? más anyag? milyen színű? vajon eredeti?
- falak: vakolt? tégla? kváderkő? höbörcsös vakolat?
- **kapu:** fa? fém? díszes? eredeti? üvegbetétes? rács van rajta? kovácsoltvas? milyen motívumok láthatók rajta?
- **ablakok**: eredeti? fa? műanyag? eredeti osztások megvannak? kőkeretes? milyen az ablakszemöldök?
- erkély (ha van): kő? kovácsoltvas? öntöttvas?
- díszítmények: szobrok, stukkók, domborművek, mozaik, majolika, zászlótartó, kandeláber, vas stb.
- párkány: díszes? hangsúlyos? profilozott?
- tető: magas? lapos? cserép? tetőtérbeépítés van-e?

Fig. 3.

Two slides from the research guides provided for the volunteers. One offers links to usfeul sources, while the other poses inspiring questions for the content of the building descriptions

Since the research of building plans are an essential part of the program and they are usually the least known sources for volunteers, they are provided with an introduction into the general



structure and content of the BCA's collections as well as an in-depth introduction on how to interpret the plans and on the kind of information they can gather from them so those can be included in the final data sheets. Although each building drawing is different, every year we are choosing typical examples to show the practical analysis of the ones that the volunteers are going to encounter during their research. We are showing them the invaluable information that they can find in the plans and related documents about the phases of construction with dates and names, including the architect, the original owner, the contractor as well as craftsmen and engineers. Additionally, apartment layouts and sizes are an indicator of the social classes that the apartments were intended for. Besides the building plans, volunteers are encouraged to look up as many information about the former residents of the houses as they can which can be their name, their occupation, their family history, etc. Many of such information can be found online in the digitized notarial deeds, flat data sheets and land registers, or the address books that were provided for the Hungaricana platform by the Metropolitan Ervin Szabó Library. Besides plans, monument protection documentations are also available in the BCA's collections, providing further insight into a building's history.

A unique part of research is the oral history documentation. Although many residents share their stories during the organization process, there are even more who only participate during the weekend events and start talking about their memories then. It's quite tricky to record these stories, but volunteers are more than eager to collect and add them to the traditionally collected data. Based on the local laws and regulations, oral consent is sufficient to share these stories, but it is important to note that it may defer so it is highly suggested to check local rules in case of adaptation. Participation in the program and publicity is at the discretion of the participants, and the organisers cannot be held responsible for any information shared in personal stories.

Volunteers are entrusted with gathering all of this information and compiling a written data sheet complete with citations as per the data sheet template. They are asked to send the final material to the research coordinators for fact-checking and proofreading, and also share it with their fellow volunteers as well as the residents.

III.2.6. Organization of research in the BCA

The coordinators of Budapest100 paid attention to deliver research guides to their volunteers from almost the beginnings. During workshops and also in written guidelines they demonstrate the use of the Archival Information System and online services and databases to help those who might never have visited an archive before. Although that provided plenty of help for the volunteers, inviting colleagues from the BCA to present their institution and archival system turned out to be more efficient and exciting to the volunteers. So from 2017, the BCA's archivists have been visiting KÉK's office to do presentations and in the last two years (2023 & 2024) the group of volunteer researchers have been visiting the Archives even before they started their research. They were presented with the collections in theory and also physically: the BCA offered the chance to take a look behind the scenes and visit the repositories in person.



Now they have an insight about the whole process the BCA's inner workflow and the complex processes of delivering archival materials to the researchers.

Thanks to this immersive and detailed training, volunteers are turning into well-trained, experienced researchers, who can work independently using the BCA's online databases, and sending the requests for the documents they need. These experienced research volunteers can easily analyse the building drawings and gather relevant information from them. They are confident and critical in their handling of different sources, and they produce rich research materials which are also enjoyable to read for the wider public.

The BCA and KÉK have signed a framework agreement in 2021 about their joint contribution to set up important details, e.g. the time frame and structure (schedule) of the research process, the appointed colleagues who coordinate workflow from both sides as well as the format and deadline of submitting the materials to the BCA. In order to assign a manageable workload to the colleagues of the Archives, the agreement also contains that volunteers can select max. 5 drawings per building each year to digitise for exhibition and other presentation purposes at the event. Volunteers are obliged to credit the drawings to the BCA in exhibition labels or texts. In return for the copies, KÉK transfers the compiled research materials – which encompass historical descriptions and data sheets of houses as well as photo documentation – to the BCA, that become digital data entries among the Archives' records.

This kind of agreement did not exist before 2021 which caused many challenges and issues, especially timewise in the process of the research and the realization of the event. Since this agreement has been settled, the research workflow is much more fluid and efficient. The initial framework agreement, however, didn't specify the digital data format, metadata structure and transfer workflow in detail. It has been worked out in City Memories project.

III.2.7. Use of drawings in Budapest100 events

The researcher volunteers of Budapest100 flock to the BCA each spring to gather knowledge about the participating houses. Their primary aim is to gain reliable information on the owner, designer, and builder of a certain house from the original building plans; however, the research process often includes other archival materials besides plans, e.g. official documents, photos, heritage protection documentation etc. The volunteers are additionally deepening their knowledge and familiarity with the archival world.

On the one hand, volunteers usually use the copies as part of the building history exhibitions on the weekend of Budapest100; on the other, they are also a great visual aid for guided tours, revealing the smallest details about the houses. Exhibitions are realized by the volunteers and the building's residents/current users, so they range from small-scale posters hung on a clothesline to grandiose displays. Primarily, it's institutions who invest more in fancier installations; but it also happened in recent years that the descendants of the former owners or residents have put considerable effort as well as their own money into the design and realization of exhibitions. As the main organizer of the event, the project managers of KÉK responsible



for the festival help the volunteers by collecting the list of required drawings, which they send to the BCA, and then they print the received digital copies in A3 size. We have established this exchange to present high-quality copies of the plans to visitors which showcase the professional excellence of the BCA and raise awareness of the importance of their work in preserving Budapest's built heritage.

The plans are important because in many cases they contain not only names but provide information on the original layout of apartments, or even show features that were never built. The small inscriptions and notes on them are especially informative about the original intent of the architect regarding the layout and the decoration, as well as the social status of the presumed inhabitants. In many cases, drawings are a delight to look at thanks to their artistic quality.

Moreover, they also encourage not only professional discussions, but new discoveries through storytelling with the current residents. One typical example of this is how buildings have been transformed over the years compared to the original plans. What are stables in a courtyard on a plan, are now apartments. The layout of smaller apartments now make sense that residents see the original plan of the large and lavish ones which were divided due to housing shortage. A level or even a whole facade that does not quite fit with the rest in its ornamentation (or lack, thereof) turns out to be built decades after the original construction. These are all phenomena that are quite well-known to architecture historians, but they represent something much more personal when one is talking about them with the actual users of a building.

III.2.8. Harvesting the digital content created by volunteers

Upon completion of the research, volunteers submit the research materials in digital format to the research coordinators using the previously provided format guideline and data sheet template. The research team then fact-checks and proofreads these materials to ensure the accuracy and relevance of the collected information. Subsequently, the materials are linked to the data in the compiled list of houses and the photographic documentation. All these resources are disseminated via the Budapest100 website, which serves as an open-access database and a public platform. The database can be filtered by various criteria (architect, date of construction, location, etc.) and browsed on a map or as a list. As previously outlined, research is conducted on each participating house, and the content generated for the BCA by Budapest100 is provided accordingly. In rare instances, the research material does not meet the minimum requirements and cannot be submitted to the BCA. These materials require thorough revision before being uploaded to the Budapest100 website.

Involving volunteer researchers from Budapest100 and utilizing the data circulation provided by this project has offered the BCA a novel approach to presenting their material and collecting new digital assets and metadata.













Kutatás Programok Rólunk Korábbi évek Csatlakozz! Kapcsolat En



100

Akácfa utca 15-23. [BKV székház] irodaépület

Nyitott ház @2021

↑ ↓ 0/4 Tartalom Adatok és leírás Források Ez történt a házbar Házak a közelben

Adatok és leírás



1926 óta ebből az ötemeletes, neobarokk stílusú épületegyüttesből irányítják a főváros közösségi közlekedését. Eredetileg a Budapest Székesfővárosi Közlekedési Részvénytársaság – a köznyelvben csak Beszkárt – székháza volt, majd az 1968-ban létrejött BKV Zrt. örökölte meg. Főbejáratát a főváros címere "koronázza". Itt működik Budapest egyik utolsó, díszes páternosztere, mely a mai napig nagy népszerűségnek örvend.

A Beszkárt székház egy több Iroda-, műhelyépületből és garázsból álló épületegyüttes, amely 1926-ban épült a Budapest Székesfőváros Közlekedési Rt. megbízásából, akiknek ugyanezen évtől van a tulajdonában a budapesti tömegközlekedés. Az épületet a vállalat magasépítési osztálya, az utcai homlokatot és a belső berendezést pedig Wälder Gyula tervezte. A neobarokk stílusú épület kivtelezése ifj. Waller József irányításával történt. A székházat az építése óta többször is átalakították az elmúlt évtizedek alatt, illetve megannyiszor hozzáépítéttek, valamint modernizálták.[1] Itt található a főváros kevés fennálló páternosztere közül az egyik.





House data sheet from the website of Budapest100

III.2.9. Preparation for transfer to BCA

Although the structure of the transferred materials is very similar, it required synchronization which involved more steps than initially expected. The AIS of the BCA has been finely tuned over the past decades, based on the needs of the archives' colleagues and scientific researchers. Consequently, the metadata structure of the material provided by Budapest100 needed adjustment to align with it. The transferred material comprises two parts: the metadata structure



in a spreadsheet and the digital content consisting of house data sheets (PDF) and photographs of the current state of the buildings (JPEG). The structure of the metadata sets and the data fields required comparison and alignment.

KORTÁRS (FEITÉSZETI KÖZPONT	
Kerület	L
Mai cím	Úri utca 45.
Másodlagos cím	nincs
Építés éve	14-15. század; 1699; 1740-es évek; 1932; 1961-1962; 2003
Épület funkciója	intézmény
Kivitelező	nem ismert
Mai helyrajzi szám	6649
Építtető	nem ismert; Kaspar Schuster; Fortunato di Prati (?); Zwack Jánosné; CD Hungary Zrt.
Tervező	nem ismert; nem ismert; nem ismert; Szepessy Sándor; Lipták Irén; Ferdinánd Árpád - Ferdinánd Csaba
Kutató	Tóth Judit
Fotós	Polinszky Tibor; Láng Vilmos; Polgár Ádám

Az épület története

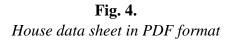
Az Úri utca 45. szám alatti neobarokk lakóház jó állapotával, kellemes arányaival, különleges homlokzatával a Budai Várnegyed hangulatosabbnál hangulatosabb házai közül is kitűnik. A környék és a ház is az átlagosnál többet kutatott, emiatt nemcsak szakirodalma gazdag, de lakóinak köszönhetően érdekes történetekben is bővelkedik.

A Budai Várnegyed egyik legrégebbi (a középkorban Mindszent utcaként ismert)¹ és leghosszabb utcájában álló egyemeletes épület két kisebb középkori, feltehetőleg 14. századi ház maradványainak felhasználásával épült. Érdekessége a lépcsős homlokzat, mely az eredeti középkori elrendezést őrzi,2 a telek többi határvonala azonban eltér a középkoritól: feltételezések szerint az udvar déli felében kelet-nyugati irányban futó 80-90 cm-es kőfal lehetett ugyanis a középkori telekhatár, mely alatt a keleti részen a pince is folytatódik.

A ház régészeti kutatásai során a középkori vakolaton festett kváderes díszítés nyomait fedeztek föl, emeletén és földszintjén feltártak egy-egy csúcsíves nyílást, a déli részében pedig középkori pincenyílást.4 A lakóház előtt, az Úri utca régészeti ásatása során kb. 1 méteres mélységben 13.

¹ Végh András: Buda I. kötet, 1686-ig. Magyar Várostörténeti atlasz 4. Budapesti Történeti Múzeum, Pázmány Péter Katolikus Egyetem Bölcsészet: és Társadalomtudományi Kar Régészeti Tanszék, Budapest, 2015. p. 38. [link] (A nér az utca középe táján elhelyezkedő Mindenszentek kápolnától ered.)
² Végh András: Úr utca 45. A budai vár online adatbázig [link]
³ Zádor Judit: Budapest I., Úri utca 45. Régészeti kutatások Magyarországon 2004. Dr. Varga Kálmán, Budapest, 2004. p. 190

183. * Bertalan Vilmosné: Budapest I., Úri utca 45. Az 1960. év régészeti kutatásai. Régészeti füzetek 14. Dr. Fülep Ferenc, Budapest, 1960. p. 63.





The method of the arrangement is the following: The materials of each house constitute an independent/separate unit of description (item) structured as follows:

HU_BFL_XV_44_2023_001

HU_BFL_ fonds number_year_ ordinal number

"Year" in this case means the year when a certain house participated in the event and the research was conducted.

Ordinal number in the format of "001", e.g. the reference code of the first house from the year of 2023 will be XV-_44_2023_001.

The houses within a year should be listed by districts and within those by the addresses (alphabetical order of the street names).

Each year after the event of Budapest100 the coordinators deliver the materials of the participating houses. The data sheet contains the following data set:

- Year
- Ordinal Number
- District
- Present address (street name and number)
- Secondary address (in the case of corner houses or passage houses)
- GPS coordinate
- Time period with comments:

In case the datasheet and the images weren't created in the same year (so the photos don't reflect the state of the house in that particular year) it can be indicated here.

- Year of construction (also including the dates of significant modifications or reconstructions)
- Function of the building
- Contractor
- Current lot number
- Client
- Architect



- Photo: *number of photos*
- Technical parameters: format, number and size of files
- Researcher
- Photographer

The digital content of each house should be organised in a separate folder under the main folders by year. The folders of the houses should be named after the ordinal number of the house. Folders should include the .pdf data sheets and the photos in .jpg format.

The folder system should be organized as follows:

IV. Archiving and publishing of the digital content created by volunteer researchers of Budapest100

IV.1 Concept and issues of long-term archiving of citizen science products

The task of arrangement and long-term preservation of the Budapest100 building documentations as archival records requires defining their position in archival order, and the description of them according to the principle of provenance and the rules of multilevel description. They constitute an independent collection of e-born records, within which the



individual house data sheets and photos are related to the architectural drawings upon which they are based (ISAD(G) 3.5.3.).⁸

The research materials of Budapest100 are arranged as a Collection on fonds level, within which the materials of each year's program constitute an archival series, within which the documentation of one house is an item (exclusively digital – house data sheets in PDF and photos in .jpg format).

Archival description on collection and series level should contain information on the project and the order and process of transfer to BCA, on item level the metadata delivered by KÉK on individual houses The potential users of this collection are informed in a disclaimer at the end of the data sheets that the materials are products of community-based research. The evaluation and reuse of such data requires enhanced caution, even when they are factchecked and proofread by the experts of the organizing team. As public archives BCA is not responsible for the quality of the content of the records and documents it preserves, but it is responsible to include into the description all facts and circumstances which are important for the user to evaluate it.

IV.2. Transfer of the data and digital content into OAIS-bases preservation system

BCA preserves digital records in a digital repository system which is managed by Preservica Digital Preservation software, compliant with Reference Model for an Open Archives Information System (OAIS).⁹ Preservica requires a workflow the first phase of which is transformation of the digital asset and metadata into Submission Information Package (SIP) according to OAIS, ingest into the Preservica system, where it is connected to the archival structure from the Archival Information System (AIS), so the archival description can be created by transferring the metadata into AIS.

As mentioned above, digital content is organized in a folder structure of year/house in .pdf and .jpg format. Metadata are encoded for ingesting and storage by Encoded Archival Description (EAD) 2002. The following EAD elements are used to describe one item:

<unitid>HU BFL XXV_44_2023_0001 – [Reference code_ Year of Creation – No.]

<unittitle> - Documentation created in Budapest100 project + [Adress]

<unitdate> year of creation of the documentation

<scopecontent> function of the building, architect's name, builder's name, contractor's

name, year(s) when it was built or rebuilt, researcher, photographer

<note> files (number and format); number of photos

<addressline> property plot number; adress; geocoordinates

⁸ ISAD(G) International Standard of Archival Description <u>https://www.ica.org/resource/isadg-general-international-standard-archival-description-second-edition/</u>

⁹ Reference Model For an Open Archival Information System (OAIS) <u>http://www.oais.info/</u>



<userestrict> information on copyright and proprietary issues
 <relatedmaterial> reference code of the related original archival material

IV.3. Archival description and metadata. Problems of searchability, findability and accessibility

Digital content and metadata are published in different forms via the Archival Information System, the Hungaricana Cultural Heritage Portal, the Budapest Time Machine etc. Providing searchability and findability, the metadata in AIS are crucial. They are synchronized from the Preservica digital repository system. Digital content is usable without direct licencing from BCA and KÉK in accordance with CC BY-NC-ND rules. A wide spectrum of user groups gains access to these holdings, which gives rise to the appearance of different stakeholders, generating inspiring new ways of contribution . The cooperation with them results in the creation of new content and metadata which should be integrated back into the archival system. We may call it data/document circulation. How can the archive allow these new connections to influence our system and inspire to develop?

Beyond making individual building documentations accessible via AIS, they are suitable also for integrating into (H)GIS systems, as the records contain geolocation data. A relatively new but rapidly developing family of these systems is "Time Machine" which is a brand of a Europe-wide international initiative aiming to develop the *Big Data of the Past*, creating a huge and widely distributed digital information system.¹⁰ Local Time Machines are representations of the collected Big Data of the Past of a certain place, created by the sum of information provided by different projects and initiatives connected to this place. Budapest Time Machine is a part of this initiative coordinated by the Time Machine Organization BCA being a member of TMO. Budapest Time Machin Online Platform¹¹ can be regarded as a searching for archival data and new generation of archival databases which allows digitized records based not only on "traditional" keywords and data fields, but by navigating on interactive historical maps and finding the sources related to a certain site (building, building plot, address, public place) by one click. By publishing Budapest100 documentations (building data sheets and photos) on the **Budapest Time Machine online** platform in visualized format, they can be connected easily with other sources related to the same building (e.g. scanned drawings, land registers, flat data sheets, notarial records, postcards and photos).

¹⁰ <u>https://www.timemachine.eu/</u>

¹¹ https://www.hungaricana.hu/en/databases/budapest-time-machine/?



V. Transferability of the method and potential for adaptation and reuse

In 2018, Budapest100 was selected as one of the hundred good practices in Europe by the URBACT Programme – Integrated Urban Development EU. This recognition expanded the initiative to a European level through the Come-in Transfer Network (2019–2021). Since then, other EU-related programs, such as Cultural Heritage in Action (2021), have praised the initiative. It also served as a methodological basis for adaptations outside Budapest in the DANUrB and DANUrB+ Interreg consortium (2018–2022) as well as KÉK's contribution to the European Capital of Culture Veszprém in 2023. Moreover, Budapest100 was awarded the European Heritage Award / Europa Nostra Award in 2023.

The festival, along with its methods and know-how, has shown significant potential for transferability in regional and international settings, targeting various towns, cities, and challenges across Europe. This unique and attractively simple program owes much of its success to its professional partners, including the Budapest City Archives. Although the adaptation and transfer have primarily focused on the framework, process design, principles, and initial idea, the organized research, inter-institutional collaboration, training, and coordination of research volunteers or citizen scientists have not yet been subjects of transfer and adaptation.

Thus, the present Best Practice Guide aims to fill this gap by promoting viable and processable intersections between citizens and research data. It also highlights the ready-made framework for on-site research for non-professional researchers and the valuable intersectoral collaboration between an NGO and an archive.

There is a high potential for adapting the best practice developed jointly by the Hungarian Contemporary Architecture Centre and the Budapest City Archives, even without adapting the Budapest100 festival itself. The know-how, templates, and processes created through this collaboration can be adapted independently. However, using this guide as part of a transferred framework is even more powerful and promising. Given Budapest100's proven compatibility with different settings and contexts, it is conceivable to take a 2-in-1 approach, adapting the architectural-cultural festival to a local context while also transferring the established procedure for citizen science coordination.

The festival of open houses, with its detailed principles, is a low-key event with an open-source but flexible method available for adaptation and transfer. The complexity of Budapest100 has evolved significantly over the years. Thirteen years ago, we began as a small yet charming initiative with limited resources and modest outcomes. It is important to view our achievements not as a daunting benchmark, but as an inspiration. Rather than trying to replicate our scale, we encourage adaptation that fits your own context and resources.

The step-by-step recommendations for reuse are as follows:

1. Team up: The authenticity of the initiative lies in its grassroots nature, so an NGO, foundation, group of enthusiastic individuals, or urbanist association should team up with a



public institution like a library or archives, ideally seeking support from the local municipality. Intention is the first step.

2. Define: Establish the common interest and potential benefits of the cooperation. Ensure that the knowledge gained is beneficial for both the archives and the local NGO. Clarify the goals and missions collectively at the beginning.

3. Start small and frame the theme: The theme can vary based on the local context. Architectural areas, districts, neighborhoods, or green environments can all be central themes. Addressing a few houses or a smaller quarter as a first attempt is recommended. Choose a beloved theme with easily available data or a controversial theme to capture the interest of professionals and residents alike.

4. Choose the shortlist for buildings: This step is crucial as it defines the research scope and where residents will be involved.

5. Recruit volunteers: Open to all professions, ages, and backgrounds. Design the recruitment journey carefully and be prepared to maintain motivation levels.

6. Adapt the practice guide for the local setting: Create datasheets, train volunteers, and execute templates and visual guides to enable citizens to conduct research.

7. Plan the communication: Visibility is crucial for attracting visitors. Use built environment and research data as attention-grabbing content.

8. Design and realize programs: Encourage volunteers to exhibit data extracted from the research through drawings, facts, and fun facts.

9. Storytelling: Collect and archive urban stories from locals and residents. These stories can be related to the buildings or personal and cultural history.

10. Iterate and finetune: Tailor the festival to the local context after the first attempt, refining both the festival realization and the cooperation with the archives.

Besides the package-like transfer, a few recommendations or dilemmas should be considered in potential reuse. The list is not exhaustive, as various situations may arise during the process that cannot be anticipated. Solutions will depend on local cultural protocols and practices.

Firstly the place of storytelling and cultural history in collaboration with archives. Urban stories and cultural history are attractive to citizens and visitors. However, finding the most feasible way to collect, categorize, and maintain these stories is challenging, considering factual accuracy, authorship, personal rights, and ethics. International examples like the <u>Canterbury</u> <u>Story Project</u> from Sydney and <u>Soundtrails</u> from Australia highlight successful models of collecting and archiving personal stories. These projects often involve libraries for legitimacy and professionalism, though they come with complications and concerns due to the nature of storytelling. The nature of storytelling is not something to be solved, but to be considered carefully. Information and stories that emerge should be approached with caution by external readers. Our responsibility is to communicate this caution, while readers need to internalize and remain mindful of the specificities of the genre.



Quality assurance is another critical aspect. In the original citizen science model, Budapest100 researcher volunteers enter the archives to collect, analyze data, and write summary texts. These texts need to be reviewed and fact-checked, a resource-intensive activity that cannot be automated. Solutions and limitations are included in the process described above.

Depending on the geographical location and actual trends the perception of volunteering culture can vary. Critical approaches can emerge if the benefits of volunteering are not clearly communicated. So the post-capitalist non-monetary benefits from volunteering (know-how, portfolio elements, common good, self-realisation) should be listed and the difference between volunteering and internships clearly communicated.

Finally, the direction of citizen science involves turning personal contributions into common goods. In such collaborations, individuals may have private collections of photos and documents related to a given era or location. Processing these materials as part of the common goods (with consent) allows citizens to be both scientists and subject owners, expanding the boundaries between private and common. This is not a challenge per se but it is encouraged to be mindful about the changing boundaries.



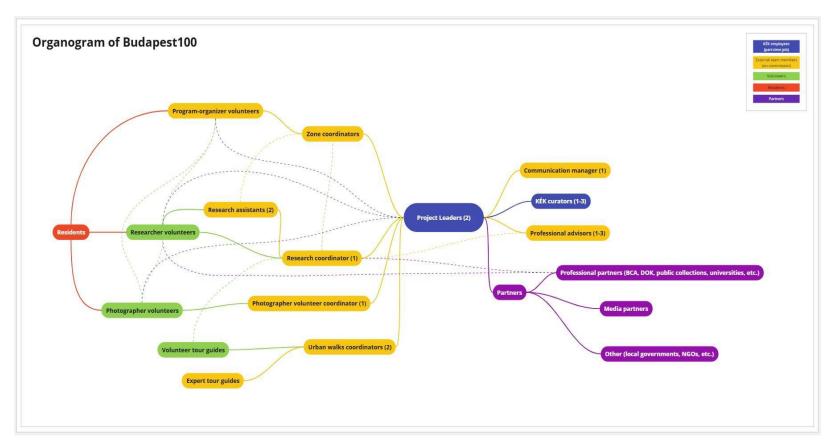


Fig. 5. Organogram of Budapest100





Fig. 6. Timeline of Budapest100 organization