Saving Ukrainian Cultural Heritage Online and the Mission to Preserve Digital Cultural Heritage

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Abstract

This paper provides a brief preliminary examination of lessons learned by the Saving Ukrainian Cultural Heritage Online (SUCHO) initiative through its first year of work from March 2022 through March 2023. I will discuss the foundation of our work by grounding it in the importance of Ukraine's cultural heritage before outlining the initiative's efforts to web-archive Ukrainian cultural heritage websites, fundraise for Ukrainian cultural heritage organizations, and develop educational materials.

Key words: Ukraine, cultural heritage, SUCHO (Saving Ukrainian Cultural Heritage Online), museums, digital initiatives.

Ukrainian Cultural Heritage

News outlets across the globe have regularly covered the widespread and intentional destruction of tangible Ukrainian cultural heritage by Russian forces since the beginning of the invasion. UNESCO has verified damage to 253 sites between 24 February 2022 and 26 April 2023.[1] Moreover, 570 potential cultural war crimes have been reported to the Ministry of Culture and Information Policy of Ukraine as of 25 January 2023.[2] As former UNESCO director general Irina Bokova wrote in a 2012 op-ed for the *New York Times*, 'culture is not hit as collateral damage. Culture stands on the frontline of conflicts, deliberately targeted to fuel hatred and block reconciliation. This is why we must start seeing cultural heritage as an international security issue' (Bokova 2012). This has not changed in the intervening decade, and in the case of Ukraine we have watched in real time and seen that the deliberate destruction of tangible cultural heritage includes – but is clearly not limited to – monuments, memorials, and historic buildings. Also targeted are locations such as museums, galleries, libraries, and archives, which not only collect and care for tangible heritage, but also serve as locations where intangible heritage is studied, performed, and created. The destruction created by the war is intended to threaten the foundations of the Ukrainian nation-state by undermining the narrative which unites the Ukrainian people under a common national identity, as Ukrainian rather than Russian.

As Myroslav Shkandrij summarizes, according to Putin's narrative 'Ukraine does not have its own history but must view itself within the framework of Russian history, within a story describing the expansion of the Russian state, and development of the Russian language and culture'. In this way, the Kremlin views 'any identification with a completely different historical account […] as dangerous nationalism' (Shkandrij 2017: 125). Cultural heritage, in its role as a form of cultural memory, crafts and supports collective cultural identity.[3] Veysel Apaydin argues that because memory is also 'accumulated through time and space' and is a 'performance of everyday engagement by people', it 'cannot exist over a long period of time and through generations without heritage' (Apaydin 2020: 24). The destruction of heritage

inevitably leads to a loss of cultural memory. This allows the aggressor to re-write history with a narrative that portrays its own actions in a positive light.

Although this article will not discuss in depth the impact of the Russian assault on intangible heritage during or preceding this conflict, the concept of cultural memory as a performance plays an integral part of both intangible and tangible cultural heritage. We see this illustrated in European memory laws that attempt to control historical narratives, providing not only negative directives regarding what cannot be discussed, portrayed or memorialized, but also positive directives regarding the proper way to understand historical events. Russian memory laws and practices have, unsurprisingly, had a direct effect upon the current conflict.[4] This is particularly evident in Russian rhetoric relating to the alleged Ukrainian threat to ethnic Russians in Ukraine, which is complicated by understandings of identity, ethnicity, nationality, and native language.[5] Ilya Nuzov discusses how, in a speech made following the invasion of Crimea, Putin remarked that 'it [the invasion] was a legitimate reaction to Ukraine's persistent attempts to deprive Russians in Crimea of their "historical memory," subjecting them to "forced assimilation"' (Nuzov 2017:134).[6] This claim highlights the way that Russia views Ukrainian heritage as distinct from Russian heritage. At the same time, it illustrates Russia's deliberate effort to deprive Ukrainians of their own historical memory.

Introduction to SUCHO

In response to these circumstances, Saving Ukrainian Cultural Heritage Online (SUCHO)[7] was launched on 1 March 2022 by Anna Kijas, Quinn Dombrowski, and Sebastian Majstorovic, with the goal of web-archiving Ukrainian cultural heritage websites threatened by the full-scale invasion that had begun in February.[8] Server damage, power outages, and financial concerns continue to threaten these websites, which contain culturally significant digital content and related information. SUCHO volunteers have therefore archived over 5,000 cultural heritage websites, including more than 50 terabytes of locally stored data that amount to more than 3,700 WACZ (Web Archive Collection Zipped) files, which are zipped containers of WARC (Web ARChive) files and associated metadata. These WACZ files are created by using web-archiving software and browser-based tools to crawl websites; these read through the site's constituent pages and produce a stable copy of the stored content as an external file that is then stored on SUCHO's servers. Volunteers are currently creating a dataset that includes the host organizations of the websites that have been archived. The project merges research with information obtained from Wikidata to create searchable metadata that can be displayed via the WACZ files. The host organizations range from state universities to art galleries, from local history centers to public libraries. Among them are institutions that have been looted, closed, re-located, or destroyed: the Donetsk Academic Regional Drama Theater was destroyed in March 2022;[9] the National Literary Memorial Museum of H.S. Skovoroda was destroyed in May 2022;[10] and the Kherson Regional Art Museum, named after Oleksiy Shovkunenko, was looted in November 2022.[11]

The SUCHO initiative moved into Phase Two in the summer of 2022. Its new goals may be summarized as to 'curate, donate, educate.' Specifically, SUCHO aims to curate materials in need of preservation and dissemination. Volunteers have begun curating items from the web-archived sites to share in the Exploring Ukrainian Cultural Heritage Online gallery,[12] as well as collecting memes about the war from social media platforms[13] for a specially designed Meme Wall.[14] The gallery provides access to the website where each item originated, either as a direct link if the site is available, or as a link to the corresponding web-archived file. This allows users to explore a wide variety of Ukrainian cultural heritage organizations. The Meme Wall provides access to the archived memes, which, as extremely ephemeral pieces of information, would otherwise quickly disappear from public view. Search and filter functionality is built into the platform to make the large volume of memes navigable for users. The content included in the Exploring Ukrainian Cultural Heritage Online Gallery and Meme Wall serve as educational materials, providing access to resources that might otherwise be unavailable or difficult to find for users who do not read Ukrainian or Russian.

SUCHO's educational and curatorial activities directly influence the third aspect of the Phase Two goals: 'donate.' SUCHO draws attention to the needs of cultural organizations and

forms partnerships with many of them. Through SUCHO, potential donors are able to learn about Ukrainian cultural heritage and develop an interest in supporting it. After contributing, they can see the direct impact of their support by virtue of SUCHO's financial transparency and social media posts. As a result, SUCHO has raised more than €183,000 to purchase and ship equipment[15] to organizations in need of support. Donated equipment ranges from power banks for library operations and patron use, to computers, digital cameras and book scanners, all used to preserve items digitally and make them more accessible. A notable example is the partnership between SUCHO, the San Jose State University School of Information, and the Cherkasy Regional Library named after Taras Shevchenko. SJSU and SUCHO raised funds for desktop computers, laptops, a digital camera setup, hard drives, power banks, and a book scanner, all to be sent to Cherkasy. The equipment supports the library's daily operations and new digitization efforts.[16] SUCHO has many other partners who contribute to the initiative in a variety of ways[17], such as the Bavarian State Library in Munich, Germany, which funds a staff position for a displaced Ukrainian citizen to contribute to SUCHO projects on a full-time basis.

Lessons for Galleries, Libraries, Archives and Museums (GLAMs)

SUCHO's model could be described as a 'semi-custodial' stewardship. We host the web-archived files on our servers with the understanding that the data is not ours and will be repatriated to its home organization as soon as possible. Moreover, initial observations from SUCHO's work underscore the fragility of websites hosted by galleries, libraries, archives, and museums, which often contain unique expressions or documentation of cultural heritage. Reports issued by the Parliamentary Assembly of the Council of Europe (PACE) committee, which describe the destruction of cultural heritage in Croatia and Bosnia and Herzegovina during the 1990s, emphasize the 'importance of integrating support for the cultural heritage into traditional humanitarian aid and the importance of emergency assistance before the conflict end[s]' (Walasek 2020: 17). SUCHO demonstrates that this emergency support must include web-based cultural heritage as well as tangible cultural heritage.

SUCHO's Phase One work has primarily taken place in the realm of digital preservation, where we have focused on preserving web-based cultural heritage as previously discussed. However, through our efforts to support institutions in Ukraine, we are now also working to support their endeavors to embrace digitization as a means of preservation. Such an approach is critical, as it ensures a form of continued access to lost or destroyed physical heritage. For example, images of tangible cultural heritage and information about the objects represented can be used in cooperation with agencies such as INTERPOL to identify, trace, and repatriate looted goods.[18] Photographs, three-dimensional tours, and videos act as digital surrogates for physical objects and activities that may be, or already have been, destroyed during the war. All of these digital materials, however, must be supported by a robust preservation strategy. Digital material does not exist in perpetuity but naturally degrades over time, even if it does not suffer from the myriad methods of destruction that are consequences of war. Digital preservation protects data integrity and ensures that threats like obsolescence do not prevent future access to the material. For websites, this means creating copies through web-scraping and conducting digital preservation activities on those copies. Waiting to see whether physical objects will be destroyed before engaging in digital preservation is not advisable because there may be little if any time in which to act. In many cases, we may not know for years whether the physical objects represented by digital surrogates have survived or where they have ended up if moved or looted; the digital surrogates will undoubtedly need care during that time and cannot be disregarded.

Multiple forms of cultural heritage may be lost without digitization and subsequent digital preservation. Data loss must be considered a type of damage; although it is obviously less tangible and less immediately noticeable than physical obliteration, its destruction can still have a deep impact on the continued transmission of heritage.[19] Culturally significant materials hosted on a single website may be irrevocably lost if that website suffers data breaches or disruptions, or if it goes entirely offline. A robust digital preservation practice involves the 'Lots of Copies Keep Stuff Safe' (LOCKSS) principle and the geographic dispersion of those copies,[20] which is typically considered in the context of mitigating loss from natural disasters

but is particularly important when conflict occurs in a specific geographic area. SUCHO has been able to support organizations lacking the resources to achieve this level of protection for their digital assets.

The fact that SUCHO is not centered in any one area of the GLAM field means that the lessons it has learned and is still learning are widely applicable. The 1,000 plus volunteers participating in the SUCHO initiative represent more than thirty-eight countries. Moreover, they bring expertise ranging from the humanities to library science and information technology, making invaluable contributions of their time. The majority of SUCHO volunteers do not speak Ukrainian and use English to communicate in their work with the initiative. This does not reduce the importance of presenting content in its original language, particularly when metadata is added in English. It does, however, mean that the task is more difficult, and the creation of English content is outpacing the addition of Ukrainian-language content. To address this issue, SUCHO is forming new partnerships with Ukrainian organizations and bolstering existing partnerships, such as its relationships with the Cherkasy Regional Library and the Bavarian State Library.

Conclusion

There is no apolitical way to approach this work, and GLAM organizations conducting similar activities need to anchor their practice in this understanding. The very decision to preserve Ukrainian cultural heritage is a political statement, since, as we have already discussed, cultural heritage shapes a sense of community and strengthens the argument for the existence of the Ukrainian nation-state. Preserving Ukrainian cultural heritage necessitates a belief that Ukrainian cultural heritage exists and is inherently valuable in its own right as the expression of an independent historical narrative. The materials that SUCHO strives to preserve and make available help to sustain the transmission of digital cultural heritage among Ukrainian communities. In addition, the organization's efforts encourage non-Ukrainians to learn about the nation's distinct cultural heritage and to develop an intellectual and financial interest in supporting Ukraine's independence.

In the first year of its existence, SUCHO has demonstrated the value of collecting and preserving digital content because of its fragility and impact on the transmission of cultural heritage. Simultaneously, it has established the political value of preserving and providing access to digital cultural heritage when GLAM organizations are under serious threat. And finally, it has developed a model for how an online, decentralized GLAM initiative can support peer organizations on their own terms in times of crisis and conflict.

Notes

1 'Damaged Cultural Sites in Ukraine Verified by UNESCO', UNESCO 23 January 2023. https://www.unesco.org/en/articles/damaged-cultural-sites-ukraine-verified-unesco, accessed 29 January 2023.

2 'Recorded War Crimes', Ministry of Culture and Information Policy of Ukraine. https://mkip.notion. site/e9a4dfe6aa284de38673efedbe147b51?v=f43ac8780f2543a18f5c8f45afdce5f7, accessed 29 January 2023. See also 'Evidence of Russian Aggression and War Crimes', Ministry of Culture and Information Policy of Ukraine. https://war-evidence.mkip.gov.ua/, accessed 28 April 2023.

3 For further discussion of this point, see Assmann (2008).

4 Ukrainian memory laws have had their own effect, especially regarding the Euromaidan protests that began in November 2013, but a discussion of this topic is outside the scope

of this paper.

5 For a discussion of the concept of identity through a linguistic and ethnic lens, see Filevska and Blyzinsky's article in this issue, as well as Arel (2017 - 2018) and Csernicskó and Fedinec (2016).

6 See also Nuzov (2022) for a more specific discussion of memory laws.

7 Saving Ukrainian Cultural Heritage Online, SUCHO. https://www.sucho.org/, accessed 26 January 2023.

8 For an in-depth examination SUCHO's work, see Sebastian Majstorovic, 'Collaborative Preservation of Cultural Heritage: Saving Ukrainian Cultural Heritage Online (SUCHO)', Europeana: Making Digital Culture Count 29 September 2022. https://www.youtube.com/watch?v=fFcsU79DnZs, accessed 12 June 2023. For a briefer overview, see Jolicoeur et al. (2022).

9 For more information about the destruction of the Donetsk Academic Regional Drama Theater, see 'Донецький академічний обласний драматичний театр' ['Donetsk Academic State Drama Theater'], Ukrainian Institute. https://ui.org.ua/postcard/doneczkyj-akademichnyj-oblasnyj-dramatychnyj-teatr/, accessed 28 April 2023. See also 'Ukraine: Deadly Mariupol Theatre Strike "A Clear War Crime" by Russian Forces', Amnesty International 30 June 2022. https://www.amnesty.org/en/latest/news/2022/06/ukraine-deadly-mariupol-theatre-strike-a-clear-war-crime-by-russian-forces-new-investigation/, accessed 9 July 2022.

10 For more information about the destruction of the National Literary Memorial Museum of H.S. Skovoroda, see 'Skovoroda Museum Destroyed in Fire Caused by Russia's Missile Strike', Kyiv Post 7 May 2022. https://www.kyivpost.com/post/7803, accessed 28 April 2023.

11 For more information about the looting of the damaged Kherson Art Museum, see 'Take a Look at the Unique Paintings Russia Looted from the Kherson Art Museum', Euromaidan Press 27 January 2023. https://euromaidanpress.com/2023/01/27/take-a-look-at-the-unique-paintings-russia-looted-from-ukraines-kherson-art-museum/, accessed 25 April 2023. See also 'Before Retreating From Kherson, Russian Troops Emptied One of Ukraine's Top Museums of Nearly 15,000 Objects', Artnet 14 November 2022. https://news.artnet.com/art-world/russian-troops-loot-kherson-museum-2209777, accessed 28 April 2023.

12 SUCHO, 'Exploring Ukrainian Cultural Heritage Online'. https://gallery.sucho.org/, accessed 29 January 2023.

13 For more information see Rakityanskaya (2023).

14 'SUCHO Meme Wall', SUCHO. https://memes.sucho.org/, accessed 28 January 2023.

15 'SUCHO Equipment Fund', SUCHO. https://opencollective.com/sucho/projects/equipment, accessed 29 January 2023.

16 For further discussion, see 'Електронна бібліотека [Electronic Library]', Taras Shevchenko Cherkasy Regional Library 6 March 2023. https://www.youtube.com/watch?v=Q17bh-FEeCc&t=5s, accessed 28 April 2023.

17 To see a more detailed list, visit 'Partners', SUCHO. https://www.sucho.org/partners, accessed 25 April 2023.

18 For example, 'Object ID', INTERPOL. https://www.interpol.int/en/Crimes/Cultural-heritage-crime/Object-ID, accessed 29 January 2023.

19 See Walasek 2020 for a discussion of the impact of website loss on Bosnian cultural

heritage during the 1992 - 1995 Bosnian War.

 20 For one example of digital preservation standards, see 'Levels of Digital Preservation', NDSA. https://ndsa.org/publications/levels-of-digital-preservation/, accessed 21 January 2023.

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