Knowledge is No Longer Shelved: "OPENESS" of the Oriental Institute of the Academy of Sciences in the Czech Republic

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Abstract

Scientists and scholars, as a tradition of scholarship, publish their research free of charge for the main reason of sharing the output of their scholarly endeavors. This presentation summarizes the current open access initiatives at the Oriental Institute of the Academy of Sciences in the Czech Republic. It describes the recent projects which have been made freely available in virtual space as evidence of the Institute's commitment to open access. As libraries' emerging role is to support their institutions' research, this presentation will further answer how and where the library and librarians fit in the framework of promoting open access.

Keywords: Open access, open science, oriental studies, research libraries

Introduction

The Oriental Institute, founded in 1922, is one of Europe's oldest institutions dedicated to studying politics, societies, and cultures of "the Orient" (Oriental Institute, 2014). Originally established by an act of the Czechoslovak Parliament, the Oriental Institute operates under the auspices of the Czech Academy of Sciences (the former Czechoslovak Academy of Sciences) and is tasked with promoting cutting-edge and interdisciplinary research that seeks to advance scientific knowledge at the international and national levels. The Czech Academy of Sciences of the Czech Republic (CAS), is a network of research institutions similar in function to its counterparts in continental Europe. The primary mission of the CAS and its 54 member institutes is to conduct basic research in a broad spectrum of the natural, technical and social sciences and the humanities (Center of Administration and Operations of CAS, 2022). This research, whether highly specialized or interdisciplinary in nature, aims to advance developments in scientific knowledge at the international level, while also taking into account the specific needs of both Czech society and national culture. In the present organizational structure, the Oriental Institute is divided into three departments (Middle East, South Asia, East Asia), and employs scholars specializing in the study of the Arab world, the ancient Near East, India, Central Asia, Southeast Asia, China, and Japan.

The Library

The Oriental Institute Library is composed of the General library, the Lu Xun Library, The John King Fairbank Library, Tibetan Collections, Korean Library, and the Taiwan Resource Center for Sinological Studies, with almost 300,000 volumes (including periodicals and manuscripts) in more than 140 languages. The OI Library is one of the largest libraries within the Academy of Sciences. Librarians are hired as specialists of specific languages like Tibetan, Chinese, Arabic, Hebrew, Korean, etc. There is only one practicing librarian who is part of the team. Although the major part of the work is geared towards organizing the collection in physical and virtual spaces, the library also works with OI scholars to support research. Their knowledge on information retrieval, information curation and open knowledge practices can also be an asset to fulfill the purpose of research.

Being a research institute, the value of openness is indispensable. The more people that can access and build upon the latest research, the more valuable that research becomes, and the more likely we are to benefit as a society (SPARC Europe, 2022). There are thousands of open access resources and tools that only a few people are cognizant of. While some of these are intended for specialized studies, it is not intended to reach merely a limited group. For this reason, I am presenting about the project we have at the Oriental Institute. My objectives are to: (1) provide an overview of the open access agenda in the Czech Academy of Sciences, (2) describe the projects at the Oriental Institute where output, resources, methods and/or tools are publicly accessible in digital format with no or minimal restriction, and (3) deduce implications on how the library and librarians can shape the future of open access activities at the Oriental Institute.

I. Open Access Agenda

The concept of open access is connected to the realm of movements in the global research community. This beehive (Fig. 1) represents the facets of open science. Open science involves various movements aiming to remove the barriers to sharing any kind of output, resources, methods or tools, at any stage of the research process (FOSTER, [2020]). As such, open access to publications, open research data, open source software, open collaboration, open peer review, open notebooks, open educational resources, open monographs, citizen science, or research crowdfunding, fall into the boundaries of open science, even though, especially for the library and information domain, the focus is usually placed on two of these movements: open research data and open access to scientific publications.

In the Czech Republic, specifically at the Academy of Sciences, the practice primarily works within these three concepts: open access, open data and the European

infrastructure (OpenAire). Open access is permanent and provides free online access to documents (particularly full texts) for all users. This status includes free and unlimited reading, downloading, copying, sharing, saving, printing, searching and hypertext connection. On the 14th of September 2010, the Academic Council of the Czech Academy of Sciences adopted the Open Access Policy of the CAS.

II. Open Access Projects at the Oriental Institute of CAS

Here I will expound the idea from each of our projects which provides free online access to information from publication to the base structures where the publications were derived.

The Monuments of Mosul in Danger

This project was created in response to the serious threat to Mosul's architecture by the terrorist organization Islamic State (ISIS, Daesh), which controlled the city from June 2014 to July 2017. During these years, the Islamic State severely damaged or completely razed more than 40 historical monuments, among them mosques, churches, shrines, tombs and cemeteries. This initiative immortalizes a significant part of cultural heritage in the digital space.

The framework developed by experts in the field is a good baseline data for possible legitimate replication working within the following areas (Fig. 1):

- 1. Tracking the Destruction in Mosul Through Satellite Imagery Analysis
- 2. Creation of an interactive map of destroyed monuments
- 3. Architectural and historical analysis of the destroyed monuments through extant pictorial (photographs, documentaries) and plan documentation, as well as recent descriptions published by both Iraqi and Western researchers
- 4. Creation of 3D virtual models of monuments for which we have preserved sufficient quality documentation
- 5. Analysis of the ideological background of the destruction (religious propaganda of the Islamic State, historical precedents)



Fig. 1 The User Interface of Monuments of Mosul

The project team published a database of the most important results of their research, containing:

- a complete catalog of Mosul's destroyed monuments
- satellite image analysis
- an extensive map application with an interactive map of the destroyed historical core of Mosul in the GIS system
- virtual 3D models of selected Mosul monuments
- project documentary and downloadable brochures.

The database and a complete list of other outputs are available on the project website www.monumentsofmosul.com.

Taiwan Biographical Database (TBIO)

The OI's Taiwan Biographical Ontology (TBIO) provides an array of biographical data related to Taiwan intellectual elites to pursue studies in prosopography. It currently contains information about 27,488 people, 45,858 organizations, and 2,740 various positions within the organizations which can be accessed in http://tbio.orient.cas.cz/

 TBIO is a graph database combining six datasets amounting to approximately 19,000 personal entries which is an open platform for researchers to use and contribute to with their own data sets, offering a number of analytical instruments which can be freely adapted to support investigations at the intersection of history, sociology, literary history, and digital humanities. • TBIO is a tool that can be used to identify and relate a group of persons or characters to specific social groups in Taiwan. By allowing users to systematically correlate commonalities in the lives of individuals with each other, such as place of birth, education, occupation, marriage, family background, and social status, TBIO reveals sociologically relevant patterns with positional analyses of the authors' social involvements, which allowed us to treat them as proxies for various types of social, cultural, economic and political capital (Chen & Dluhošová 2022) which can also be useful in the developing related studies. Fig. 2 below illustrates the mapping.

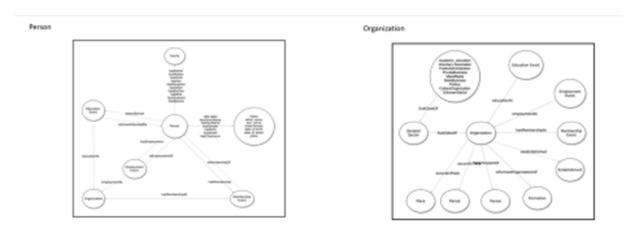


Fig. 2. TBIO Mapping of Semantic Categories (Dluhošová & Wen-Hsin Cheng, 2022).

Persian Tadhkira Project

The Persian Tadhkira Project is devoted to exploring trends in the production and circulation of Tadhkiras (biographical anthologies) of Persian poets produced across the Persianate world from 1200-1900. One of the main features assisting the development and construction of the transregional Tadhkira library over space and time was the manner by which texts served as a collection to be utilized for the crafting of new works (Schwartz, 2020a). Among the myriad features that are useful for further studies are citations and timeline. At its simplest form, this comprehensive information can be useful for scoping review or citation analysis on the topic. As Schwartz (2020b) explained, citations—as intertextual links connecting multiple Tadhkiras across space and time (Fig. 3). — may serve as an additional way to assess the constitution of the transregional library of Tadhkiras as a whole (p.128). For Timelines, it can be employed for different purposes: quantitatively, visualizing individual items in aggregation, and for sampled or curated groups, offering an overview or simplifying presentations (Fig. 4). Timeline visualization can also be used to express numerically by plotting or scaling data points (Vane, 2020) to see correlations. The project is accessible at

https://ptp.daoyidh.com/



Fig. 3. Illustration of Citation Network



Fig 4. Timeline Visualization

The Tibetan-English- Czech Dictionary

This trilingual online dictionary is a publicly accessible source for translation from Tibetan into English and Czech and vice versa. The dictionary allows searching in English, Czech, and the Tibetan script, as well as in the international Wylie

transliteration (Fig. 4). Wylie transliteration is a method for transliterating Tibetan script using only the letters available on a typical English language typewriter. The contextual online dictionary started in 2017 as a collaborative project of the Oriental Institute of the Czech Academy of Sciences, Humboldt-Universität zu Berlin, and Linguatools Berlin. This database continues to be expanded but is ready to provide context based translations in these languages at https://linguatools.info/tibendicts/.



Fig 5. Illustration of Simple Query

Digitization of OI Publications

Open access copies of the official publication of the Institute can be accessed through the Digital Library of the Czech Academy of Science.

There are two publications of the Institute where the majority of the issues are digitized. One is Archiv Orientální, an international, peer-reviewed journal which is indexed in Scopus, AHCI (Thomson Reuters) and ERIH Plus. This publication started in 1929, and is considered to be one of the oldest academic journals dedicated to the area of Northern Africa, the Middle East, and Asia. Volumes 1 (1929) to 78 (2010) are openly accessible here: https://tinyurl.com/7ht56e4t.

Another one is the Czech-language magazine Nový Orient which has been published by the Oriental Institute since 1945. During the socialist period, it used to provide the general public with well-founded and interesting snapshots from, for the Czechoslovak reader, exotic countries outside of the Iron Curtain. Currently, it is a triannual peer-reviewed journal publishing fresh analyses from a vast region once perceived as "The Orient". Volumes 1 (1945) to 71 (2016) are available under Open Access through the digital library of the Czech Academy of Sciences at https://tinyurl.com/3m37jhc6

Digitization of Rare Books

One of the initiatives of the OI is to make accessible to the public some of the rare collections. The current collection includes Chinese manuscripts published in the mid-18th century and gazetteers dated as early as 1760. This is an ongoing project embarked upon by the Library which can be accessed at https://tinyurl.com/4dyxne9d.

III. Librarians in the Open Access Agenda

The most common way librarians participate in open access is through consortia, where schemes to pay less for open access publication are negotiated. OI Library participates in making OA a publishing option through Czech E-Lib. Negotiation is always a struggle for open access publication, but consortia can help as they have the power to coordinate and negotiate pricing. Libraries also promote self-archiving through institutional repositories and digital libraries to preserve research output and make it more accessible. A good example in this study is the digitization of rare materials and making these resources available through the Czech Academic of Sciences digital library.

After looking at the multifaceted and specialized framework in these projects developed at the institute, it can be seen that data come in many forms, in different languages, and in very specific fields of interest. It brings to the question, "How open is open?" Not all open access materials are equally visible and openly accessible due to language barriers. Can data in different languages be combined together? This is where the work of the librarians and IT experts should be combined. Optimization of digitization workflow can enhance the quality of digitized texts and can also create structures to make data reusable and interoperable.

Librarians are also at the forefront of enhancing retrieval of information which can enhance the visibility of research to the broadest possible audience. Their expertise in understanding how advanced search and ontology-based metadata work is also invaluable.

The value of open access does not always equate with a huge number of page visits or citations. Taking the case of the Oriental Institute, the field of study OI scholars are dealing with is highly specialized. A few may understand the socio-political, cultural or historic relevance of data, but it still cannot be neglected. Someone must deal with the past and not leave evidence or traces of history to be forgotten. Creating digital spaces where all these resources are curated and preserved is an important role that libraries play in collaboration with scholars.

Future Direction

The potential of openness becomes more pervasive with the sharing of outputs at different stages of their maturation and combined with continually updating data, simulations, and visualizations, as well as commentary and interpretation. As Pinfield, Wakeling, Bawden, & Robinson (2020) projected, OA will become the default, at least for many disciplines, increasingly developing within a broader context of "open science" or "open research" where network-level content venues are likely to transform dissemination, and increasingly personalized retrieval agents will transform discovery. Other developments, such as the creation of a wide range of metrics and indicators of quality and impact; however, challenges such as long-term preservation of the scholarly record are likely to become more apparent. The trajectory of OA will always be evolving. Oriental studies, like other fields of humanities and social sciences, will continue to work within these transformations as knowledge is never meant to be merely shelved.

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