

PAGODE – Europeana China

Valentina Bachi¹ and Antonella Fresa²

¹ Photoconsortium, Via della Bonifica 69, 56037 Peccioli (PI), Italy

² Promoter Srl, Via della Bonifica 69, 56037 Peccioli (PI), Italy
valentina.bachi@photoconsortium.net; fresa@promoter.it

Abstract. PAGODE is a new project (start date 1 April 2020) proposing a thematic approach in the aggregation, curation and presentation of Chinese cultural content hosted in European museums and Cultural Heritage Institutions (CHIs). The focus of the project is to offer an innovative experience by making this content available Europeana, the European digital library. PAGODE will aggregate to Europeana more than 10,000 new digital objects, annotate and enrich more than 2,000 digital objects that are already in Europeana, and activate a wide range of CHIs to plan new digitization and curation of relevant content from their collections. Focusing on the various forms of the presence of Chinese culture in Europe, the overall aim of PAGODE is to add further value to CHIs that own Chinese collections, to reach new end users, and to encourage creative reuse of cultural content in the domains of multicultural integration, cultural tourism, education and research.

Keywords: Chinese cultural heritage, digitized photography, metadata, linked thesauri, Europeana

1 Introduction

The main concept of PAGODE is to contribute to generating rich user experience and high audience engagement with Europeana, the European digital library[1]. The project is co-funded by the CEF Connecting Europe Facility Programme of the European Union, responding to the call for Generic Services dedicated to the improvement and enrichment of Europeana. For this scope, public and private institutions preserving content relating to Chinese Cultural Heritage (CH) are working together for both digitization and metadata enrichment of high-quality cultural materials. The data are made accessible for many purposes (research, education, creative reuse and personal enjoyment) through the Europeana portal, and promoted with dedicated exhibitions and compelling editorials.

PAGODE proposes a thematic approach in the aggregation, curation and presentation of Chinese culture related content that is hosted in European museums and Cultural Heritage Institutions (CHIs). The project will aggregate more than 10,000 new objects, including photographic collections, digital representation of artworks and paintings, books and manuscripts. Furthermore, it will annotate and enrich the metadata associated with more than 2,000 digital objects that are already in Europeana, experimenting new forms of annotations and interlinking in a dedicated pilot that involves scholars, researchers, curators and non-professionals practitioners.

It is very significant that the coordinator of this project is the Italian Ministry for Economic Development, showcasing that heritage is not only a matter of culture and scholars but has a huge potential in the progress of nations. PAGODE will participate in the effort of lowering cultural barriers across and beyond Europe, creating unique cross-border perspectives and leveraging the benefits of digitized cultural heritage, by connecting existing digital historical resources and by creating new ones sourcing both institutional content (from archives, museums and libraries) and personal materials (collected by citizens with appropriate crowdsourcing actions). PAGODE is

willing to promote cultural diversity expressions giving to a wide range of new audiences the access to the richness of cultures and facilitating research in and knowledge of the multi-faceted culture and history of Europe and its multiculturalism. In doing so, the whole Europeana concept and its surrounding environment of users and content providers will play a core and novel role.

Two main content providers are involved in the project as partners: KIK-IRPA and United Archives. KIK-IRPA is the Royal Institute for Cultural Heritage [2], a Belgian federal institute of the Belgian Federal Science Policy Office (BELSPO). The institute studies and conserves the artistic and cultural assets of Belgium and is a major contributor of Europeana since its establishment. United Archives [3] is a private company based on Cologne. It owns a large photo library that offers professional image content for editorial usage. It participates actively with its collections to Europeana. The two content providers are members of Photoconsortium that is also partner of PAGODE. Photoconsortium [4] is the international association to value photographic heritage, created as a spin-off of the Europeana Photography project in 2014. Europeana Photography has been a successful digitization and aggregation project that resulted in nearly 500,000 early photography items made available online within Europeana. The original partners of Europeana Photography founded the international association to provide a sustainability model ensuring long-term maintenance of the project results. Since then, the association has grown, welcoming new members from CHIs, archives, professionals and amateurs of vintage photography. Photoconsortium represents a centre of expertise and knowledge on digitization, aggregation of content, metadata standards, indexing, cataloguing and controlled vocabularies, best practices for management of digital archives, and is currently acknowledged as the expert hub for photography. This expertise and knowledge is the core to generate activities, provide services, organise training programs and seminars and participate in new research. The main areas of research for Photoconsortium are in particular those of storytelling and curation for valuing photographic heritage, multilingualism and the role of rich and dereferenced metadata to ensure searchability and interlinking of digital CH resources. Photoconsortium is one of the accredited aggregators of Europeana. In this role, it participates in the Digital Service Infrastructure initiative of the European Commission, which supports the operations of the Europeana core service platform. Through Photoconsortium, a number of associate partners from all over Europe are joining the PAGODE network to support and to participate with their collections in the project's activities.

Two very active SMEs participate in the consortium with specific technical roles: Promoter S.r.l. in Italy and Postscriptum Ltd. in Greece. The former is technical coordinator of the project and leads the communication and dissemination activities. The latter leads the liaison with Chinese CHIs in its role of representative of Europeana in China. The two SMEs collaborates in the EastMeetsWest initiative, whose first instance is EMWG EastMeetsWest in Greece [5], coordinated by Postscriptum to which Promoter participates. The Department of Asian Studies of the University of Ljubljana completes the PAGODE consortium. Its expertise enables a critical understanding of the main cultural determinants of the Chinese culture in their social context and to support the creation of a scientifically sound semantic background for the whole project.



Fig. 1: A trip to China, Carl Simon, 1910 © United Archives

PAGODE is already at work since April 2020, for coping with the following six main objectives:

- 1.To aggregate new content of Chinese cultural heritage in Europeana and 'hook' into data that come from existing Europeana providers and aggregators (national, thematic and domain ones) establishing new forms of collaboration. This will be achieved by producing new technical information to be integrated in the curation processes of the existing datasets, in order to highlight links with Chinese culture.
- 2.To increase discoverability of Chinese content and collections in Europeana via an annotation methodology to be validated in the real-life pilot
- 3.To bring more Chinese collections into Europeana by identifying high-value collections of Chinese content in the repository of the European cultural heritage institutions, which will be digitized and made available for free use under the 'Tier 4' technical and rights conditions of the Europeana Publishing Framework (EPF). The Tier 4 specifications establish that the compliant digital objects are available for free use and re-use.
- 4.To outreach professionals of the CH sector, including CHIs and the Europeana aggregators, with a rich program of dissemination and awareness raising activities, including the availability of online resources about Chinese CH links with Europe, the organization of workshops, participation in professional events, and the organization of an international conference in Brussels that is planned for autumn 2021.
- 5.To promote user engagement in multiple forms (on the social media, through crowdsourcing and with exhibitions) in order to facilitate cultural exchanges among European and Chinese users of Europeana, for education, research, social integration and cultural tourism purposes. In particular the flagship outcome of the project will be a travelling exhibition which will premiere in Pisa hosted by the Museo della Grafica, in summer 2021.
- 6.To open cultural connections to China, exploring new economic advantages based on a richer reciprocal knowledge of our cultures. This Sino-European dialogue – necessary to support the development of a harmonious Sino-European political and economic relationship - will be fostered through mutual understanding of cultural notions.

2 A new project for cross-cultural exchanges

Focusing on the various forms of the presence of Chinese culture in Europe, the overall aim of PAGODE is to add further value to CHIs that own Chinese collections, to reach new end-users, and to encourage creative reuse of CH content in the domains of multicultural integration, cultural tourism, education and research. PAGODE promotes further understanding of the cultural values of China and the cultural exchange between China and Europe, allowing CHIs to connect and share their collections and metadata across new sectors and borders and in this way to increase awareness and usage of Europeana to a wider audience, internationally. The project's originality lies on the creation of a framework for a holistic overview of all Chinese collections within the scope of the pan-European area. As such, it would offer the foundations for further scholarship in this field. Even more important, PAGODE will develop instruments for the reinterpretation of questions about circulation, trade, collection and display of Chinese art in modern Europe, offering novel interpretations of Europe-China relationship from the historical and contemporary perspectives, which can accompany the reality of the present economic exchanges. The project also wants to engage with Chinese heritage institutions. Since a long time, there are discussions among professionals in the field, both in Europe and in China, about how digital technologies, high quality digitization and 3D visualization can help in allowing Chinese artifacts preserved in Europe to "virtually" come back to China, for all Chinese people to enjoy such gems. There is a strong interest from Chinese and European institutions to find new ways of collaborations. Europeana can play a fundamental role in this process, offering a platform made of millions of CH digital objects accompanied by rich and constantly growing thematic collections. Europeana China is the title of a new thematic collection foreseen to be published in Europeana in 2021, where the visitors will find virtual exhibitions, stories, curated digital galleries and much more.

In addition to that, the potential of digitization is also looked at as a solution for various challenges that all the cultural institutions experience and that are particularly relevant for China. Being such a large country including communities established in hard-to-reach regions, often without the possibility to move to big cities to go visit museum and cultural sites, there is a major problem in China about access to CH. Moreover, it is often the case that in such difficult territories the internet access is also lacking. As citizens cannot go to meet CH, it is possible that CH goes meeting citizens, supported by the digital technologies: an interesting example of this approach dates back since 2013, where the "Mobile Digital Museum" project was launched by the Inner Mongolia Museum [6]. The Mobile Digital Museum started as an answer to three main challenges: the inaccessibility to physical museums; the lack of connection between the visitor with the artifacts; and finally the safety of physical relics during travelling exhibitions. With regard to the problem of inaccessibility to physical museums, this is due to the fact that most of museums are physically located in the city centres, and visiting them becomes both a time-consuming and expensive activity for people living in the outskirts of the city. This conflicts with the museums' mission of transferring knowledge, empowering and inspiring all people to embrace and respect a country's diverse heritage. Also, museums are not only places for storage of cultural objects, they also serve as knowledge centers. Although museums have engaged the use of verbal and visual aids such as brochures and audio guides, their effects are very limited and fail to allow visitors the means to explore artifacts more thoroughly as they tour an exhibition. Visitors often remain with queries unanswered or pass through exhibitions without being really engaged. Due to the fact that every visitor is peculiar in interest and preferences, it is difficult to develop an all rounded platform that provides all relevant information, histories and stories or other content that each visitor would like to get. The Mobile Digital Museum was conceived as a futuristic truck equipped with the most advanced digital technologies, custom made both the

exterior and interior to cater to digital requirements. It measures 13m in length and 2.5m wide, but on the push of a button the museum space can expand to 5.3m wide creating a space of 45m². A central computerized system is designed to control all the advanced interactive screens and contents of the museum. CH items are displayed on screen and accompanied with compelling interactive features such as interactive games, quizzes to increase knowledge, surveys and in depth information. Additionally, interactive platforms allow visitors to manipulate the digital artifact freely, view them in any angle and zoom in to discover details, beyond basic facts about works and even “holding” the valuable artifacts in their palms which would never be possible with physical relics. By traveling to remote areas, schools and underprivileged communities, the Mobile Digital Museum allowed to meet visitors in an innovative way, to share the diverse aspects of the country’s culture and show the people of different ages and social status that they play a significant role in contributing to its richness and diversity. This is just one example of how high-quality digitization and 3D visualization help engagement with CH and access without borders.

3 Starting of a journey

The launch of PAGODE was originally organized with a double event in Rome, hosted by the coordinator at the prestigious venue of the Italian Ministry of Economic Development in via Molise. The plan was to include a first operative meeting reserved to project partners, followed by an open event for associate partners and other stakeholders, with invited guests from Europe and from China. Due to the unprecedented circumstances connected to the COVID-19 crisis, the consortium was forced to change the plans. Both meetings, the operative meeting reserved to partners and the open meeting for associate partners and stakeholders took place online.

Already during such initial discussions, the question about “what is Chinese Heritage in Europe” raised quite predominantly. The sinologists and experts from the University of Ljubljana have started moving in the direction of defining relevant themes and keywords to depict the concept of “Chinese cultural heritage”. In facts, to set the semantic background for this project, it is important to define first what can be considered as Chinese CH in Europe, distinguishing between “Chinese” versus “made in China” and analyzing the (dis)connection between materiality and cultural connotations. Another aspect to be considered relates to migration processes: Europeans in China and Chinese in Europe contaminated each other, as it normally happens in every phenomenon of migration. The discussion then needs to be extended to the type of objects that represent Chinese CH: tangible, intangible, natural (especially landscapes) and what examples of these types of heritage can be found in PAGODE’s partners archives. Final and crucial step is the definition of metadata specification, for allowing a correct representation of the digitized objects in online environments, especially in Europeana. Correct metadata are necessary for granting the best user experience in the search and retrieval of content, to meet various search purposes. The project originally foresaw a dedicated workshop to be held in Ljubljana in July 2020, with the aim of finalizing the methodology and the metadata specifications for the curation of PAGODE digital content in Europeana. Again due to travel restrictions, the meeting had to be reorganized in virtual format, which does not prevent to reach interesting outcomes. The metadata requirement and guidelines for curation need to be integrated in the process of digitization and indexing that happens in the rooms of cultural institutions, to make possible to offer to Europeana nice content with meaningful information: the task on digitization is guided by KIK-IRPA in collaboration with the Digital Humanities Lab of the University of Basel, associated to PAGODE, true experts about all the secrets of high-quality CH digitization. All this expertise is

complemented by a Content Quality Plan that established the process for the review, improvement and enrichment of the content to be delivered to Europeana. The coordination of the entire work on content selection, digitization and delivery to Europeana is managed by Photoconsortium that makes use of the MINT mapping tool [7] developed by the Digital Cultural Heritage group at the National Technical University of Athens, to perform the conversion from content providers' data structure to the Europeana Data Model [8].

A robust program of communication, dissemination and visibility started, under the coordination of partner Promoter s.r.l. Next to an appealing project website [9], a sound planning for outreach was developed, even in time of coronavirus. A dense editorial calendar of blogs, galleries and social media actions is set to engage with users, and very soon the work to develop the PAGODE exhibition will be ignited. PAGODE was presented at the Aggregators Forum that is the gathering where twice a year the community of Europeana most trusted partners meets to review strategies and collaborations, and make plans for the future. Like Photoconsortium - the domain aggregator for photography -, all the aggregators work with CHIs to gather authentic, trustworthy and robust cultural data and make them accessible through Europeana. Through the Europeana Aggregators Forum, all together they work to exchange the knowledge and best practice that support the digital transformation of CHIs. That of 6-7 May 2020 was the first only-virtual meeting, and despite it was a bit sad not to meet in person, the plenary and the various breakout session were perfectly working and efficiently run by the experts appointed by the Europeana Foundation. PAGODE was enthusiastically presented to colleagues with a video and a short pitch. A call to networking to other aggregators and CHIs was launched in the light of having PAGODE as a seed for a new community around Chinese CH in Europe. The project is promoted also by the European Commission on its channels, on twitter, LinkedIn and on the newsroom of the Innovation and Networks Executive Agency INEA [10].



Fig. 2: Lion of Fô, or Lion of Buddha, c. 1800 © KIK-IRPA, Brussels, Belgium

4 Photography et al.

While Photoconsortium is the domain aggregator for Europeana specialized in the field of photography, photographic heritage is of course not the only kind of CH included in PAGODE to

represent Chinese Heritage in Europe. Photographs of China in the past are surely a wealth of knowledge about a civilization that has changed much in the last century. However, in addition to this embedded knowledge to discover and study, photography is also an element for storytelling. This is the case, for example, of the collection by Carl Simon, which was acquired by United Archives in March 2012. The Carl Simon Archive was a sleeping treasure of photos for 60 years: in 2011 finally the sensational life work of this visionary man was rediscovered in an old storage room in Unterbilk, in the city of Düsseldorf, Germany. Approx. 23,000 wonderful glass slides (9.5 x 8.5 cm and 8.5 x 8.5 cm), for the most part hand-coloured and well-assorted in 200 wood boxes, as well as 2 original projectors, accessories, 15 lenses and a lot of scripts for slide lectures were stored. Carl Simon (1873-1952) first worked as procurator at the German photo company Liesegang in Düsseldorf and he founded his own company Lichtbild-Anstalt Carl Simon & Co. in 1907, where he offered services for the upcoming photo industry. He constructed cameras, lent slide projectors and began to collect wonderful hand-coloured glass slides. The most important part of his activities were live slides performances. Carl Simon had the ambition to show the big world to many people and presented about 300 slide performances to amazing spectators in whole Germany. During these events, whilst showing the photos, an actor read a special text for each image and, last but not least, a small orchestra was playing background music. Till 1945 Carl Simon collected 80,000 images. Over the years, more than 23,000 survived. After his death Karl-Heinz Simon (1920-2002), his son, carried on with the tradition of slide shows performances till to the 1960s. The End came with the introduction of television. There are several beautiful photographic trips within this marvelous collection, that showed far and strange countries to people who never had the opportunity to go visit them: for example Rome, life in East Africa, Asia, a travel through France, earthquakes and volcanic activity, Japan, Tibet, the sinking of the Titanic and many more “Highlights” of glass slide photography, including China mission. Part of the Carl Simon Archive is already available in Europeana. Thanks to PAGODE, United Archives will offer more content from this wonderful collection. Furthermore, other relevant photography collections will be made available in PAGODE, also from recent days, such as interesting images taken during the cultural revolution.

While United Archives is a press agency specialized in various kinds of imagery, there are many collections of Chinese or China-related artifacts in various collections held by museum in Europe. These collections include decorative objects, clothes and accessories, porcelain furniture, Chinoiserie, paintings, musical instruments, books, and much more. All these different kinds of objects have their own peculiar requirements for digitization. Most common way is to take a picture or more pictures of the object from different angles, and just show the images. Technologies and standards, such as the International Image Interoperability Framework IIF [11], help a deeper interaction with the image allowing for zooming and navigating the various part of the pictures in high detail. 3D digitization is a more complex solution, especially for porcelain because of relevant issues with light reflections in the object's surface, even if user experience can be improved with this technique more than with a set of plain photographs. This however opens a question on technology and accessibility as not all the institutions, and the smaller ones in particular, have access to or resources for 3D production facilities. Currently, several initiatives are playing technological efforts in order to offer good viewers for 3D content. For example, this is the case of the 3D viewer embedded in Europeana, which allows users to look at, rotate and interact with the object and have seamless quality experience of 3D.

Chinese books are another hard nut to crack, because of the challenges of the language they're written in: although Optical Character Recognition OCR technologies are enough mature nowadays, for a Chinese book it is necessary to recognize the characters in traditional and modern

Chinese, and with different orientations as usual for Latin languages: vertically writing and from right to left. This means that offering a meaningful digital experience with an old Chinese book requires much more than just scanning the pages and putting them online one after the other.

Finally, the world of music heritage: China has a long and influential musical tradition based on the philosophy and culture of ancient China. The Confucian embraced a correct use and form of music matching to sociological and cosmological conceptions, so to discover traditional Chinese music helps understanding Chinese culture. There are still a number of barriers to online access for audio and audio-related materials, including the need of appealing content display to support user-friendly search and engagement, which is a difficult task also in physical museums: but this will be the subject for future projects.

References

1. Europeana Homepage, <https://www.europeana.eu/en> , last accessed 2020/06/08.
2. KIK-IRPA, for Koninklijk Instituut voor het Kunstpatrimonium - Institut Royal du Patrimoine Artistique, is a federal scientific institute responsible for the documentation, study and conservation-restoration of the cultural and artistic heritage of Belgium. Homepage, <http://www.kikirpa.be/EN/> , last accessed 2020/06/08.
3. United Archives Homepage, <https://united-archives.de/> , last accessed 2020/06/08.
4. Photoconsortium Homepage, <https://www.photoconsortium.net/> , last accessed 2020/06/08.
5. EastMeetsWest in Greece is a new initiative to link the countries of Asia with Europe in Greece under a DIGITAL CULTURAL HERITAGE umbrella, Homepage, <https://emwg.site/>, last accessed 2020/06/08.
6. Mobile Digital Museum post on digitalmeetsculture magazine, Homepage, <https://www.digitalmeetsculture.net/article/mobile-digital-museum-the-frontier-for-cultural-heritage-exhibitions/>, last accessed 2020/06/08.
7. MINT is the tool that provides users the ability to perform a mapping of their own metadata schemas to reference domain models. The tool is used by several aggregators of Europeana to map the content providers metadata schema to the model of Europeana. The tool is published as open source. Homepage, http://mint.image.ece.ntua.gr/redmine/projects/mint/wiki/Mapping_Tool , last accessed 2020/06/08.
8. Europeana Data Model EDM is the model used by the Europeana Core Service Platform to as the basis for the implementation of the aggregation process, Homepage, <https://pro.europeana.eu/page/edm-documentation> , last accessed 2020/06/08.
9. The PAGODE website Homepage, <https://photoconsortium.net/pagode/> , last accessed 2020/06/08.
10. The Innovation and Networks Executive Agency INEA of the European Commission is appointed to run the monitoring and assessment of the progresses of the PAGODE project. The newsroom of INEA promoting the PAGODE project is available at <https://ec.europa.eu/inea/en/news-events/newsroom/pagode-project-brings-chinese-heritage-europe-europeana>, last accessed 2020/06/08.
11. The International Image Interoperability Framework TM is driven by a community of research, national and state libraries, museums, companies and image repositories committed to providing access to high quality image resources, Homepage <https://iiif.io/> , last accessed 2020/06/08. Europeana is implementing the support to the IIIF standard.