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DiFaB - Digital Research Archive for Byzantium

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DiFaB - Digital Research Archive for Byzantium

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The Digital Research Archive for Byzantium (DiFAB – Digitales Forschungsarchiv Byzanz) is a visual resource database devoted to the cultural legacy of Byzantium. DiFAB is designed to serve as a digital research archive open to the scholarly community at large. In fulfilling this mission, DiFAB aims to achieve several interrelated objectives. First, DiFAB sets out to digitize historical photographs, slides and other types of images contained in independent public and private archives around the world. Second, scholars and staff working with DiFAB contribute new digital images to the database in the course of field research. And finally, DiFAB strives to make all these images easily accessible to the interested scholarly public through its database, which will be made available online.

In striving to bring together images – old and new – from diverse collections into a single digital database and to make this material easily accessible to scholars, DiFAB aspires to open new horizons for the study of the material culture of Byzantium. The project, which was initiated in 2006 by Professor Lioba Theis at the Institute of Art History of the University of Vienna, is now in its fifth year.

Collections currently in DiFAB

Currently, the DiFAB database contains approximately 19,000 unique digital assets. These assets primarily include scans of historical photographs and slides obtained from several archives, and digital photographs made specifically for DiFAB since the project's initiation.

The DiFAB project began when permission was obtained to digitize the private slide collection of deceased German art historian Horst Hallensleben. This important archive is made up of more than 100,000 mostly original slides made by Hallensleben over several decades of travel and study in Greece, Italy, the Balkans and Turkey. Incorporation of the Hallensleben material into DiFAB continues today.

The DiFAB database also includes images related to Byzantium that are kept as part of the extensive photographic collection of the Institute of Art History of the University of Vienna. The Institute's photography holdings reflect a long tradition of teaching and research at one of the world's oldest university departments of art history. DiFAB now contains extensive material – much of it as yet unpublished – that was collected by some of the pioneers of the history of Byzantine art who worked at the Vienna Institute, including Josef Strzygowski and Otto Demus. Incorporation of the Strzygowski and Demus archives is ongoing; to date DiFAB has digitized approximately 1000 unique assets from the Strzygowski archive and significant portions of the Demus archive.

DiFAB has also digitized photographs from the private collection of German art historian Marcell Restle. These photographs documenting Byzantine monuments and landscapes were made in the 1960s and 1970s during research campaigns to Turkey.

The importance of presenting historical photographs from various archives alongside new images showing the same sites should be stressed. For the first time, DiFAB provides a database of collected material that, taken together, provides virtual documentation of the history of monuments over the course of decades since these objects were first photographed. Making available images from various archives in a single digital database has the potential to further a greater understanding of the history of these monuments. Documentation of this nature is especially valuable for material related to Byzantium, many of whose monuments have seen periods of destruction and restoration since first being photographed. Thus, the evidence in old and new photographs is vital for any discussion and understanding of many of these monuments today (figs 1–6).

The DiFAB database is, however, not restricted to digital images of objects. Other types of material, such as architectural and technical drawings, photogrammetric data, field notes and even audio and video files can be brought into DiFAB. Already, DiFAB contains field notes and sketches from the Strzygowski and Demus archives that allow significant insights into these scholars' working methods and research approaches (figs 7–8). Such documents are vital for any study of the historiography of the field of Byzantine art history.

Project structure, standards and features

DiFAB's continued development is reliant on the project's integration into the academic program of the Institute of Art History in Vienna. The DiFAB project is maintained by project staff working in dedicated offices at the Institute of Art History of the University of Vienna. Inherent to the success of DiFAB is its emphasis on research and learning. Courses and work groups organized each semester give students the opportunity to work extensively on all aspects of the DiFAB project, including maintenance and expansion of the database. Students also participate in fieldwork excursions to Byzantine sites, collecting new images that are then added to DiFAB.

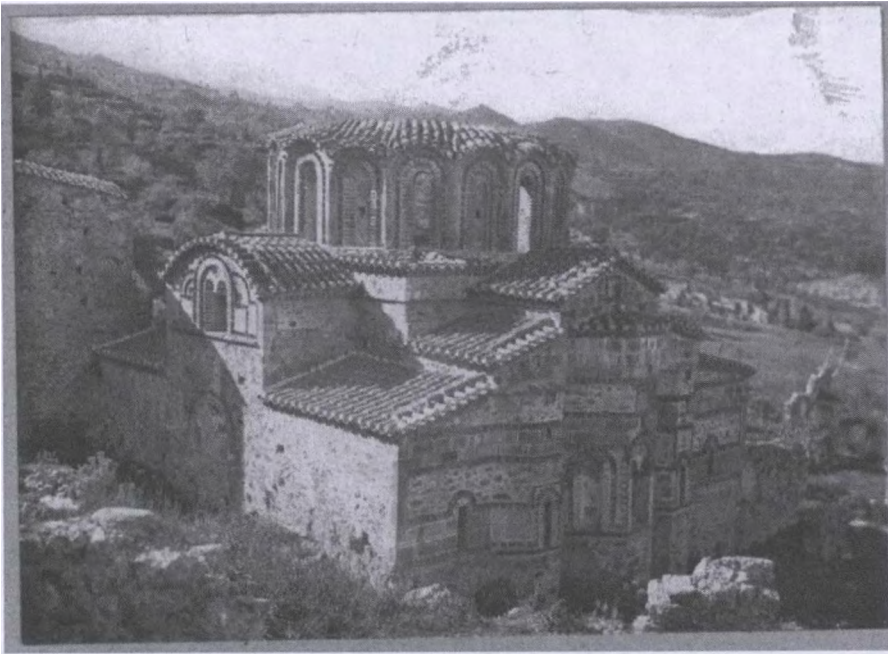


Fig. 1. Mistras, Ag. Theodoroi. View from southeast. Undated black-and-white photograph. DiFaB/University of Vienna. Permalink: <http://phaidra.univie.ac.at/o:19597>

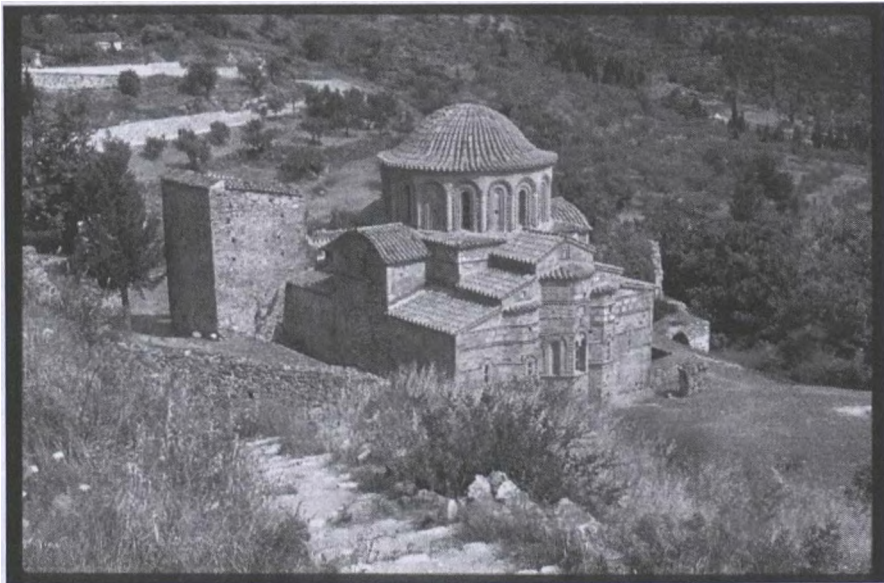


Fig. 2. Mistras, Ag. Theodoroi. View from southeast. Undated color slide (1992). DiFaB/Horst Hallensleben. Permalink: <http://phaidra.univie.ac.at/o:19596>

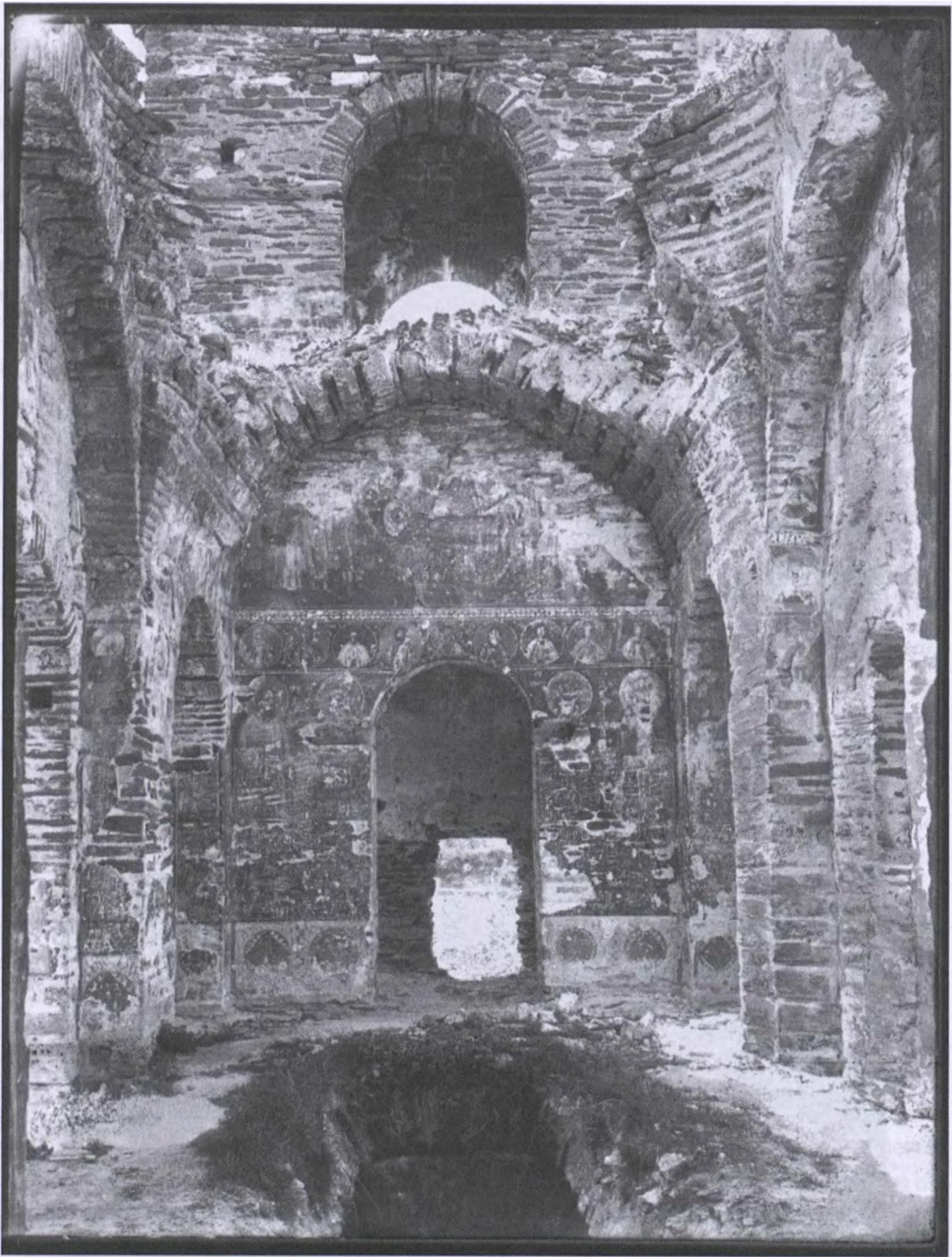


Fig. 3. Asenovgrad, Sveta Bogoroditsa Petrichka. Black-and-white photograph from before 1906. DiFaB/University of Vienna. Permalink: <http://phaidra.univie.ac.at/o:19603>



Fig. 4. Asenovgrad, Sveta Bogoroditsa Petrichka. Color digital photograph from 15 Feb. 2007. DiFaB/Fani Gargova. Permalink: <http://phaidra.univie.ac.at/o:19599>

From its initiation, the Digital Research Archive for Byzantium has aimed to use the highest technical standards to ensure the preservation, maintenance and easy accessibility of its digital assets. In scanning and digitizing historical material such as slides and photographs, DiFaB adheres to the highest standards established by leading institutions and authorities in the field, in particular the European Union's MINERVA network and the United States National Archives and Records Administration. Digital files are stored in the University of Vienna's new digital asset management system, PHAIDRA (Permanent Hosting, Archiving and Indexing of Digital Resources and Assets), and are assigned a permanent asset identity number that can be used as a unique citation reference for the data. PHAIDRA is designed for long-term archiving of digital assets and is thus ideal for DiFaB's needs.

DiFaB's attention to standards ensures that digitized material archived in the DiFaB database retains as much information from the original as possible. Application of these standards means not only that images and their metadata are archived properly, but also that the digital files can be used for high-quality publication purposes. Further, these high-quality digital images can also be used with emerging visualization technologies.

The metadata structure of images archived in DiFaB adheres to the Dublin Core standard which is ISO certified for interoperable information exchange. The possibility

of working with standard, defined fields containing specific types of information enables the user to search the databank with a high degree of success in finding specific images or image details, for instance through various kinds of keyword searches. Specific data fields document title, artist, founder, location, date, general description, inscription, and information related to the imaged object's position within a given archive, thus allowing both general and detailed searches. Another valuable research tool is the possibility for users to create their own "collections" from images in DiFAB. Such collections enable digital objects to be linked together by means of user-assigned collection-specific metadata. For indexing, DiFAB relies on the well established Getty Thesauri (Getty Thesaurus of Geographic Names; Art and Architecture Thesaurus; and the Union List of Artist Names).

The ability to search the database both generally and on several distinct levels, as well as the possibility to create user-defined collections of images and metadata are major advantages of DiFAB as a research database.

Open Source and Open Access

In maintaining its database, DiFAB relies on open source software solutions and on open standards. Also, DiFAB features an open access policy in the conviction that only thus can the benefits of new technologies be brought to research in the humanities. Furthermore, open standards and open source solutions provide greater accessibility and better prospects for long-term preservation of the images and their metadata.

The integration of DiFAB within the University of Vienna's PHAIDRA digital repository system fits the project's aim to operate through a non-proprietary system. A prime advantage of PHAIDRA over other digital repository systems is the security of data citation. Archived images are thus permanent and cannot be deleted from the database. The legal owners of images and image data can, however, restrict access to material, e.g. for copyright purposes. Nevertheless, even thus restricted, image metadata remain under a stable

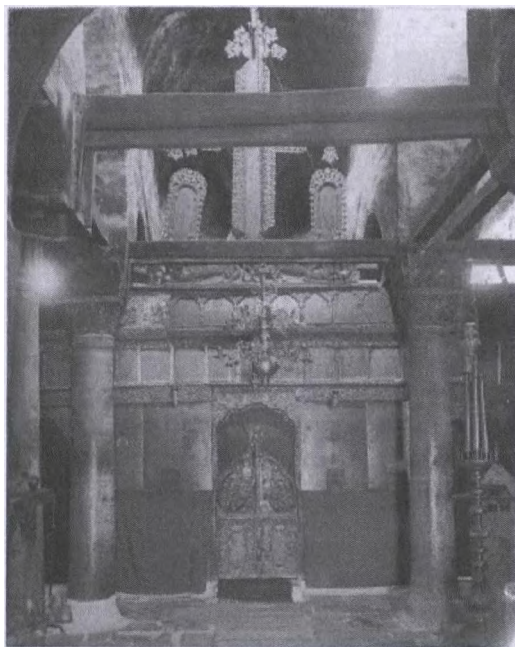


Fig. 5. Veliko Turnovo, Sveti Petar i Pavel. Black-and-white photograph from ca 1905. DiFAB/University of Vienna. Permalink: <http://phaidra.univie.ac.at/o:19601>



Fig. 6. Veliko Turnovo, Sveti Petar i Pavel. Color digital photograph from 18 Feb. 2007. DiFaB/Fani Gargova. Permalink: <http://phaidra.univie.ac.at/o:19598>

URL, which means that users can be certain of the viability of the image source and all information associated with it.

Perspectives for the future

DiFAB continues to digitize the Hallensleben and Demus archives. The digitization and incorporation of other archives, specifically the photograph collection of the *Tabula Imperii Byzantini*, is scheduled. The task structure of the project is, however, flexible: DiFAB is actively seeking to work with new partners in digitizing their archives for inclusion into DiFAB.

Online access to the DiFAB database is planned for 2009. While DiFAB currently operates through a German-language interface, the introduction of an English-language interface is planned for the near future; however, the implementation of international thesauri in DiFAB's PHAIDRA repository means it is already possible to search the database in a wide variety of languages.

By incorporating a diverse array of old and new photographic material from many sources and archives and making this digitized material easily available to the interna-

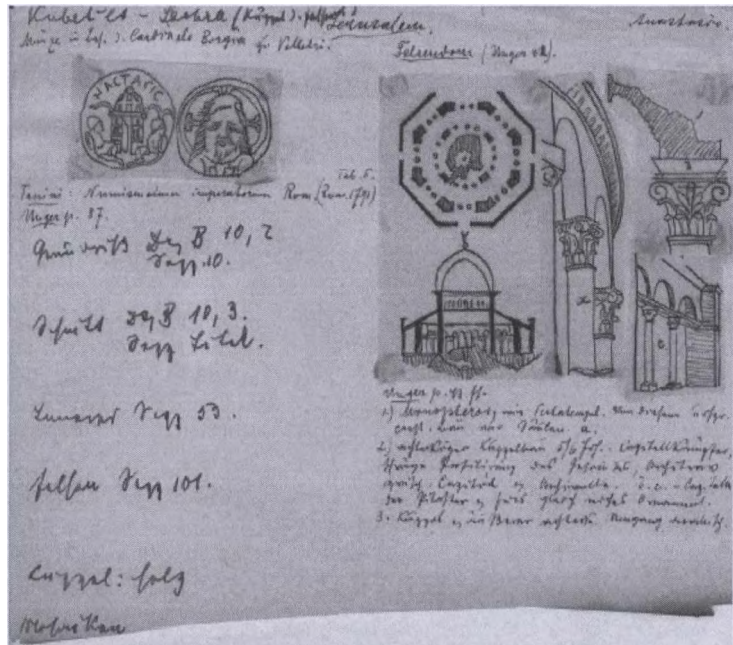


Fig. 7. Josef Strzygowski,
 sketches and notes related
 to the Anastasis Rotunda
 in Jerusalem. Undated
 folio. DiFaB/Univer-
 sity of Vienna. Permalink:
[http://phaidra.univie.
 ac.at/o:19604](http://phaidra.univie.ac.at/o:19604)

tional scholarly community, DiFaB aims to enable new research approaches to Byzantine material culture.

We welcome suggestions for new partnerships and we would be happy to talk to you about the possibility of cooperating on digitizing your archives with DiFaB.

www.univie.ac.at/difab

Contact:

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Project Director: Univ.-Prof. Dr. Lioba Theis: lioba.theis@univie.ac.at

Further links:

PHAIDRA: <https://phaidra.univie.ac.at>

Dublin Core Metadata Initiative: <http://dublincore.org>

MINERVA: <http://www.minervaeurope.org>

U.S. National Archives and Records Administration: <http://www.archives.gov>

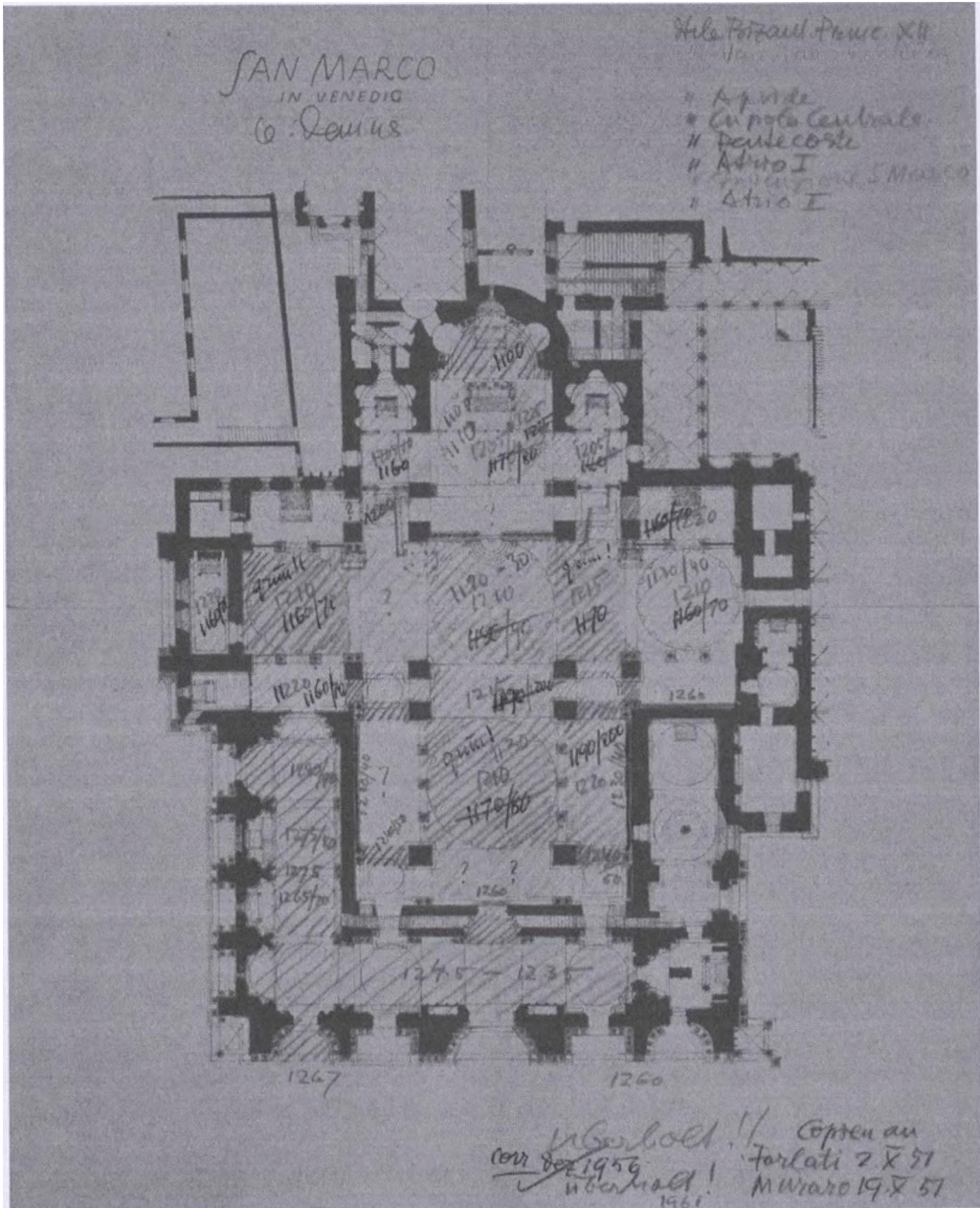


Fig. 8. Otto Demus, plan of church of St. Mark's, Venice, with color-coded notes and area highlights. Undated folio. DiFaB/University of Vienna. Permalink: <http://phaidra.univie.ac.at/o:19866>