Library

HEAD OF LIBRARY *Urs Schoepflin* (until March 2015)

Overview

The Library's mission is to provide the best possible information services to the research groups of the Institute and to create and maintain optimal access to both print and electronic resources and tools. It aims to develop effective services and infrastructures for research in the history of science by exploiting the potential of traditional and new media for scholarly work and for disseminating research results.

With the rapidly growing importance of scholarly content that is available online, libraries—building on their strengths and expertise in collection building and dissemination—are shaping new roles and practices throughout the entire scholarly communication chain. The open sharing of content and data has become another crucial library activity.

To meet the evolving needs of the existing research groups at the Institute and to integrate the topics of new groups, particular attention was given to the following key areas: (a) continuous development of the collections, content provision, and services; (b) enhanced acquisition and curating of digital content and sources, and development of appropriate access systems; (c) support of scholarly publication and dissemination activities by copyright clearing services and additional publication aids with a special focus on implementing the Max Planck Society's open access policy; and (d) extension of the collaborative network of the Library through outreach activities. The Library thus continues to develop into a universal information instrument, covering the widespread needs of a multidisciplinary research area and extending its

services to the entire scholarly information cycle. It is prepared to flexibly master new bodies of knowledge as new research directions and themes appear. For the technical development of the Library, the collaboration with the IT Group has proved instrumental. The years 2013 and 2014, in particular, focused on consolidating existing development projects and preparing the library system to migrate into a unique scholarly discovery framework that will constitute a primary gateway to trusted content.

The Library's Collections and Services

The Library's physical collections currently hold 75,000 volumes in print and 25,000 historic works and materials in microform. In addition to the systematic collection building policy in line with the scholarly needs of the Institute, as in past years the print collection has benefited from special book collections endowed to the Library, in particular, items of the private library and archive of Peter Damerow. These unique kinds of collections are of particular interest because they reflect the special approach of the collector or the collecting body to specific thematic areas relevant to research at the MPIWG.

In addition, original archival resources contain some 10,000 items, mainly papers of physicists of the first half of the twentieth century (Gehrcke collection, Rupp correspondence, Einstein letters), the majority of which are made available in digital form. With recent additions, the Gehrcke collection constitutes the most important collection of Gehrcke materials.

Access to electronic resources includes over 30,000 electronic journals, more than 200 full-text and reference databases, and 500,000 scholarly e-books, largely as a result of the basic information provision of the Max Planck Digital Library (MPDL) and of the ongoing National Licensing Program of the German Research Foundation (DFG).

Library services and scholarly information cycle.

Complementing the access to these holdings and resources, the interlibrary loan service continues to be in high demand and has maintained a level of between 10,000 and 12,000 loans per annum. This special service priority of the Library allows for rapid document delivery, providing books and articles from a wide network of national and international research libraries within days of a scholar's request and responding flexibly to new thematic user needs. Thus, the Library represents a central node of an information network—which currently extends to the holdings of well over 500 individual libraries worldwide—that flexibly brings together information from a wide range of relevant sources and makes content available to scholars at the MPIWG and at its collaborative research centers.

Digital Research Library and Acquisition of Digital Content and Sources

Harriot manuscript "The Moon"; private collection Lord Egremont.

Access to digital sources and other materials has become crucial for research in the history of science. To address this issue, the Library has unfolded a multilayered strategy to enhance acquisition and access to digital content and sources. The strategy includes several elements:

The Library has further developed the special program for digitizing and presenting sources in the history of science in high-quality color facsimiles from the Library's rare books collection and in greyscale images from the microform archive. All digitized materials are made available in a Web-based Digital Research Library. The program includes the establishment of a special digitization group within the Library, which is equipped and qualified to digitize material at a high professional standard at

a rate of 500,000 pages per annum. The service, designed to flexibly react to new demands in the short term, is working closely with the research groups at the Institute that present their research on the Internet and that can immediately integrate the digitized sources in their presentation.

The ECHO open access infrastructure (http://echo.mpiwg-berlin.mpg.de; ECHO – Cultural Heritage Online; responsible project coordinator: Simone Rieger) is the Institute's central digital research environment for uploading and openly presenting sources on the Internet and at the same time for offering appropriate scholarly tools to work with the digital sources. It is a widely recognized flagship repository for historic material, making some 200,000 items available to a scholarly public.

To maintain it at a high level of performance, the Library, together with the IT Group, is rebuilding the ECHO infrastructure and its functionalities, focusing on the integration of innovative tools developed by the IT Group in the framework of activities in the Digital Humanities (TextGrid and DARIAH-DE). The Library maintains the central repository of metadata of all digital objects created at the Institute, which includes consistent information on copyright and permissions by systematically attributing Creative Commons licenses.

ECHO materials and other digital objects of the Institute are made known to a larger national and international audience by the uploading of more than 1,400 digital facsimiles and video recordings to Deutsche Digitale Bibliothek (DDB) and to Europeana.

Delisle correspondence; Bibliothèque de l'Observatoire, Paris.

The Library is redesigning its system in order to address the need for integrated access to the multitude of content created internally and externally—for example, CrossAsia—and to allow for flexibly using taxonomies developed in the research groups with the library collections. The search environment will concentrate in a first step on the central metadata repository of all digital objects, the library catalog, preprint series, PubMan publication repository, archival resources, data from ECHO and from other research databases at the Institute, and data resulting from full-text conversion. Thus, for the first time, access to these highly focused resources will be possible through a single search environment.

The Library's investment into professional mobile digitization equipment and its expertise in systematically digitizing source materials on remote sites yielded in a number of campaigns in institutions or in private collections to make these items available to scholarly research. Special highlights were the digitization of the Hilprecht Archive and Cuneiform Collection at Jena University (using also 3-D scanning, in cooperation with Jena University and Department I), the digitization of the collection of Arabic scientific manuscripts at the Berlin State Library (in cooperation with the ISMI project of Department II and McGill University, Canada), and the digitization of the correspondence of the French astronomer Joseph-Nicolas Delisle, held at the Bibliothèque de l'Observatoire, Paris.

The Library has been granted exclusive access in digitizing the unique Harriot manuscript collection held by Lord Egremont at Petworth House, West Sussex, in the
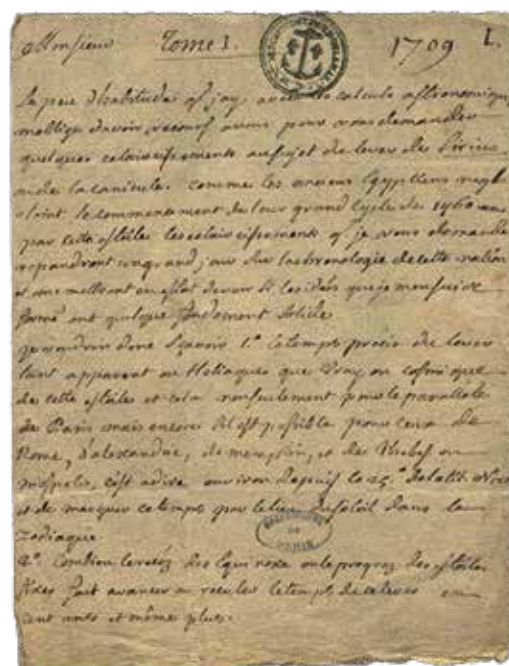
United Kingdom. These manuscripts now filled in the blanks of the Harriot manuscript collection of the British Library already available in ECHO, and for which a new contract allowing for permanent open presentation and reuse has been negotiated with the British Library. In addition, the Library is involved in the XML text acquisition and XML structuring of primary source works in,Western languages as well as in Chinese. This work is performed in cooperation with the IT Group and the research groups at the MPIWG.

Finally, the Library has been intensively involved in designing and implementing the digitization workflow for the project "History of the Max Planck Society" and installing two dedicated groups in Berlin and Munich for digitizing archival materials.

Support of the Scholarly Publication and Alternative Dissemination Process
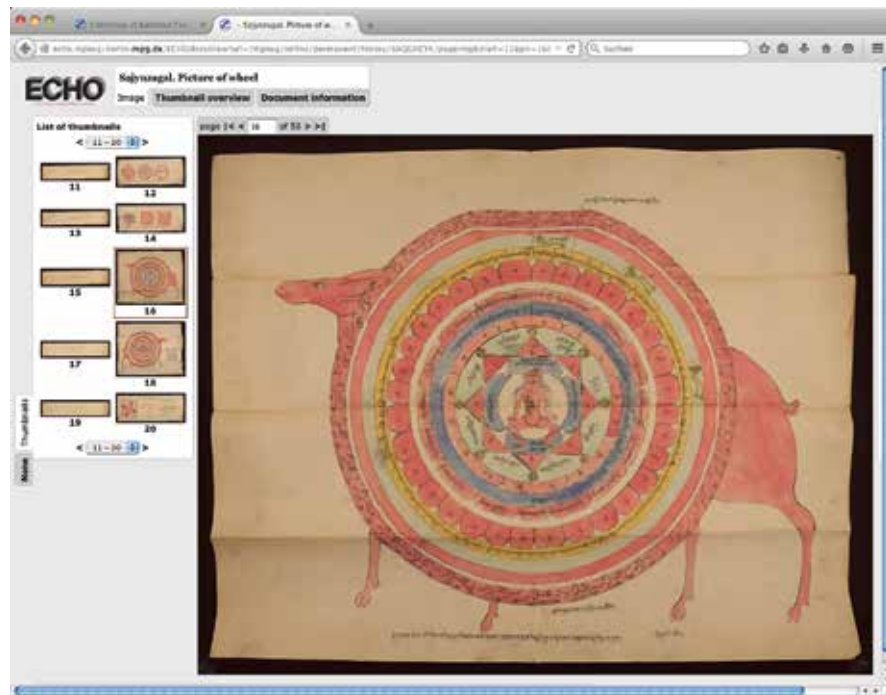
Sajynzgal, picture of wheel, Mongolian manuscript; Mongolian Academy of Sciences.

In carrying out the Max Planck Society's open access policy, the Library took on the responsibility for uploading the Institute's bibliography and publication output (metadata and documents) to the Max Planck Society publication server PuRe. On this server, the searchable bibliographic data and—depending on the individual authors' agreements—the full text of the research results, presentations, and so forth, are made available for either internal or open use. Data curating throughout the life cycle of the documents is also part of the Library's responsibility to secure long-term availability and enhanced international visibility of the Institute's research output.

To foster awareness and acceptance of open access publishing, the Library offers guidelines for MPIWG scholars, with information on the open access process, publishing standards, electronic publishing on the repository, legal issues, copyright

transfer agreements, and recommendations of what rights to retain, and has held several seminars with hands-on information. Since December 2014, Simone Rieger is Open Access Ambassador of the Max Planck Society.

With Edition Open Access (http://www.edition-open-access.de), a major desideratum for peer-reviewed open access publishing of monographs is addressed (see Department I). The Library is actively involved both in developing the concept and in negotiating and providing access to sources to be included in the edition. In the framework of the commented source series Edition Open Sources (http://www.edition-open-sources.org/), developed through the close collaboration of Department I and the Library with the University of Oklahoma in the United States, the head of the Library serves as one of the editors.

Furthermore, in an effort to concentrate content production and rights management, the responsibility for the media library was given to the Library. This responsibility, assumed by Hartmut Kern, includes the production, editing, and archiving of audio and video recordings of talks and conferences at the Institute. The video material is disseminated as part of the public outreach of the Institute. At the same time, the concept of a media journal as an innovative medium to document current research is being explored in collaboration with Department III.

Outreach Activities

The Library was involved in several collaborative projects. The two paramount aims of cooperating with research and cultural institutions are, on the one hand, the sharing of rare and manuscript materials in order to enhance access to these resources for research purposes and, on the other hand, the transfer of skills by sharing expertise in maintaining digital projects in order to make these resources available on the Internet.

In a number of international collaborations, the Library employed its expertise in digitizing and in making available cultural heritage materials on the Internet. The Library is working closely with the MPIWG's partners at the Institute for the History of Natural Sciences at the Chinese Academy of Sciences in Beijing in digitizing collections, which includes advisory meetings and training sessions in Beijing and Berlin. The cooperation with the Competence Center for Digitizing Cultural Heritage at the Mongolian Academy of the Sciences in Ulaanbaatar, which was implemented and guided by the Library in the framework of a cooperation Agreement be-

Talk at "Science 2.0" conference, Hamburg 2014.

tween the Mongolian Academy of Sciences and the Max Planck Society, has resulted in the digitization of several key manuscripts held in Mongolia. The Library's key concepts are communicated in many different ways. In particular, its basic ideas were conveyed during several expert visits from Germany and abroad.

With its involvement in library education, the Library is assuming another responsibility: it offers internships on a regular basis to students in library and information science who are preparing for a career in modern library management. These internships provide an efficient means for transferring our concepts into library education, a fact that is reflected in subsequent master's and diploma theses. In addition, Urs Schoepflin frequently gives presentations at Berlin universities, the Berlin State Library, and professional meetings. He also was invited to give talks and lectures on library concepts, on ECHO (together with Simone Rieger), and on open access publishing at such institutions as Villa Vigoni, Italy; the University of Oklahoma, USA; the Rijksmuseum in Amsterdam, The Netherlands; the International Conference on "Science 2.0" in Hamburg, Germany; and on digitizing Mongolian cultural heritage at the University of Bonn, Germany (together with Simone Rieger).

As a member of the Expert Advisory Board of the German Digital Library (Deutsche Digitale Bibliothek), he provides advice on its development from a scholarly perspective.

Finally, the Library is actively involved in the discussions on the concept of the Max Planck Digital Library (MPDL). The strategic cooperation with the MPDL will provide the necessary support for further generalizing and maintaining the services developed at the Institute, integrate new services, and secure the long-term availability and archiving of the scholarly results in a reliable and stable environment so crucial to research.

Library Team, from left to right:
Beate MacPhail, Hartmut Kern,
Sabine Bertram, Ralf Hinrichsen,
Simone Rieger, Ellen Garske,
Matthias Schwerdt, Urte Brauckmann,
Ruth Kessentini, Anke Pietzke,
Urs Schoepflin.