

HERICARE - DOCUMENTATION SOFTWARE AND ONLINE-DATABASE FOR CONSERVATION

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Abstract

An innovative online database and documentation software titled *hericare* has recently been developed by the Hornemann Institute, Center for the Preservation of World Cultural Heritage. This paper describes the idea and concept of *hericare*-database and *hericare*-docu, as well as their features and how to access *hericare* (www.hericare.com).

hericare serves the proper documentation of preservation projects and offers easy worldwide access to practical and up-to-date information from all lines of specialization in the field of conservation-restoration. *hericare*'s online database provides the data and information on the projects: A variety of features help to search the reports. By way of *hericare*'s documentation software, the preservation projects can be documented on the user's local PC or online. Among other features to facilitate the input, a conversion tool allows the user to continue working on the documentation in his own text processing program (MS Word).

According to the aim of the Hornemann Institute, *hericare* aims at enabling and supporting world wide knowledge transfer between people involved in this field.

Keywords: documentation tool, database, conservation reports, knowledge transfer, Internet

1. Idea and concept of *hericare*

The acronym *hericare* stands for heritage conservation and restoration experience. *hericare* consists of two components, an online database called „*hericare*-database,“ and a

documentation software called „*hericare-docu*„. In accordance with the aims of the Hornemann Institute the purpose of *hericare* is to collect and to provide complete conservation reports (and results of research projects) to experts in the field of conservation and restoration, and therewith to support the international exchange of information and quality of preservation. Experience concerning materials, methods of treatment, products for conservation and results of examinations gained working hands on in a project, could be very valuable information to other experts, if it is available without loss of (sometimes particularly) important details due to summarizing or editing it for publication.

The idea of providing complete and detailed information was derived from MONUFAKT, a database containing conservation reports, exclusively dealing with monuments damaged by immissions. MONUFAKT, set up in 1987 and formerly run by the German Umweltbundesamt, Berlin, was intended to make the reports searchable and to interrelate the information. Input, retrieval and output of information was done by the staff at the Umweltbundesamt.

The Hornemann Institute inherited the 250 conservation reports and extended the concept:

- To reach a larger audience and to fasten the information retrieval, the database was designed as an online database (being accessible all over the world at relative low costs) with multilingual user interfaces in English, German, French (in preparation) and Spanish (in planning).
- To include all lines of specialization in cultural heritage conservation (offering a lot of interdisciplinary information for different specialists), the structure of the documentation scheme was simplified.
- To facilitate the documentation of preservation projects the documentation software *hericare-docu* was developed. Thus to assist and encourage the user in his documentation work and to enable the Hornemann Institute to easily introduce the resulting reports to *hericare*-database.
- To keep information up to date, the *Forum* gives users the opportunity to make comments and/or suggestions to every report (the *Forum* is accessible with the report and can be searched too).
- To facilitate the use of the software and the access to the database to the greatest extend, every action is described in the help files. All buttons are linked to the Context Sensitive Help. Additionally several master reports and a user manual for download are available.

hericare intends to complement the existing databases on conservation literature and the conservation reports and research published on some institutions website, such as the Bibliographic Database of the Conservation Information Network [BCIN 2003] and the Art and Archaeology Technical Abstracts [AATA 2003] as well as the Conservation Information database run by the Canadian Conservation Institute [CCI 2003] or the Getty Conservation Center PDF Publications [Getty 2003].

The documentation records created by means of *hericare-docu* will be taken over unabridged from their respective authors, conveying their expertise and useful details without any alterations. To assure a minimum of information within the report all required fields are marked with headings in bold letters. Incoming reports are checked and sent back in the case the required fields are not completed.

Furthermore, the *Forum* permits the exchange of information, ideas and comments on the described techniques and products between colleagues even if a user has not handed in a complete report of his own.

The concept for *hericare* was developed in the Hornemann Institute between 1999 and 2001. During the developmental phase, experts working in the fields of conservation (of monuments and sites, as well as in museums), database development, software ergonomics and library systems supported the institute. *hericare* is accessible since February 2002.

2. *hericare-docu* - documentation software

With the help of the documentation program *hericare-docu*, conservators, restorers, architects and other specialists in the field can easily create documentation records of their current preservation projects in their workshop or in situ. Particular emphasis has been put on intelligibility and user-friendliness in order to assist users from of any cultural background. Therefore a layout was chosen that has the most resemblance to the well known Microsoft products.

Navigation on the level of the objects is possible by means of the tree of folders, like it is on the level of the chapters of one object, additionally objects and chapters can be navigated through by the blue arrows in the icon bar (*Fig. 1*). Within a chapter there are up to 4 tabs, with the input fields on them, to click at. The number of tabs depends on the amount of input fields that are necessary to that chapter (*Fig. 1*).

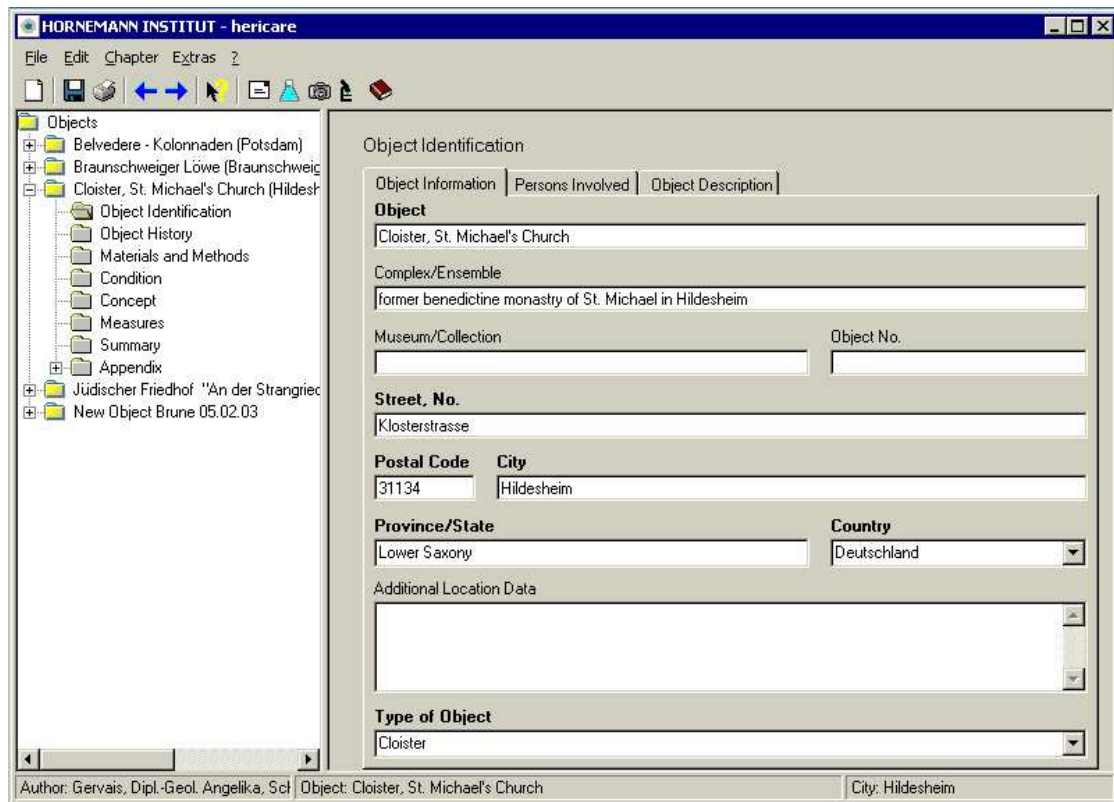


Figure 1: hericare-docu user interface, showing tree structure of objects and chapters (left side) and user input fields (right side)

2.1 Structure of reports

The structure (scheme) of the reports keeps a general level, so as to guarantee that all areas of specialization in conservation can be covered. In accordance with the international standard structure of documentation records, each report is divided into the chapters: Object Identification, Object History, Materials and Methods, Condition, Treatment Plan and Measures.

The chapter Condition, as well as the chapter Measures, can be subdivided into subfolders describing specific damages and actions taken respectively, if this should be required due to the amount of the available information. Each new Condition and Measures subfolder contains the same specific input fields on its tabs.

The Appendix lists all figures, examinations and literature cited in the input fields of the report. A summary adds to clarity when the conservation report is published online in hericare-database. To report on extensive projects or large objects, several „parts of an object,, (subdivision of the main object) with the same (predefined) structure as described above can be created.

Hericare-docu offers therewith a scheme to follow during documenting conservation work. It might not fit for every purpose and some specialists eventually will miss a field. But the general level structure allows to introduce every information to the predefined input fields. At this moment *hericare* is a first launch and we will keep on developing it with the help of the users expertise.

2.2 Working with the software

In order to enhance the usability of the software, the program has among others the following features:

- Input fields of different size: single row fields for one term or fields up to 60000 letters were necessary.
- Listing fields: for adding authors (*Fig. 1*), citing products, literature etc..
- Internal databases assist the user in archiving and citing addresses, products, images, description of examinations and literature (*see icons at Fig. 1*).
- Fields with drop-down menus: to choose from a list of terms. The menus can be edited by the author. In future special drop-down-lists will be available for the different lines of specialization using different terms.
- Users can copy text blocks from existing text files and paste them into the input fields. It is also possible to attach complete files to some of the fields.
- Import and Export functions enable the transfer of data between several, locally separate participants in one project.
- Complete reports or parts thereof can be converted into MS Word files, allowing the user to edit and print the reports. The records can thus be adapted to a corporate design or to any form of layout which customers or clients may use.

hericare-docu is available as a single user and as a network version with unlimited number of users. The latter enables institutions and companies with several workstations to use the internal database, for example the addresses database, commonly and reducing the amount of double input.

The users can not only use *hericare-docu* for publishing their work in *hericare-database*, but also as a tool for everyday documentation. In such case the scheme can be filled out partly only, with the information favoured. To find objects the list of objects displayed in the file tree can be sorted alphabetically by the name of the object or by the name of the city.

When a report is completed and wished to be published, it can easily be exported from the software and send to the Hornemann Institute by email or by postage. The institute will check if all required fields (with bold titles) are filled out and load the report to the database by a click. Reports will not be reviewed, but incomplete reports will be send back to the author to be completed.

3. *hericare*-database

hericare-database contains the documentation records created by means of the *hericare*-docu software. These can be retrieved throughout the world via Internet. Any registered user can view the reports in the database, get valuable information and exchange technical experience with their authors.

3.1 Information Retrieval

There is a variety of options to search the inventory of records, thereby making detailed information about the condition of objects, applied measures and products and experts involved in conservation-restoration available. By combining terms in the Advanced Search new aspects of information can be generated out of the data.

The query options consist of

- a) the 'Standard Search': a single input field combinable with the chapters of the reports,
- b) the 'Advanced Search': four input fields each combinable with a section of the report to be chosen,
- c) refining a search by searching the result (whole reports) again,
- d) the 'Search History', that lists all previous searches of the session,
- e) searching a period or a dating by entering special operators

Moreover, a list displays all reports in the database sorted either alphabetically by name or city (location) or by date.

		All
AND		All
AND		All
AND		All

Search

Fig 2 *hericare*-database: Advanced Search features

3.2 Display of information

A search result lists the reports with the chapters in which the searched term(s) have been found. By clicking the chapter the report is opened and the term(s) are highlighted.

The reports are displayed in the database with chapters accessible by buttons (Fig. 3). For viewing the database please see "4. Access to *hericare*" for a link and the access data.

3.3 Contents of the Database

hericare-database contains around 420 conservation reports on monuments and objects. Among these are nearly all conservation projects that have been sponsored by the Deutsche Bundesstiftung Umwelt (German Federal Environment Foundation). So far, subject matters tend to focus on the conservation of stone, wall paintings, glass and metal. Currently, the majority of datasets are in German language, but more English reports are following from the already existing co-operation with some European universities teaching conservation. The Hornemann Institute seeks to find more co-operating partners from all countries.



The screenshot shows the *hericare* database interface. The top navigation bar includes the logo 'hericare' and a 'FORUM' button. Below the navigation bar are links for 'Investigations', 'Images', 'Products', 'Literature', and 'Adresses'. A left sidebar contains a menu with options: 'Abstract', 'Object Identification', 'Object History', 'Materials/Methods', 'Conditions', 'Treatment Plan', and 'Measures'. The main content area displays search results for 'Schwarz, Norddeutsches Zentrum für Materialkunde von Kulturgut e. V. Hildesheim, Kreuzgang, ehem. Michaeliskloster, ehem. Benediktinerkloster St. Michaelis in Hildesheim'. The results are organized into sections: 'Object', 'Complex/Ensemble', 'Address', 'Additional Location Data', 'Type of Object', and 'Owner'.

Object:	Kreuzgang, ehem. Michaeliskloster ehem. Benediktinerkloster St. Michaelis in Hildesheim
Complex/Ensemble:	Kreuzgang, ehem. Michaeliskloster ehem. Benediktinerkloster St. Michaelis in Hildesheim
Address:	Klosterstr 8 31134 Hildesheim Niedersachsen Deutschland
Additional Location Data:	Nummer des Gesamtobjektes: 15693 Flur 31, Flurstück 7/10 GK-Koordinaten: R 356460 H 578040 Gemeindekennschlüssel/Denkmalsschlüssel: 254021.00339 / 032 - 5083 - 004 - 01 Aktenzeichen der Deutschen Bundesstiftung Umwelt: AZ 14785
Type of Object:	Kreuzgang
Owner:	Ecclesiastical Property

Fig. 3 *hericare*-database: Search result: conservation report on Cloister of St. Michael's Church, Hildesheim, Germany

4. Access to *hericare*

As the Hornemann Institute is part of the Department of Conservation at the University of Applied Sciences and Arts Hildesheim/ Holzminden and Göttingen free access is provided to other national and international educational institutions. Also national heritage boards in Germany received free access to *hericare* upon stating their interest. Further non-profit institutions are welcomed to contribute to *hericare* for the benefit of the cultural heritage and to profit from the available information.

Users that contribute in providing a conservation report to the database get a free access for one year, all others would have to pay a fee.

The *hericare-docu* software, is available on CD-ROM or for download on Internet, both for the single user and the network version. While the software has been designed for Windows platforms, the Hornemann Institute also prepared the online version that is independent from the type of operating system used. Because the software could also be used without a benefit to the database, there is also a fee to pay.

More Information on *hericare* is provided at the home-page www.hericare.com where also the Log-ins to *hericare*-database and the online version of *hericare-docu* can be found.

5. Conclusions

hericare demonstrates how information on preservation projects can be made accessible to all for the benefit of the cultural heritage as such.

Since the Hornemann Institute wishes to contribute to the global transfer of knowledge, the inventory of reports in *hericare* is projected to increase throughout partnerships with other institutions, such as museums, conservation authorities, universities and schools. The structure and the programming of *hericare* have been custom-tailored to permit extensive co-operation between different entities in the field of cultural heritage.

This presentation may help to establish such partnerships to the better understanding and preservation of the world's heritage.

Currently, the documentation software and the database are available in English and in German. A French version is being developed. Depending on the funding a Spanish version is intended to be realized later.

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