THE DIGITAL ARCHIV FOR DESIGN, ART AND ARCHITECTURE

SUMMARY OF THE RESEARCH PROJECT
OF THE DESIGN DEPARTMENT

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The aim of these project is to form a data base digital picture archive for both historical and contemporary comparative discourse in the area of design and design history, as well as history of architecture and of art.

It should be integrated as a permanent component of the didactic teaching and learning medium of the Design Department. This data archive should in addition be included in the Hochschule network or in the Internet thus being available for all teachers and students of Hochschule Anhalt, and is therefore a useful, supplementary addition to teaching and learning material on all Campuses. Appearing in the Internet, it will raise the profile of Hochschule Anhalt as an internationally respected location for innovative technical applications and media design.

The collection, collating and digitising of these documentary materials into the areas of Graphic Design, Product Design, Media Design, History of Design, History of Art and of Architecture as well as Technical History were important aspects of the research projects.

This led to close co-operation between the departments of Design, Architecture and Computer Science as well as with several business concerns, other College institutions, Museums and Archives - the first positive outcome. This interdisciplinary co-operation both archived and advanced the research projects in an ideal way. First cooperations with the Archive of the formerly „Hochschule für Gestaltung (HfG)" in Ulm and the „Department for Information Resource Management and Computing Centre" of the University of Ulm were realized.

1. Names and Departments of the Applicants

In co-operation with

Prof. Dr. Stuhr (Architecture Department)
Prof. Neubert (Design Department)
Dr. Paulussen (Design Department)
Prof. Dr. Worzyk (Informatics Department)

2. Subject of the Research Project

Development and commissioning of a data base digital picture archive for both historical and contemporary comparative discourse in the area of Design and Design History, as well as History of Architecture and of Art.

3. Scientific objectives

I. Investigation and comparative analysis of data base systems

This first stage of the work is aimed at the basic determination as to what extent a data base is useful for this purpose of application, and which reference projects could give some clue to it.

The speed in getting access to the data base plays a specific role in this work. In addition, its usability in the network system of the Hochschule should be archived.

Since the beginning of 1998, Dr. Paulußen has been working on this project as a Research Assistant. First of all, he looked for orientation in the technical framing conditions and the needs analysis of the technical equipment necessary for this research project, as e.g. data base server, work terminal, software, slide scanner, as well as the mass memory required for archiving. Meanwhile, this needs analysis has been completed so that the necessary hardware and software can be.

II. Multi-platform analysis of different kinds of files

Considering the future option to integrate multimedia documents too, it should be investigated how different kinds of files (picture, text, sound documents and films) are archived and how they can be downloaded.

III. Development of the data base architecture / retrieval function

A functioning organisational structure is the basis for any work with the content of a data base. In this sphere of work, the opportunities given by the technical development together with the content-related structuring of this digital data base archive should be investigated and implemented. Text and picture retrieval have to be urgently provided here.

IV. Collection, structuring and preparation of the picture material needed to cover the intended areas

This field of work covers the archiving component of collecting, collating and digitising of the documentary material into the areas of Graphic Design, Product Design, Media Design, History of Design, History of Art and of Architecture as well as Technical History. This shall be acquired by an interdisciplinary co-operation between the Architecture and Design Departments and also with several institutes, museums and archives.

V. User-friendly visualisation of the archive structure

A subdivision of all existing and expected contents, which the user will understand and recognise, is a basic prerequisite, above all for interdisciplinary utilisation at all campuses.

The aim is to find the criteria for arranging the different contextual elements. This field of work is intended to determine which search principles and kinds of visualisation can refer, in a didactically differentiated way, to the contextual dependencies of the interwoven topics of History of Design, Architecture, Art and Culture.

5. Brief description of the project

The aim of this research project is to create a digital archive.

The structuring of the archive is based on an investigation of contextual elements, which is continued by a collection of historical and contemporary picture and text material in the areas of Graphic Design, Product Design, Media Design, History of Design, History of Art and of Architecture, and History of Engineering.
Furthermore the context relevant for art and culture should be demonstrated by appropriate documents and related to historical events.

During this 36-month research project, a digital archive should be created which could be used in networks and which covers all functions permitting a user-friendly administration of its content. Considering the access in all campuses it should be investigated how the data base can be

structured so that it can also be effectively utilised in future. The concept to prepare should therefore provide a structural standard, first of all, which is then filled with contextual elements.

In the run of the project, an inquiry and search mode should be developed which on the one hand provides a focused and user-friendly access, and also permits a search for catchwords on the basis of different contextual elements.

The data base should be established as an open system with the existing contextual elements being completed and new contents integrated into it, after this research project has been successfully finished.

6. First results

In cooperation with the department of computer science of our Hochschule we have developed in a student diploma projekt a relational data base with FileMaker. With the help of a CGI-Software called „Lasso" we could beyond that created a first prototype in the Internet, where serveral search modes and the use of the data base can be tested.

In a seminar at the department of design students have build different interfaces for the digital archiv. They dealed with the visualization of the data base content. One student realized a timeline with a „lanscape of works", which gives an interesting view on the works of one person. It is written in JAVA, so that one can test the functionality with a Internet-Browser.

The „Department for Information Resource Management and Computing Centre" of the University of Ulm develop on the basis of the „IBM Digital Library" a multifunctional search tool, which allows users of the digital archiv to organize and save the choosed informations. On a virtual slide-desk one can drag the pictures to use them in a lecture and save them for the students. They should have the possibility to consult those informations and search for context informations in the digital archiv. The digital archiv will be therefore a central tool for Distance Learning and the basis of a new teaching in Design and Art-History.

You can find our prototypes on our Internet-Site at:

http://www.des.hs-anhalt.de/Digitales Archiv/

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