Experiences in the Application of the Computer Program Promus for the Documentation of Collections of the Ethnographic Museum of Zagreb

The implementation of an information system at the Ethnologic Museum of Zagreb started in the early nineties as part of the MUGIS\(^1\) project, through which the MDC\(^2\) offered the MODES\(^3\) application. The purpose of the project was the alignment of the museum and gallery object documentation, due to the fact that the documentation methods were inhomogeneous and differing, which rendered the necessary future networking, data exchange and communication on the national as well as the international level impossible. All curators of the Museum initially took beginner MS DOS operative system courses in order to become familiar with the possibilities and technology of using the computer and the MS WORD text processor, followed by seminars including the presentation of MODES. Parallel to the beginning of the new documentation system application, some curators participated in modifying and completing the uniform classification of museum objects (by types of objects) for ethnographic museums. The reasons for the cancellation of this program were much discussed and written about in the MDC\(^4\) publication. However, these initial steps in

\(^1\) Museum and Gallery Information System  
\(^2\) Museum Documentation Centre  
\(^3\) Museum Object Data Entry System  
\(^4\) Informatica Museologica, Bulletin on the Introduction of IT to Museum Activities in Croatia
computer literacy were a good basis for the continuation of the computer application training and developing awareness of the importance of IT application in the museum activities. The following stage, like in other museums, concentrated on finding individual solutions of the problem of computer support implementation, since no organized and planned process of computerization existed and has still not been developed to date. In cooperation with the company Microlab, PROMUS\(^5\), a multimedia program for the collections processing was accepted in 1995. The first practical experiences in the application of the program called for modifications and changes both in the technical and professional sense. Initial problems were related to the data standards about a museum object. Since no such generally accepted standard exists on the national level\(^6\), the starting point of the standardization were data kept on old "paper" inventory cards, which were first completed manually and afterwards by typewriters. Every object registered on such cards is allocated an inventory number, while data on the structural characteristics (material, form, production technique) and functional characteristics (purpose, use) were added in the course of the object analysis. In addition to information deducted from the object itself, the cards contained also data about the way and date of acquisition, dimensions and purchase, while the major part of the card was reserved for a detailed description of the object. The major part of data recorded on such inventory cards is contained in the *International Guidelines for Museum Object Information: the CIDOC information categories*\(^7\) and *International Core Data Standards for Ethnology/Ethnography*\(^8\), which we used as guidelines in finding proper solutions for the problem of standardization.

The biggest problem related to the entry and subsequently to the browsing through data, is posed by the lack of uniform terminology, not just the descriptions of items, but also all terms that should be unambiguous and mutually synchronized, which is a serious obstacle to the creation of a quality data base and to browsing. Initial entries were full of different entries and term variations for the same concept. The terminological confusion was most evident among curators managing folk costume and textile collections (since the textile collections comprise the major part of the Museum's holdings, seven curators were assigned to work on them)\(^9\). In numerous meetings of the Board of Experts, we attempted to synchronize and agree upon the clearest and simplest terms\(^10\). We are aware that, by doing so, we managed to solve only the internal terminology problem, however, the problem of national-level ter-

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\(^5\) Abbreviation for Pro Museum; the name was accepted upon proposal of Mirjana Drobina, head of marketing of the Ethnological Museum of Zagreb

\(^6\) During the presentation of the Promus application at the 2\(^{nd}\) seminar *Archives, Libraries, Museums* held in Rovinj in 1997, the material entry and browsing software was praised, but the non-compliance with the data standard was criticized. However, it was not made clear with which standard.

\(^7\) International documentation Committee (CIDOC), International council of Museums (ICOM), 1995

\(^8\) CIDOC Ethnoworking Group, International Council of Museums, 1996

\(^9\) E.g., the following entries were made under "Material": cotton fabric, homemade cotton weave, cotton material etc.

\(^10\) In order to avoid extensive, lengthy and descriptive names, the entry of a noun in nominative singular was accepted. Thus, the single acceptable entry for "Material" would be - cotton.
minology remains, because there is no inter-museum cooperation to deal with the development of terminology control. Museum professionals still have to meet as soon as possible in order to discuss this segment, which is essential and important for the standardization of entries, but also for the transfer of available data into accessible information and the establishment of an effective documentation and information system. The expert conference *Archives, Libraries, Museums: Possibilities of Cooperation in a Global Information Structure Environment*, taking place for several years now in Rovinj, is of crucial importance for the solution of these problems.

The computer program PROMUS Version 2.0 was developed based on a database created in the Access application, which seems to satisfy our requirements. Developed by the company Microlab primarily for the needs of the Ethnographic Museum, it was later acquired also by several other Zagreb museums. It was conceived in such way as to enable the viewing, entry, editing and linking of text and image records. Each of the thirteen curators owns a PC\(^\text{11}\), with different configuration settings (from Pentium I 75 MHz to Celeron 800) and with the Promus application installed. Each of these PCs is linked to the server where the database is located. The databases are protected by individual curator's passwords, so that the entry and editing of data is possible only to curators using their individual passwords, while only data selected by the administrator can be viewed (Picture 1). The data structure is contained in 8 forms that enable the entry of the main categories: basic information, additional information, production mode, place and date of production, restoration, data on acquisition and notes. Each of these basic data categories contains a varying number of fields used for the entry of details. Pictures 2-9 show the fields content and descriptions. Data may be browsed by title, location, place of origin and acquisition. Fields used for browsing offer a menu (term lists) with already accepted terms to avoid invalid entries. The browse option is enabled only for direct users, curators, due to the fact that only a small part of the Museum's holdings was processed\(^\text{12}\). However, more efficient and faster entry options are already evident. Data about more than 6,000 objects have been entered already. This number could have been even higher, but the entry into the computer is not merely a transfer of data from old cards, because many of them are incomplete and require looking into the inventory record or a direct contact with the object in order to establish, for instance, the material of the decoration, its dimensions, etc. Another reason for the relatively slow retrieval of the complete information about a particular item is the need to make visual recordings of the object and to link the textual with the visual records. Pictures of the object are taken by a *Kodak DC 120 ZOOM, Ver. 1.0.2* digital camera (considered by some as being history). The process of picture taking and preparation works are done by the curator. This involves taking the object (previously cleaned, washed or ironed by the preparators) from the store-room, putting it on a background (usually on the floor of the curator's room), which can be a very demanding job, especially if the object to be photographed is a richly plated woven or embroidered aprons, shirts or bodices. After the picture is taken,

\(^{11}\) This computer equipment was introduced as late as in 2001

\(^{12}\) The holdings of the Museum contain over 80,000 inventory numbers, but the actual number of objects is considerably higher since many folk costumes consist of 10 and more parts, but are entered under the same inventory number.
the digital record is transferred to the computer base, where it is processed in the Adobe Photoshop 5.0 application. Since none of the curators is a professional photographer, the processing of the digital images is very time-consuming (the object needs to be centered, accidentally recorded details must be deleted, objects need to be straightened, sharpened etc.). The image processing includes the downscaling of the resolution and format of the digital record in order to avoid an overload of the database which and its malfunction in Access. For our purposes, the optimum size of the images is about 300 KB, a resolution of 72x72 dpi, saved in the .tiff format. Similar parameters apply for scanning. Images processed in this way serve only the purpose of object identification. After the visual record being allocated an inventory number, it needs to be linked to the corresponding textual record. The dynamics of the linking depends on the capacity of the respective computer, which is mainly not very powerful. To date, over 1,000 objects have been scanned and, for the most part, recorded by a digital camera. In addition to linking the text to visual records, it is also possible to link it to video or audio records. However, this option has still not found its practical application. These multimedia options make it possible to record various information related to the object, e.g. the sound of a traditional instrument or the use of the object in its non-museum environment.

Monthly backup copies of the records are created automatically by the server. However, this does not protect the database in case of physical or program corruption of the local hard disc. A complete protection would be to save the files on one of the mobile media (zip drives, compact discs etc.) stored in a safe place. This level of protection has not yet been achieved. In general, all problems of technical or technological nature would be reduced by the employment of a museum IT operator. This would not only provide a prompt reaction to daily problems, which would probably contribute to the computer literacy of the curators, but also ensure a much more transparent and efficient implementation of new ideas and standards into the existing software application.

The application of the computer program Promus in the material documentation enables faster data entry, database creation and establishment of database networks, faster dissemination, integration of photo, video and audio records as well as browsing by various customer criteria. Some of these options have yet to be fully exploited. However, we are facing a period of painstaking work involving data entry, the linking of data and their alignment according to definitively accepted standards and technologies, because only high-quality databases can be the groundwork of a future participation in a global information network and successful multimedia projects. Time will show whether we are on the right track.

This paper contains an example of the application of computer technology in the museum activities in just one aspect - the documentation. However, the possibilities offered by the new information technology, not only in the processing of the material, but also in the planning and conceiving of exhibitions, presentation, education and communication, are immeasurable. The Ethnographic Museum is trying to keep step with new requirements. A first step was the issuing if the CD-ROM "Furniture in Croatia", while the renewed and expanded web site should be available shortly.

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