MUSEUM AND INTERACTIVE
MULTIMEDIA INFORMATION SERVICE

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Context

The Museum of Louvain-la-Neuve is an University museum which has a double vocation:

- being open to the general public
- being a centre that encourages students and scientists to experiment and research in the subjects of museography, art history and archaeology.

This museum not only possesses an extremely varied permanent international art collection (dating from prehistory to the present day, artworks from all continents) but it also organises regular temporary exhibitions (+/- 150 in 12 years). This diversity needs an adapted museology and complementary explanations at various levels.

It has been six years now since we started using computers in the museum (Lefftz, 1991). We soon realised how much the computer screen appealed to the general public; after a few test runs we installed our first permanent information display at the entrance of the museum in September 1991.

This success is undoubtedly related to the visitor’s assimilation of the computer screen to the TV screen and of the mouse (or trackerball) to the remote control device. The computer is also a machine whose capacity to produce images and imaginary worlds is tremendous. Without making the animated image into a full-scale intellectual technology (Levy, 1991), we are modestly trying to use the computer as an analysis instrument such as we would a pencil or magnifying glass.

We attempt to show that the image is only part of the object aura, and that every new look creates a new image. It is like changing the lighting of an artwork, it allows us to discover or rediscover the work.

To achieve this, the art historian-museologist should broaden the scope of his own categories and try to forget what he knows in order to reinvent what he has learned and to discover what he had unconsciously obliterated.

The various software allowing the manipulation of images are indispensable tools; but it is even more interesting to fabricate images. The registering of images with the help of
lightweight video equipment is a true adventure during which the user constantly rediscovers the object in real time.

Once the data is digitalised and processed, they remain to be organised. Here again, the art historian-museologist should strive, for a moment at least, to forget his usual schemes, so as not to close the horizon which he had opened.

For the museum’s multimedia display at Louvain-la-Neuve, several types of structures have been adopted. A simple arborescence was selected for the information plot, whereas for scientific popularisation, we have chosen hypertext (Levy, 1990), all the while keeping a certain clarity in the structure. Indeed, hypertext is perfectly suited for intuitive heuristic consultation. For the scientific files, on the other hand, a mixed system was chosen. Since this set was articulated around an enlarged inventory, the quantity of data and the problems of research had to be taken into account. However, for the sake of establishing relationships among the artworks we have introduced punctual links between certain objects and made complementary modules accessible. Developed in continuity with the museology practised at the museum, those multimedia products are particularly well integrated into it. The visitor finds in them a complement to his visit (whether in introduction, in parallel, or in conclusion). Destined to provide him with clues to the objects, and to allow him, not only to regenerate his vision of those objects, but also to entice him to discover other works, thanks to the hypertext-type structure.

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**Interactive MultiMedia Information Service**

The IMM applications presented here are all made in the museum by a small team including an art historian, a psychopedagog and a documentalist. Only when larger programme requirements arise, are specialists of the University involved.

If we have decided to be both designers and producers, it is because we feel convinced that it is the best way to achieve balance between the museology of our museum and those new communication tools which are the IMM’s. Several contacts with specialised companies convinced us in that way. Our experience in producing IMM’s raised our requirement level concerning balance between their form and their content. It is thus more difficult to establish a specification in case we decided to subcontract the job outside. Although we recognised that sometimes it can be necessary to work with specialised audio-visual companies, we do believe that their contribution must be limited to the final phase. This last one will be based on a detailed lay-out including pictures, sound, text, graphics. This means that the exterior contribution is mostly limited to the DOD (Digital Optical Disk) editing.

In addition to the multimedia display, to scientific popularisation and to consulting of scientific files, the museum has developed a teachware (beta phase) about Greek antique ceramics. In addition, other teachwares are being developed at the moment: the big Ndengese statuary and the European engraving. The use of those tools is foreseen either in the museum, or in didactic university rooms equipped with computers or even in schools.

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**Adequation criteria between museology and IMM’s**

The four criteria mentioned below are four successive steps for the visitor in front of multimedia displays:

- Exterior outlook of the display: the computer has been integrated in the museum in the same way as show-cases and lighting. At the museum of
Louvain-la-Neuve, as far as museography is concerned the key word is: soberness!

- **Graphism:** special care is given to achieve an ideal relation between the IMM graphism and the subject shown (here too, soberness is important) and to the critical distance between the image and the object. For instance, when comparing different artworks, those belonging to the Louvain-la-Neuve museum will appear in black and white on the screen whereas the other ones will be in colour (Fig.2).

- **Ergonomics:** Establishing a convivial interface is a first step in order to guarantee the optimal use of the presentations. Under no circumstances will we use the computer interface, which means there is no key-board nor menu bar. The visitor will use buttons giving all possible choices clearly (Figs.1-3).

- **Synopsis:** the aim is to increase the visitor's attention for the artworks by offering different ways to analyse them. Navigation among the information given by the IMM allows a personal and intuitive progress. As we are used to guide visitors in the museum or to edit publications, the IMM is, for us, a new way to communicate about the museum patrimony. The information included in the IMM must be complementary to other information given by the museum. Furthermore, it should ideally encourage the visitor to return to the artworks through "a come and go" between the display and the artwork.

We would like to insist on the collective use of the display. Indeed the attraction induced by the pictures on the screen leads regularly more people around the display. One will then notice an increase in research that can go in different directions.

**Applications**

The different applications presented here have been chosen because of their complementarity. They were conceived within a research programme aiming at the testing of those new technologies for the museum in order to establish their constraints and advantages.

**Entrance display** *(structure: arborescence; addressed: to general public). (Fig.1).*

This display is permanently placed at the museum's entrance (an innovation in Belgium) and gives relevant and up to date information concerning:

- general introduction to the museum
- its dynamics and services offered to the public: educational service, restoration, Friends of the museum, publications and computerised records
- the exhibitions agenda and activities organised by the museum and it's Friends
- work progress concerning the new museum - the Dialogue Museum - designed by the Japanese architect Kisho Kurokawa.

**A simplified scientific presentation display** *(structure: hypertext; addressed: to general public). (Fig.2)*

This multimedia display is located in a museum's room in front of two groups of baroque sculptures of late XVII century and beginning of the XVIII century (15 pieces). The IMM presentation contains information related to the exhibition. Different aspects of the
Fig. 1  Entrance Display

Entrez au musée
Le musée de Louvain-la-Neuve
(carte de visite)

La vie du musée
(informations)

Visite-découverte

Le musée du Dialogue
(avant-projet)

Cliquez sur votre choix

Fig. 2  A simplified scientific presentation display

La draperie
La torche transversale

Il s'agit de la torsion formée par l'accumulation des plis lorsque le manteau tombe des épaules et glisse sur la taille.
Fig. 3  Example of screen from the engraving section

Fig. 4  Example of screen from the engraving section showing detail and position
artworks are shown such as stylistic, iconographic, historical and technical... This information is clearly drafted and set up in a convivial way. The use of the computer right next to the artworks proves to be a necessary tool giving the visitor a better understanding of the origin of these sculptures. The wishes of the public are checked in order to answer in the way most appropriate to their needs.

**IMM display giving access to scientific files (structure: mixed; addressed: to scientist)**

This database is experimental and contains a selection of more or less twenty representative pieces of the museum's art collection. Anyone concerned can easily get hold of relevant scientific information:

- an identification index: inventory number, title, subject, date, state of conservation, marks, inscriptions and location
- artwork's history: successive owners, acquisitions, exhibitions
- restoration file: laboratory analysis, material, techniques, conservation treatment and restoration
- scientific study of the work: iconography, iconology, attribution, dating, comparative elements, documentation
- illustrations.

Note: this IMM display contains scientific datas as well as the simplified scientific presentation mentioned previously.

**Teachware about Greek antique ceramics.**

This program refers to the ceramics as far as typology is concerned (shapes and uses), so as technique, decoration and iconography. Presently this program is available in black and white but it will soon be developed in colour to be edited on DOD.

**Other teachwares are being developed: big Ndengese statuary (Fig.3-4) (semantic study of the scarifications, stylistic and ethnographic studies...) and the European engraving (stylistic and technical evolution, major artists).**

**Notes**

**Technical information:**

For technical and financial reasons, the productions presented in the museum are made in 256 or 32,000 colours. The datas are stored on a hard disk in order to achieve a quicker access but mainly in order to modify them at any time.

All IMMs are made with an Apple Macintosh, Display colour 13'. Presentation software is Macromind Director.