Jamtli Historical Building, Phase 1

Project Survey

During the last couple of years, cultural institutions around the world have been working in order to digitize their collections and historical photographs. The purpose of this has been to be able to ensure the continued existence of the collections as well as to increase their availability for research, etc. For example, a co-operative project concerning the digitization of text- and picture-based information was carried out by the National Library of Sweden, Nationalmuseum, Riksantikvarieämbetet (Swedish National Heritage Board) and Riksarkivet (The National Archives). The aim of the project was to initiate the development of a joint platform for co-operation archives, libraries and museums. Some of the project outcomes were recommendations for standards, norms and frameworks of digital image management (http://abm.kb.se/).

In Taiwan they are in the process of building the country's largest digital collection of photographs. The basis for this project, The Taiwan Digital Photo Museum, has been that of the traditional, such as safe conservation and increased distribution. But the museum also claims that the project's field of application will extend to advanced applications with academic and commercial goals. The museum want to offer a "journey of discovery" through Taiwanese history and users should for instance be able to find thematically related pictures (http://www.sinica.edu.tw/photo/). In Taiwan, parallels are drawn to the American project, American Memory Historical Collections for the National Digital Library, which offers more than 7 million digital objects concerning US history and culture (http://lcweb2.loc.gov/ammem/).

Another American example is The California Museum of Photography, where they are working to make available old stereographic images to a wider audience. Previously, the images' 3D effects could only be attained through a stereoscope. By digitizing and processing the images they can now be viewed on the Internet. It is possible to order 3D glasses through the museum and the gallery's address is:
http://www.cmp.ucr.edu/site/exhibitions/stereo/anaglyph.html.

On the 7th of November, 2003, the British e-learning group for museums, libraries and archives had their first well-attended and praised conference in London. The speakers at the conference stressed that meaningful e-learning should build on problem solving, participation and mutual learning. Furthermore, they asserted that digitized collections do not equate with accessibility and that accessibility does not automatically lead to learning (http://www.elearninggroup.org.uk/7nov_conf.htm).

Image presentations are often thought of as screen-based solutions produced in applications such as Flash and Dreamweaver, or as presentations in Powerpoint. Animated image presentations which often include some interactivity, commonly occur for informative purposes and the technology has been adopted in several museum projects. For example, Göteborg's statsmuseum (Gothenburg's civic museum) produced a CD-ROM that replaced the traditional exhibition catalogue for the project "Spåren

talar". By trying to attract with the new medium the museum wanted to increase interest in archeology and history, especially in one underrepresented target group – youth. The production contains approximately 1000 digitized photographs and also texts, animations and sounds (http://www.stadsmuseum.goteborg.se/).

The Vasa Museum's exhibition, "Makten & härligheten", provides the museum with new advanced technology that consists of a pictorial show on eight large screens. In this show, the Vasa ship's sculptures are placed in their historical context and the ship's reconstructed colors develop before the eye of the beholder. The eight-screen show consists of newly produced film material and still pictures of the known artworks (http://www.vasamuseet.se/).

The VALA project is produced by The Interactive Institute and Runecast Ltd. The project combines film, games and art with the intention of developing new methods to explore the mythological world of the Viking age. Furthermore, these new methods examine the usage of narrative landscapes as an interactive, dramatic medium. A combination of interaction, choices and random events generates the audiovisual expression of the "hyper-movie" VALA so that it is different each time (http://www.tii.se).

Another context where images and image shows have become significant, in the application of digital technology within the area of "culture and museums", is the digital guide. Several historical environments use and develop GPS and Bluetooth solutions so as to offer visitors an informative and available guide for indoor as well as outdoor environments. Mölndals museum is an example of a Swedish museum that stands up for the development of digital guides in outdoor settings. Their digital guide contains both audio and image presentations and are played at different places around Kvarnby (http://www.museum.molndal.se/).

A similar project to that of Kvarnby is the "Framtidshyttans GPS" project and also has a portable guide with digitized material such as maps, audio, image presentations etc (http://www.framtidshyttan.com/).

Making historical landscapes and places more lifelike has become more and more desirable. Norrköpings Visualiserings- och Interaktionsstudio (NVIS) wants to create experiences about the changes that have occurred in Norrköping's industrial landscape during the 20th century in their project "Här & där och då & nu". The project's narrative is facilitated by VR-environments and 3D graphics (http://www.nvis.itn.liu.se/).

A similar but Internet-based solution is "Kulturarvsdialogen", a collaborative project between Riksantikvarieämbetet (The Swedish National Heritage Board) and Chalmers University of Technology. The project applies the Active Worlds platform which is a combination of a real-time simulator, a chat environment and web technology. It uses two 3D models of the church in Gamla Uppsala as its starting point (http://www.raa.se/kulturarvsdialog/).

The Interactive Institute desires to go beyond the limitations of the screen and Smart studio. Together with Avesta in the project, "Meta.L.Hyttan", an attempt is made to animate a closed down steel industry with new technology. What are today ruins, but also a part of the Swedish cultural heritage, are going to become transformed into an interactive environment for the visitor to learn and experience. Going beyond the computer's interface must involve renewed thoughts on interactivity. This is done in the Avesta project where the visitor interacts with the environment and *inter alia* finds information with the help of a flashlight. By integrating new technology, content and design the project group sees how "Meta.L.Hyttan" will fill the visitor with wonder (http://www.tii.se/avesta/).

Another project within the institute, "Do-Be-Dj", examines how physical movement, genres and physical environments can be used to compose music. The product is an interactive auditory interface. By moving his/her body and stepping on a number of plates, the visitor composes music. Together with other visitors it is possible to increase the complexity of the musical expression (http://w3.tii.se/en/project.asp?project=97).

Concept

With an extensive photographical archive available, we chose to construct three levels to a visit (experience, facts and play), as a basis for the interactive historical building. The experience level constitutes the main feature, including a picture show and accompanying set design; it is aimed at every visitor. The factual part is directed at visitors who would like to learn more, dig into the archive and seek out facts and curios. The play level is primarily aimed at young people and presents them with the opportunity to send pictures via the Internet and thus share their visit with others.

Experience

In order to get away from the traditional archive and one dimensional presentation of images, the conveyance of and interaction concerning photographic material should be incorporated and shaped through set design. Sensuality should guide the correspondence between space, visitor and image presentation. The four seasons can serve as a basis for the experience of the photographic material, giving us four spaces/rooms. These spaces are round and each has two entrances and exits. The atmosphere and sensations of each season are created with lighting, sounds, materials and colors. Together they result in a complete set design and the seasons correspond to each other. The pictorial presentation is available in the spherical rooms and the pictures are grouped first by season and then by theme. The museum has chosen four themes: decade (ex. 1920s), locality (ex. Åre district), age and gender, from which the occasional visitor can reconstruct a scenario from life. The themes are available by way of touch screens on the wall and floor of each room. A pictorial presentation is created after the visitor specifies a theme on the wall and time period by way of the temporal axis on the floor. The interface is designed so that the timetable is activated and lights up only once the theme is specified. The display screens from which a theme is chosen and which are at first illuminated are then switched off. Randomly generated pictorial presentations are shown if no theme has been chosen by a visitor. This way, no visitor will ever enter a quiet and "inanimate" room. Furthermore, the pre-generated pictorial show can inspire visitors to develop an interest for a set of

pictures, theme or time period. The visitor does not have to initiate their own show if they do not desire to do so. Suitable audio is created for the picture show and can consist of sounds from nature and possibly music (not sounds that disturb the visual experience, for instance chatter).

Facts

Four stations are available outside of the four seasonal rooms and have more in-depth facts and curios. These stations make it possible to search for more specific information using dates and actual events as keywords. The visitor can acquire facts about specific pictures and associated contexts and can also read newspaper articles and listen to popular music from that time period. The stations allow visitors to settle down and detach themselves from the exhibit where they can gain further facts or reflect on pictures, time periods etc.

Play

Outside of the seasonal rooms, space is set aside for more playful experiences that pertain to the pictures. The four themes are created in the form of physical icons - three dimensional figures that illustrate work/school, celebration/festivals, etc. The symbols, in the form of blocks of different shapes, can be placed by visitors onto a table. This table becomes a physical clipboard with different categories to choose between. The table is in the shape of plastic-/glass boxes so as to reveal light and space as well as to visually invite the visitors to play. By placing radio transmitters into the symbols and sensors into the clipboard, each symbol can be identified and the chosen category played back. The shows that are created in these "play boxes" can then be sent to friends by email.