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CULTNAT & THE ART OF DOCUMENTING HERITAGE

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Abstract : The art of documenting heritage in the modern times is the art of using the different evolving technologies in order to document as well as to highlight the different aspects of this heritage. For this reason the center for documentation of cultural and natural heritage was created to materialize this concept in a holistic approach treating different aspects of cultural and natural heritage (tangible and intangible) at three different levels: national, regional and specific.

Keywords : Cultural Heritage — Virtual Reality — New technologies — Natural Heritage — Documentation.

1 Introduction

Egypt's heritage is of a worldwide interest and importance due to its continuity over a period of more than five thousand years.

It encompasses various aspects of the human civilization, monitors the development of human heritage, and represents a cultural as well as natural heritage of national and international value.

This wealth in archaeological sites, architecture, arts, folklore and natural beauty needs to be accurately and purposefully documented.



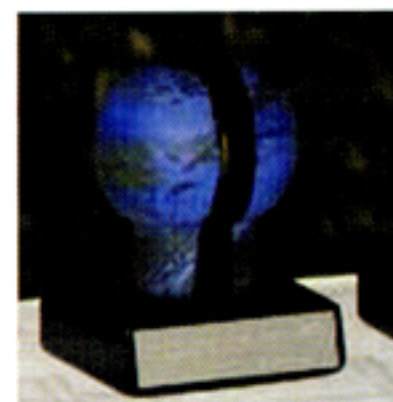
Hence, the establishment of the center for documentation of cultural and Natural Heritage, CULTNAT, which is affiliated with Bibliotheca Alexandrina and supported by the Ministry of Communications and Information Technology.

The Center's mandate is to document the various aspects of Egypt's tangible and intangible cultural heritage as well as its natural heritage.

This involves the implementation of the national plan of action towards the documentation program, making use of the most up-to-date information technology in collaboration with the national and international specialized organizations.

It is worth mentioning that the center has taken first prize in the Stockholm Challenge Award 2004, in the field of Culture. The prize was awarded, in a "Nobel" Ceremony at Stockholm City Hall, to Dr. Fathi Saleh, Director of Center of Documentation of Cultural and Natural Heritage (CULTNAT) for the project entitled "The Archeological Map of Egypt".

More than nine hundred contending projects had participated in the Challenge from different countries representing all continents. It is worth saying that Egypt is the only country from the Middle East that has been awarded this prize in the competition. This prize is a coronation for Egypt's effort in applying the information Technology in the field of Documenting its Cultural and Natural Heritage since thousand years ago.



The Center also aims at increasing public awareness of Egypt's cultural (tangible and intangible) and natural heritage using all available media as well as building capacities of professionals in the field of conservation and documentation of cultural and natural heritage. Stressing on the developing of the e-content, which is clear in its projects as follows:

2 The archeological map of Egypt

The overwhelming number of sites, monuments and artifacts scattered all over the country and the ever-increasing pace of urbanization around archaeological sites as well as environmental hazards, make the task of archeological site management a real challenge. The documentation, protection and restoration of sites for future generations has become a vital matter best achieved with the availability of an extended archeological Geographical Information System (GIS) which gave rise to the archeological map of Egypt project.

The archeological map of Egypt offers three consecutive levels of information :



The first level is the National one, allowing the user to zoom into different regions and/or select sites based on certain criteria. Basic information, corresponding to the selected site, is displayed.

This includes recent and old photographs as well as information about the related objects in the Egyptian Museum. At the second level, **The Site** level a detailed map displays the site and its components and their basic information. The third level, **Monument Level** portrays the in-depth data of the selected monument and displays a plan of the structure and an overview image. A complete description of each wall's reliefs or paintings accompanies the attached model is displayed with a possibility of a virtual visit.

By virtue of the enormous available data from the project, a wide variety of products are being produced, including archeological atlases and maps of different governorates illustrating published as well as unpublished archeological sites.

3 The architectural heritage of Egypt

Having witnessed a major building boom since the 1860s that extended to the 1940s, a number of Egyptian cities have a modern core contrasting sharply with the old medieval one and featuring a unique architecture combining European styles with local influences and materials.

The magnificent architectural product of that era will never be equaled but the wealth of Egyptian antiquities overshadows the importance of this more recent, yet endangered, heritage that remains poorly documented. Moreover, the public awareness to this heritage is still not fully formed.

The purpose of this project is to document the nineteenth and twentieth century architectural heritage of Egypt, starting with the Downtown area of Cairo as a pilot project and continuing with more parts of Cairo and other cities. This project constitutes of a Geographic Information Systems (GIS) with an easy to browse database that includes extensive photographic documentation, all published material for each inventoried building, in addition to historic documents, maps and archival material.



This massive database serves a variety of users ranging from decision makers to architects and historians. In the wealth of studies about architecture in Egypt, this is an unprecedented systematic digital approach that crowns the limited attempts of the dispersed few who have documented one aspect or another of Egyptian architecture. A series of thematic CD-ROMs, books, guides and other publications are extracted from this database serving as very effective cultural awareness tools

4 The natural heritage of Egypt

The documentation of Egypt's Natural Heritage is a multi-disciplinary project aiming at a computerized documentation and dissemination of data on the natural heritage of Egypt.

The project involves the collection of all data available on the protectorates as well as the diverse habitats and their components in the country including detailed information on the Flora, Fauna, geological formations and cultural features related to specific sites or protected areas.

A Geographical Information System of the existing and proposed protectorates is built, including the distribution of the various plant and animal species within them.

The system is designed to be used as a monitoring, assessment and management tool by various stakeholders in the field of protectorates and environmental policy making as well as conservation. It can also be useful to researchers of natural history and environmental studies, visitors of protectorates, and Environmental NGOs.



As a means of knowledge dissemination, a series of books and generously illustrated CD-ROMs are being produced on various subjects such as the protectorates of Egypt, the natural/cultural heritage sites of special interest, the plants of the land of Pharaohs, and the birds and mammals of Egypt.

5 The Egyptian folklore

Every country has its own folklore. Egypt's living tradition is embedded in a deep and colorful source stemming from the rites of passage of various cultures during the millennia of its past. In an unprecedented attempt, CULTNAT is engaging in the never-ending task of documenting traditions of daily life



that historically shape the Egyptian Folklore.

The systematic approach adopted in the database compilation process aims at building up the most comprehensive and inclusive library of scientific and audio-visual material.

The library is designed to include a rich array that covers ethnological and analytical activities, popular themes, traditional feasts, celebrations, folktales and proverbs, legends, customs, daily activities, cults of the saints, architectural and agricultural traditions, popular music, arts and crafts, popular superstitions, national costumes, jewelry, mythological legends from Egyptian lands, deserts, rural and urban communities.

With such rich library, a thesaurus on the Folklore of Egypt (Al-Meknaz) is being produced, in addition to publishing a series of books and specialized websites on various topics, such as the traditional crafts in Fatimid Cairo, or the traditions and practices of the holy month of Ramadan. Simultaneously, a national action plan for the Folklore documentation was produced.

6 The musical heritage of Egypt

The earliest part of the twentieth century witnessed a strong revival of Arabic music and the birth of a national theater movement that was, even then, considered a pioneering activity and art in the modern history of the Middle East.

Music specialists confirm that the wealthiest years for the Arabic music were the 20's till the 70's of the twentieth century. Unfortunately, copies of such rare songs were not all well preserved and much of this musical heritage was lost while the few remaining are in very serious danger of being lost forever.

CULTNAT aims at providing a better understanding of both our musical heritage and theater. This is achieved by firstly documenting it in a thorough database and secondly classifying and analyzing it. Such database will assist the music educational process in institutes and musical establishments and provide a tremendous source of edutainment and fun to the laymen.



The Arabic music information system consists of 3 levels: the first level focuses on documenting basic information related to composers, lyrics, singers, modes, forms, and rhythms. The second level compiles complete lists of artists' works with original lyrics, scores, audio and video clips whenever possible. The third level is a multimedia upgrade that targets the production of documented audio-visual and multimedia deliverable based on the collected data as well as a detailed musical analysis of selected musical pieces by professional critics.

The result of this massive effort is a publication of an Encyclopedia of Arabic musicians. Each volume contains the comprehensive works of certain musicians with the lyrics of his songs. The volume is coupled with a CD that contains extracts of the musicians songs.

7 The photographic memory of Egypt

Nineteenth and early twentieth century photographers produced some of the most memorable and technically refined photographs ever made. At the turn of the century, Egypt and the Middle East as a whole became a destination that attracted a multitude of pioneer photographers. Their works documented such vivid topics as archeology, excavations, local architecture, landscaping, as well as the social life and daily activities of the indigenous dwellers of the region. CULTNAT took upon itself the task of automating the archives of as many vintage orientalist photographs as possible.

Glass plate negatives, vintage sepia toned albumen prints, selenium toned silver sheets of the early twentieth century that stood the test of time are being classified in Egypt's first of its kind photographic heritage database.

Collections of famous photographers, gathered from local and international museums as well as private collections, are being

presented in CD-ROMs, starting with the exclusive collection of Lehnert and Landrock that houses over 1200 black and white thematically assorted quality prints.



The project aims to make such rare collections available for researchers, curators, and old photographs admirers via other means of publications including paper publications.

8 The Scientific Islamic Manuscripts Heritage

Began in Sept. 2001 with a UNESCO fund, the manuscript documentation project took upon itself the challenging task of documenting scientific Islamic manuscripts available in various institutions and private collections on the national and regional level. The joint vision is to compile an encyclopedic electronic library of sciences and mathematics of Dar al-Islam at its climax from Samarqand to Casablanca.

The pilot project conducted at Dar al Kutub is serving further identification and other documentation projects. It covered seven manuscripts in their entirety, illustrating the contributions of the Islamic civilizations to medical sciences. This is followed by the documentation of astronomy and time reckoning manuscripts at al-Azhar University Library.

Other topics in the project scope include cosmography, physics and chemistry. The project is also exploring the potential of documenting microforms of manuscripts in special collections as well as creating a portal of Islamic Scientific manuscripts on the Web.

The portal is planned to be the first of its kind exhaustive survey of who has what in the world of Arabic manuscripts. Multi-lingual publications and CD-ROMs are some of the products that render the treasures collected by the project available for scientists, researchers, and laymen locally and internationally.

9 Eternal Egypt on the Web

In collaboration with the Supreme Council of Antiquities and IBM Corporation, "Eternal Egypt", www.eternegypt.org, is a premier website to showcase a selection of Egypt's treasures and cultural heritage on the Internet, to the global audience, using state-of-the-art technologies. The website covers the different eras of the Egyptian civilization: Pharaonic, Graeco-Roman, Coptic and Islamic. It comprises descriptions of events, characters, museums objects, as well as historical sites, wrapped in a variety of stories covering attractive topics. The descriptive information is available in three languages, Arabic, English and French, and supported by an innovative text-to-speech

In addition to the information, 2D high-resolution images of the artifacts are displayed with a zooming capability for the visitor to enjoy the fine details of the artifacts. Virtual tours and panoramic views of many sites are produced, and a selection of objects are 3D-scanned and modeled to allow for adding missing parts, colors, or texture. The Website is enriched with Web Cameras covering the Giza Plateau, Karnak temple, Qaitbey Fort, and Islamic Cairo, by which the visitor can freely navigate and lively view these areas.

In another use of the rich content, the Digital Guide – a handheld computing device – is available for museum visitors. It provides the visitors with visual, audio, and textual information on some of the museum collection. It also links

them to related objects, characters, places, and events, and includes animation that seeks to demonstrate concepts not easily grasped in the physical museum. Similar to the Digital Guide, tours are also provided for the Giza Plateau and Luxor Temple and accessible by the cellular phones that are supporting GPRS technology.



10 Culturama

Culturama is a set of showrooms at CULTNAT premises, in which diverse cultural exhibitions and activities are held using state-of-the-art technologies.

10.1 Micro Gallery

is a showroom with several booths displaying information and sample products of the different projects and activities at CULTNAT in heritage documentation. With new projects outcomes, and the birth of new projects, the display will continuously reflect this growth.

10.2 La Galleria

is an arts cafe for an exhibition gallery that is monthly renewed with alternative artworks.

10.3 Folklorama

is a specialized showroom exhibiting sculptured characters from the ever famous folkloric "Helaliya Epic", the first Egyptian folkloric heritage added to the UNESCO World Masterpieces of the oral and intangible heritage.

Digital documentation of this Epic and its famous characters is also displayed.

10.4 Star Riders

is a showroom exhibiting replicas of astrolabes and other astronomical instruments, illustrating the pioneer work of the Islamic civilization in Astronomy. Virtual representation of the components and the use of such instruments is an integral part of the exhibition.

10.5 Culturama

is a showroom in which a variety of interesting cultural topics are projected on panoramic 180 degrees screens. This nine screen interactive system is the first of its kind worldwide. Contributing in revealing cultural treasures using state-of-the-art technologies, CULTNAT aims to be positioned among the significant attempts for the preservation of the world's precious cultural and natural heritage.



Most of this Projects Success are consequent from the International Joint Projects, and this can be seen as follow :

11 International joint projects

CULTNAT, through its International Relations Department, is collaborating in several activities and projects with various esteemed international organizations, such as: The European commission The UNESCO, and IBM international.

11.1 European Commission

CULTNAT is an effective partner in several projects funded by the European Commission, namely:

11.1.1 Patrimoines partagés

This three-year joint project research program aimed to improve the knowledge of the architectural and urban heritage of the 19th and 20th century in the Mediterranean basin.

11.1.2 Traditional Water Techniques: Cultural Heritage for Sustainable Future (Shaduf)

This three-year research project, aims to contribute to the development of a bank of information on traditional and indigenous technologies and to focus attention on the rich and versatile water and wastewater-related heritage in the Mediterranean region.

11.1.3 Defence Systems in Mediterranean Coasts (SID-LIM)

This two-year project, aims to build a website for the distributed databases of the participating countries on their coastal defense systems, in addition to restoring an ancient defense-related building in each participating country and creating a museum near that building.

11.1.4 Strabon:

It is a scientific and technical cooperation program that associates the humanities and social sciences to information technologies. The goal of the project is to equip Mediterranean space with a multilingual and multimedia information system regarding the Euro-Mediterranean cultural heritage and ethical tourism.

The project groups within the consortium nineteen partners belonging to twelve countries of the circumference of the Mediterranean and it is the Center for Documentation of Cultural and Natural Heritage (CULTNAT) who represents Egypt in this project. Each country should present a complete

database of one or more site of its monuments. At the end of the project the databases will be gathered on an Internet Portal.

11.1.5 Unimed Cultural Heritage II

This three-year project, aims to improve cooperation in the field of Cultural Heritage preservation, restoration and management by implementing extended cultural heritage databases, a dedicated portal and training courses in relevant fields.

11.2 IBM Corporation

In collaboration with the Supreme Council of Antiquities and IBM Corporation, CULTNAT is developing and maintaining a premier website, www.eteraalegypt.org, which uses the state-of-the-art technologies to illustrate a selection of Egypt's treasures and cultural heritage

11.3 UNESCO

UNESCO has been and still is one of the main organizations funding several of CULTNAT activities and projects, such as :

11.3.1 Strategic Approach to Egypt's Cultural Heritage

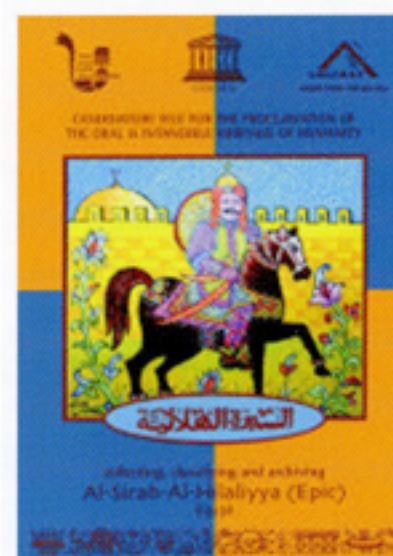
A study funded by UNESCO and UNDP to learn the present situation of Egypt's cultural heritage and suggests a strategic approach for this wealth, covering its documentation and the creation of a National Register and databases, site management, conservation and restoration, education and capacity building, cultural and ecotourism, as well as institutional arrangements.

11.3.2 The Scientific Islamic Manuscript Heritage

Began in Sept. 2001 with a UNESCO fund, the project is documenting scientific Islamic manuscripts available in various institutions and private collections on the national and regional level.

11.3.3 Al-Sirah-Al-Hilaliyya (Epic)

In collaboration with The Egyptian Society for Folk Traditions, CULTNAT is documenting Al-Asirah-Al-Hilaliyya Epic, as it is approved to be added to the UNESCO World Masterpieces of the oral and intangible heritage.



11.3.4 CULTNAT Library

The Center Digital library is developed with UNESCO support to be a model of an e-preservation library.