

<http://ddc.aub.edu.lb/>

## 0.1 Status

The *Digital Documentation Center* project started in 1997 with the publication of *Solar Disinfection of Drinking Water* (seminal research published by Aftim Akra at Health Sciences) and unique picture collections from the Jafet Library Archives and Special collections (compiled by Asma Fathallah).

The DDC site now has a total of 64 429 pages<sup>1</sup>, 98 530 images<sup>2</sup> and 96 sound files<sup>3</sup>.

Contents vary from historical manuscripts and photographs to oral interviews from the 1960's and contemporary scholarly documents.

The project is a collaboration between AUB's *Computing and Networking Services* and Østfold University College (HiØ), Norway.<sup>4</sup>

## 0.2 Participating units

The following units and departments have participated at one time or another. Most units contributed projects and material in the initial phase (1997-1998) with the Saab Medical Library, CAMES and the Jafet Library sustaining the process and providing the bulk of the material through 2009.

- Jafet Library - Archives and Special Collections
- AUB Museum
- Center for Arabic and Middle East Studies
- Arabic Department
- School of Business and Management
- Health Sciences
- Political Studies
- Geology
- The University Hospital
- University Administration
- Projects made in cooperation with the Ministry of Tourism

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<sup>1</sup>HTML-pages

<sup>2</sup>PNG, JPG and DNG formats

<sup>3</sup>MP3, OGG and FLAC

<sup>4</sup>HiØ also collaborates with AUB on MS scholarships in IT studies.

- Department of History and Archaeology
- Biology Department
- Saab Medical Library
- Architecture

(See appendix for complete list.)

### **0.3 Shifting technologies**

Digitizing technologies have progressed significantly since the start of the project in 1997. With the exception of disk storage, no new equipment has been acquired by AUB for the project since 1998. However, as most of the digitization in recent years has been carried out with high resolution cameras, these have been upgraded by HiØ as they have become available. Computers and working storage disks are also brought out for each season of work. The most recent medical manuscripts from the Saab Library have been digitized at 21Mpx resolution.

#### **0.3.1 Quality assurance**

The DDC project strikes a pragmatic balance between digitizing for conservation of threatened archive material, network publishing for accessibility to the academic community and cost efficiency. Of overriding importance is quality assurance in total material inclusion and legibility.

#### **0.3.2 Publishing**

The primary concern of the project has been to make rare, fragile, threatened and requested information held at AUB accessible to the wider academic community. There has been some variation in the appreciation of the idea of contribution to a common, global heritage of such knowledge on part of the various units.

#### **0.3.3 Accessibility**

In order to conserve the restricted external bandwidth available to AUB, a mirror of the entire DDC contents is maintained at HiØ in Norway under the same URL used at AUB. (<http://ddc.aub.edu.lb/>) This allows unrestricted access of material to the global Internet.

### 0.3.4 Sustainability

For long term sustainability the project strives to archive and publish all material in open standard data formats. With the exception of some very early audio and video files, all material follows internationally recognized open standards data formats such as those recommended by the Library of Congress and those now being enacted by the Norwegian government for use on public websites.<sup>5</sup>

Text is encoded in Unicode UTF-8 which allows mixing of Latin, Arabic and other languages in the same documents.

Data was previously archived on CDs and DVDs. In the past two years, data quantities have outgrown the viability of optical storage. All originals and copies are now stored on a migrating harddisks system and the CNS's tape backup system. Storage is however, running short with 78% of 275Gb space used.

## 0.4 Organization

The project was started at the initiative of Nabil Bukhalid and George Tomey in 1996 when a mirror of the *Al Mashriq*<sup>6</sup> server was installed at AUB to provide local content at a time of extremely low bandwidth to the Internet.

Børre Ludvigsen was invited to start up the project with 4 student assistants during the last half of 1997, and has continued working 4 - 6 weeks per year since with 0 - 2 student assistants. The number of student assistants varies with need and efficiency of work balanced with efforts necessary for training.

In addition to digitizing rare and fragile manuscripts the project also aims to assist units with need for high volume digitizing to get started and develop effective workflows, including publishing. In spite of the availability of so-called "user friendly" tools, web publishing requires a certain amount of technical insight, design, planning, programming and maintenance depending on the character of content. Digitized oral interviews tied in to transcriptions require different forms of presentation than an ancient medical manuscript of 1000 pages or an anatomical mannequin. Quite often solutions requiring insight into a wide range of disciplines, including IT-technologies, are necessary to digitize special materials successfully. The DDC project has thus been innovative in many aspects.

Financing was initially from vice president's office, but has in later years been sustained on a yearly project basis from the individual units.

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<sup>5</sup>Børre Ludvigsen and Audun Vaaler, *Open standards for multimedia data formats in public websites*, recommendations for the Norwegian Ministry of Government Administration and Reform ([http://media.hiof.no/diverse/fad/rapport\\_4.pdf](http://media.hiof.no/diverse/fad/rapport_4.pdf)), English summary p.25

<sup>6</sup><http://almashriq.hiof.no/>

## 0.5 Appendix

### 0.5.1 List of projects

The following list is complete as of spring 2009.

- From the AUB Archives and Special Collections - Jafet Library:
  - Arabic Manuscripts
  - The Moore Collection
  - 1928 yearbook
  - Political Posters from the 60's through the 80's.
  - The Blatchford Collection
  - Art Posters in Lebanon
  - The Students Union Gazette 1913 - 1932
- The AUB Museum
  - General information on the Museum of the American University of Beirut
- Center for Arabic and Middle East Studies
  - The Oral History Project
    - \* Saeb Salam
    - \* Adel Osseiran
    - \* Anbara Salam
    - \* Husni Barazi
    - \* Raymond Edde
    - \* Aref el Nakadi
    - \* Nizar Qabbani
- Arabic
  - Calligraphy
    - \* The Calligraphy of Sheikh Nasib Makarem
- The School of Business and Management
  - Information technology in the banking sector.
- Health Sciences
  - Environmental Health
    - \* Solar Disinfection of Drinking Water
    - \* Women's education, economic activity and fertility: relationship re-examined (A Study Based on a Lebanese Community)

- \* Differential risk of mortality among pensioners after retirement in the state of Maharashtra, India
- Political Studies
  - The Department of Political Studies and Public Administration
    - \* Department Brochure
    - \* History's Burden
    - \* Political Parties and Electoral Systems in Lebanon and Israel: Interactive Reinforcement
    - \* A Sufi response to political islamism: Al-Ahbash of Lebanon
    - \* Lebanon's Hizbullah: from Islamic revolution to parliamentary accomodation
    - \* Qatar: The Duality of the Legal System
    - \* Accountability of Lebanese Civil Servants: An Overiview of Disciplinary Mechanisms
    - \* Lebanon's First Postwar Parliamentary Election, 1992: An Imposed Choice
    - \* Permanent Settlement of Palestinians in Lebanon: A Recipe for Conflict
    - \* Public Service Accountability in Lebanon
    - \* The Rehabilitation and Reconstruction of Lebanon
    - \* The New World Order and the Tempo of Militant Islam
    - \* The Lebanese Civil War and the Taif Agreement
    - \* Assessing the Impact of the Post Civil War Period on the Lebanese Bureaucracy: A view from Inside
    - \* Syrian Foreign Policy and State/Resistance Dynamics in Lebanon
- Geology
  - Notes on the Geology of Lebanon
  - Ziad Beydoun
  - The Geology of Lebanon
- The University Hospital
  - Specimens (from the AUBMC Pathology Department)
- The AUB Campus
  - The extended campus tour project
  - VRML model of the campus
  - Maps of the campus
  - Overview panoramas of the AUB campus
  - Pictures from College Hall clocktower, May 21, 1998

- Projects made in cooperation with the Ministry of Tourism
  - Picture archive
  - Detailed maps of Lebanon
  - A very simple VRML model of Lebanon
- Department of History and Archaeology
  - Archaeology 101 course
  - From the excavations of the souks i central Beirut 1993-97
    - \* BEY006 Deliverables (UNDER CONSTRUCTION)
    - \* Picture database from BEY006 - needs authorization
    - \* VRML reconstructions of glass and pottery
    - \* Supplement to Berytus 1998
  - Back Issues of Berytus
    - \* Vol. I, 1934
    - \* Vol. VIII, 1943 ( FASC. I, FASC. II)
    - \* Vol. XXXIX, 1991
  - Supplement to Berytus 1999-2000
  - Ottoman Sultans
  - Proposal for presentation IMA exhibition, Oct. 1998.
  - Brochure for Careers 97, Beirut Expo (History and Archaeology Department)
- The Biology Department
  - Natural History Collection (Small Selection)
  - Birds database
  - Herbarium
  - Post-Flora
  - George Post, botanist and multi-scholar
- The Saab MedicalLibrary
  - Avicenna - Ibn Sina, “The Canon of Medicine”
  - The Van-Dyck Pathology, 1878
  - Hand-written MD theses 1928-1931
  - Hand-written pharmacy theses 1897-1919
  - The Complete Post Flora
  - Professors at the school of medicine
  - Al-Shifa, journal of medicine, Cairo 1886-1890
  - Dr. John Wortabet, Fundamentals of Autopsy, 1871
  - Abi Bakr al-Razi, On Chickenpox and Measles, 1872

- The Doctor, A Journal of Science and Medicine, Vol. I, 1884-1885
  - The Doctor, A Journal of Science and Medicine, July 1, 1899
  - Tamir Nassar - articles and albums from expeditions in the 1930s
  - Abdul-Massih Massuh - Accreditations and Van Dyck's Notes on Physiology
  - Instructional Posters, 1930's and 40's
  - Philips' Popular Manikin
  - Baillière's Anatomy and Physiology of the Female Human Body
  - Diplomas
  - Lebanese Corner at Saab Medical Library
- Public Presentations
    - Nizar Qabanni - January 30, 1995
    - Mohammad Hussein Fadlallah, May 27, 1998
    - The Arabic Music Group at the American University in Cairo, 24 January 1998
- Digital Reporting
    - Monday October 27, 1997
- Miscellaneous
    - Architecture
      - \* Surveys
      - \* Slide library
    - Historical images from the AUB Infirmary.
    - Fossils from the amber of Lebanon

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