



Geo-Coded Cultural Heritage Content: CULTNAT's GIS of Architectural and Urban Heritage

Presented by:

Malak WAHBA

Assistant Director and

Head of Tangible Heritage Section

CULTNAT, Bibliotheca Alexandrina

www.cultnat.org



CULTNAT... establishment and mission

**Center for Documentation of Cultural and Natural Heritage
Founded in January 2000
Under the auspices of the Egyptian Ministry of
Communication and Information Technology**

Part of its e-heritage programme

**Affiliated to Bibliotheca Alexandrina since February 2003
Maintained the support of MCIT**



CULTNAT... board of directors

**Representative of the Ministry of Communication and
Information Technology**

Representative of the Ministry of Culture

Representative of the Ministry of Environment



CULTNAT... establishment and mission

- to carry out the documentation of Egyptian heritage both cultural and natural
- ongoing documentation programs
 - The archeological map of Egypt
 - The architectural and urban heritage of Egypt
 - Egyptian cartographic heritage
 - Egyptian intangible heritage
 - Egyptian arts and music
 - The photographic memory of Egypt
 - Islamic scientific manuscripts
 - The natural heritage of Egypt...
- using the latest information technology in doing so
- cooperating with local and international organisations
- to raise public awareness towards that heritage

Bibliotheca Alexandrina



PART I: Architectural and Urban Heritage Program



The documentation of Egyptian 19th and 20th century architectural and urban heritage

Program initiated by CULTNAT to carry out:

Systematic inventories of architectural and urban heritage

Photographic documentation

Geographic information systems (GIS)

Databases for information

Collection of massive archival material (maps, architectural drawings, old photographs...)



Downtown Area of Cairo

Initiated in July 2000

GIS of 550 historic buildings photographed and documented

Archival material (maps, architectural drawings, old photographs...)

Exhaustive bibliography collected

Virtual visits and 360-degrees panoramas for squares and main street intersections



1. Qasr El-
Nil Bridge

2. The
Egyptian
Museum

3. Tahrir
square

4. Abdeen
Palace

5. Attaba
square

6. Ezbekiyeh
Garden

7. Cairo
Railway
station

■ Limits of
studied area

Downtown Area of Cairo

CD-Rom (2nd edition)

Cairo: 19th and 20th century architectural
heritage

The Downtown area

(GIS) of over 540 buildings
information

actual photographs

old photographs

historic maps

panoramic shots of squares
intersections

bibliographic list of readings

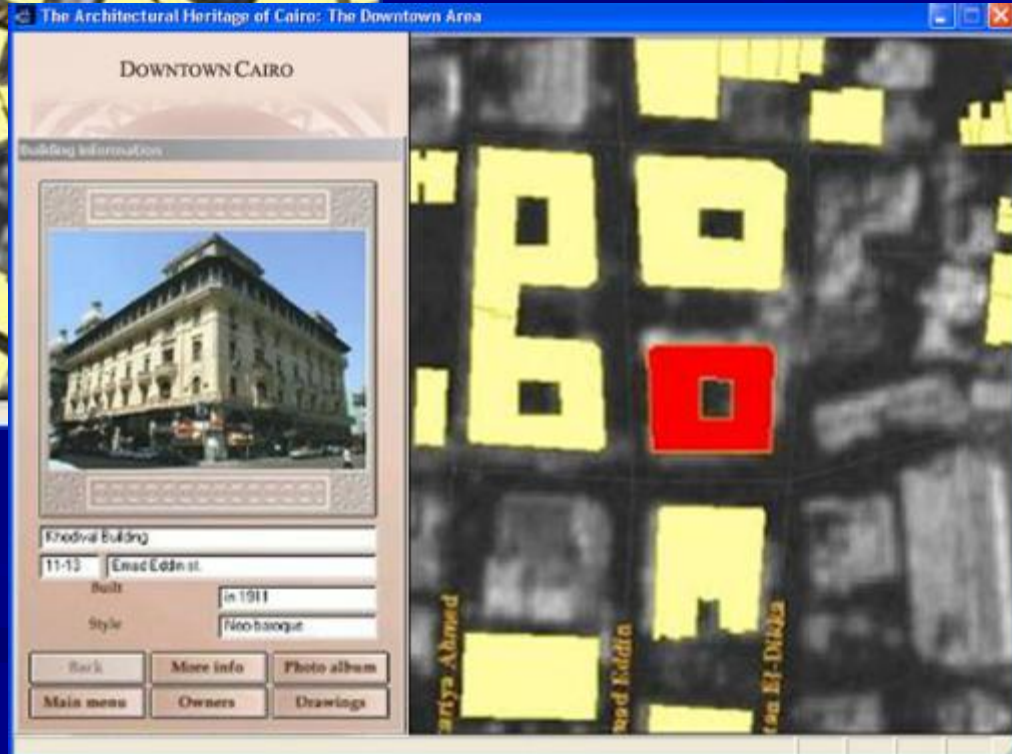
city's history 'Cairo in few words'.



19th and 20th Century Architectural Heritage of the Downtown Area

CULTNAT

Downtown Area of Cairo





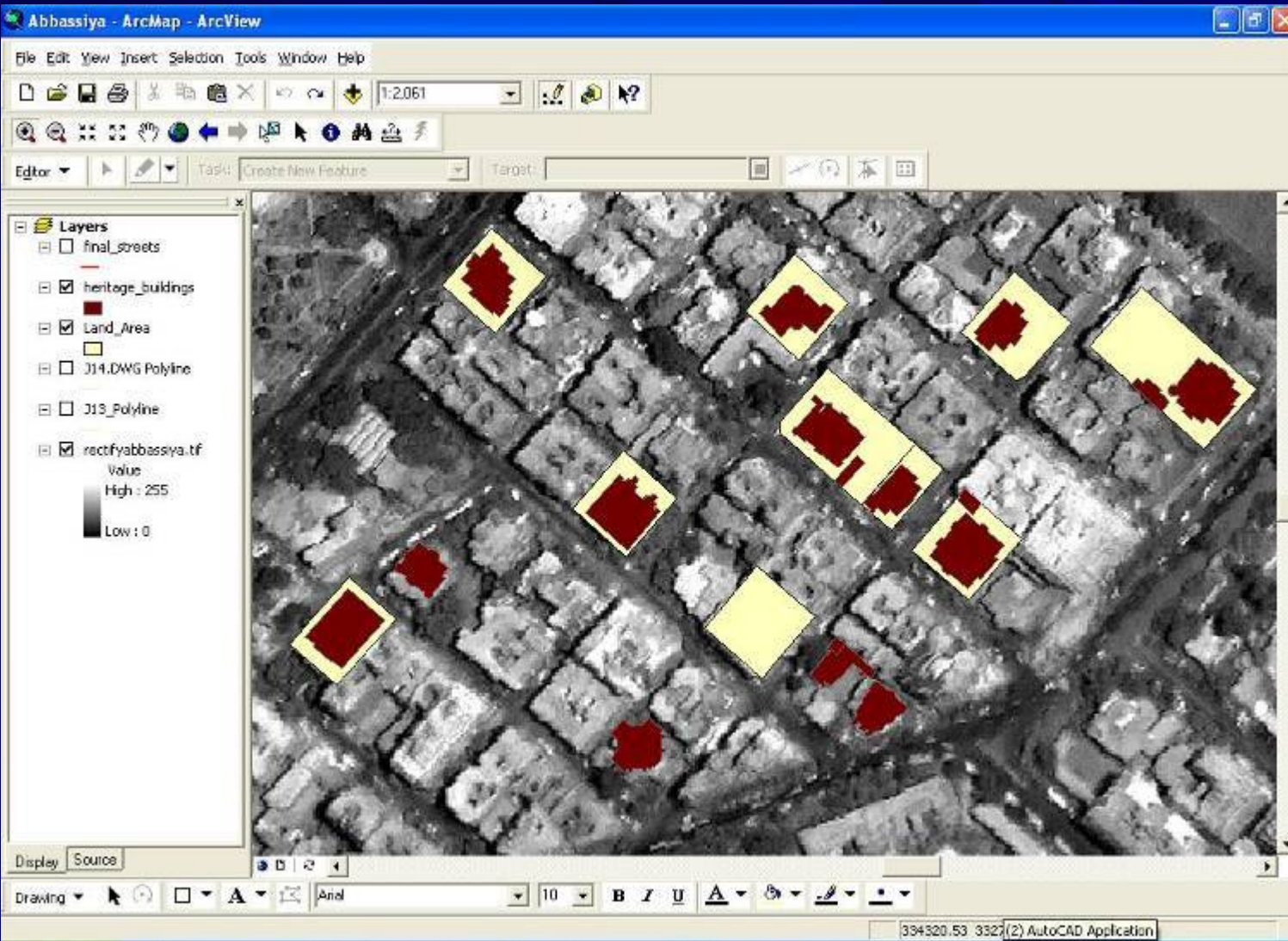
'Abbassiya' in Cairo



1. Residential area

2. Public services area

'Abbassiya' in Cairo



GIS
190 buildings
surveyed,
photographed
and documented



Style: Neo-Islamic

Influence: [dropdown]

Decade of construction: 1920s

Date of construction: around 1923

Legal Status: مطرح تكتيكية المعمارية



Architect: سبوهون

Record: 1 of 1

Reference: Cadastral Maps (1941)

Record: 1 of 1

Current Name: [text box]

Former Name: [text box]

Arabic Current Name: [text box]

Arabic former name: [text box]

Record: 1 of 1

Physical Data

Architectural typology: Apartment Building

Land use: Residential

Ground floor land use: [text box]

No of floors: 3

Decade: 1934-1941

Description: واجهة قبيلة الغربي المملك 115 من شارع العباسية والشركى شارع الأفضل وبه باب ثلاثة أوار بالأرضى داخل جنبته مساحتها 300 متر تقريبا بها من الجهة البحرية الشرقية جراج بابه من شارع الأفضل

Owner Name: است نبوية حاتم شناوى كريمة محمد باشا شناوى

FileNumber: 32633391

Number: 4

Note: 4 شارع يمينك

Record: 1 of 5

Select images

Image path: C:\Documents and Settings\nwahba\Desktop\pisaad\8-1 copy.jpg

Browse for images

Set as default



Record: 2 of 5

Original owner: كهيمة حاتم حرم محمود الكدى حمدى

Actual owner: [text box]

Area of plot: 0

Area of building: 0

Record: 8 of 109

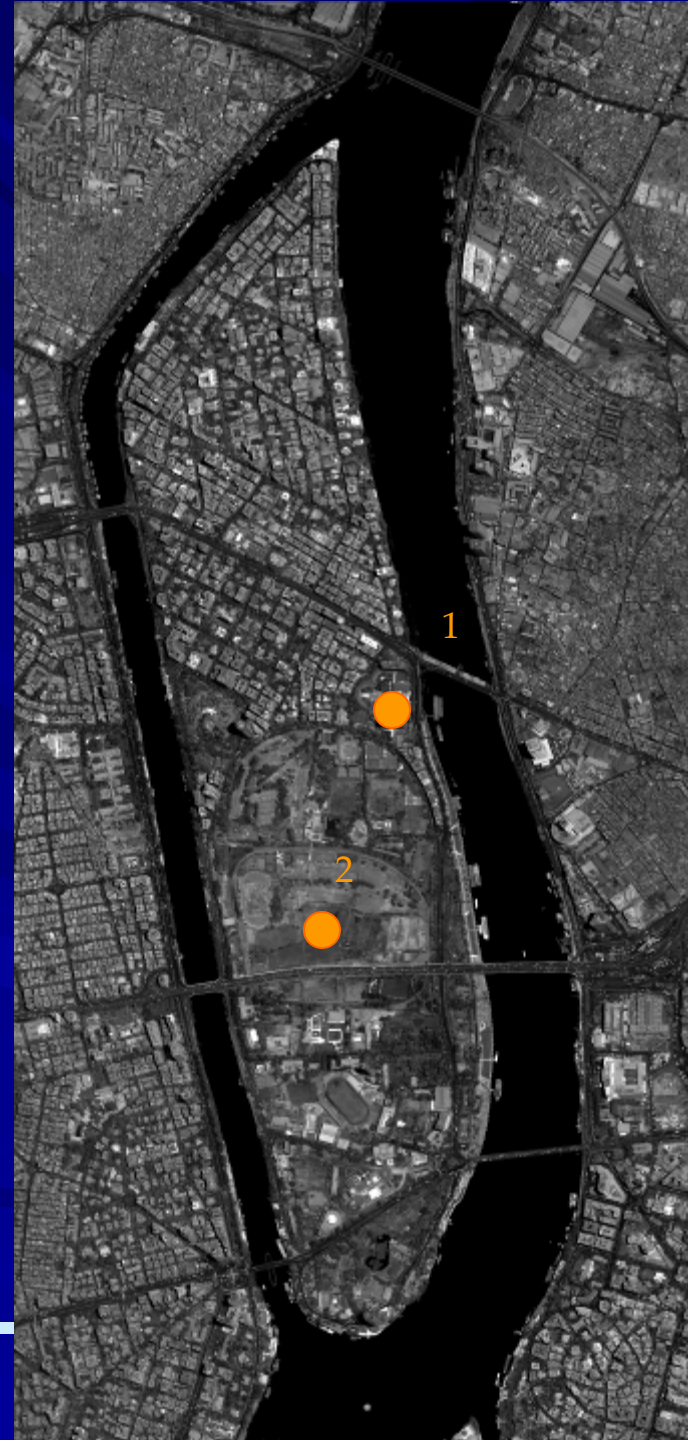


'Zamalek' in Cairo

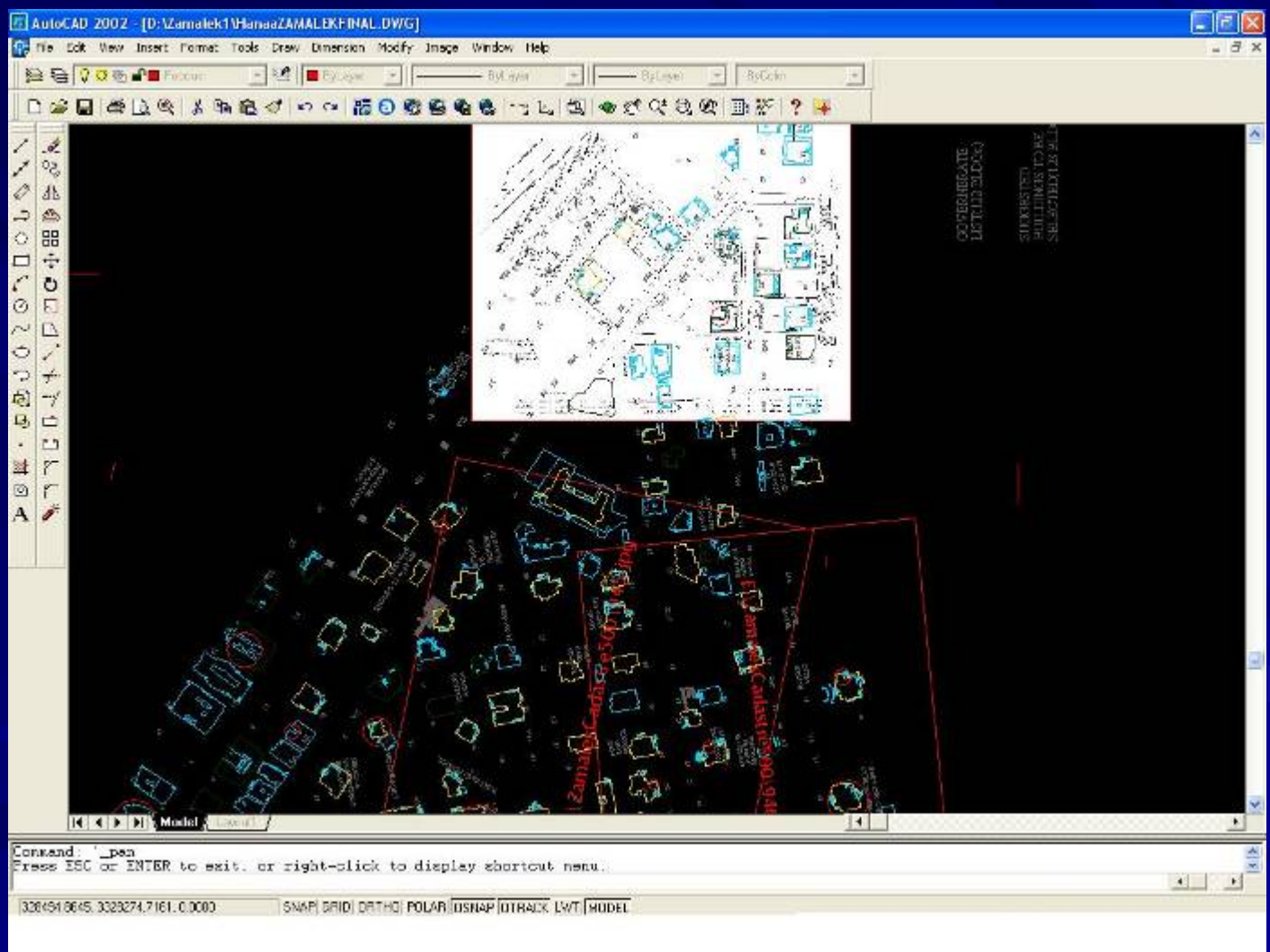
in collaboration with the 'Center for Architectural and Engineering Design Support' CAEDS, Faculty of Engineering, Cairo University

1. The Cairo Marriott Hotel

2. Gezira Sporting Club

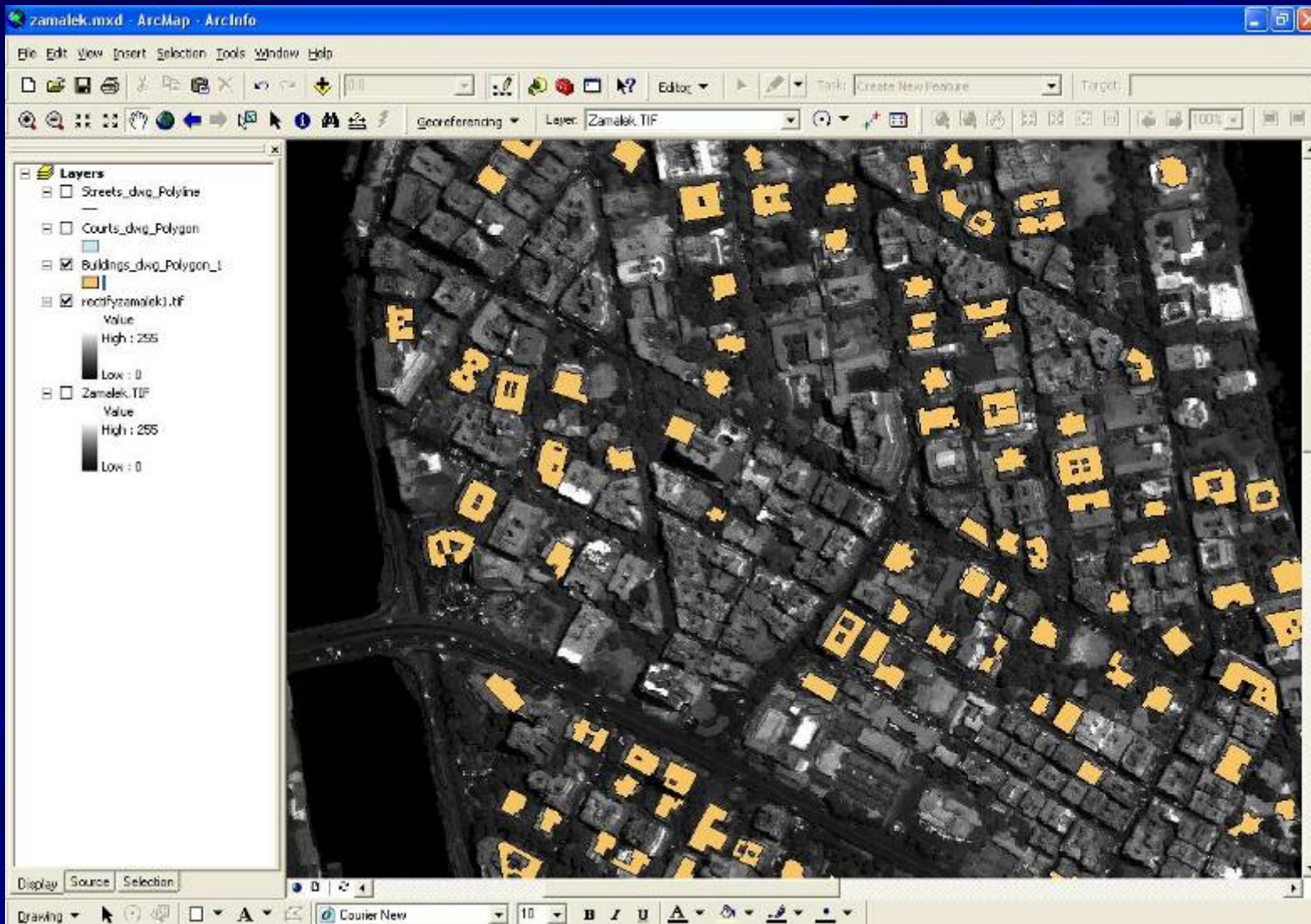


'Zamalek' in Cairo



GIS
220 buildings
surveyed,
photographed
and documented

'Zamalek' in Cairo



'Zamalek' in Cairo

Microsoft Access - [Building : Form]

File Edit View Insert Format Records Tools Window Help

Type a question for help

Times New Roman 10

Location data

Shiyakha

Qism

Number of free-standing facades

Cadastral map number

Capmas ID

Style data

Style

Influence

Decade of construction

Date of construction

Legal Status

Number:

Street

Set as default address

Record: 1 of 1

Architect

Record: 1 of 1

Reference

Record: 7 of 237



Select images

Image path

Browse

Set as default image

Record: 1 of 1



Form View

NUM

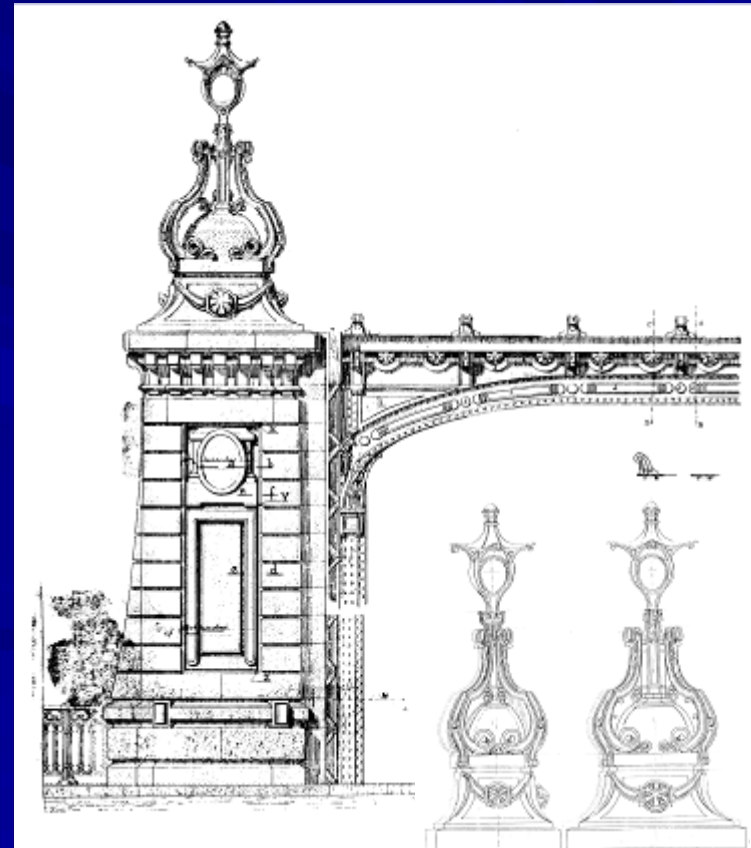
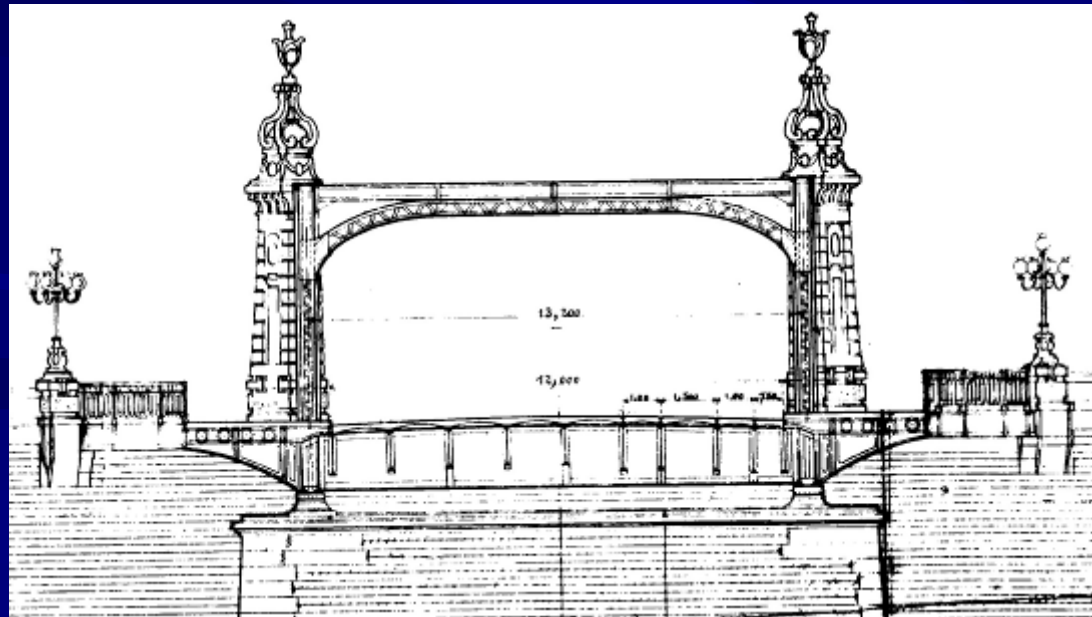
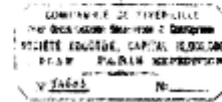


'Zamalek' in Cairo



Gouvernement Egyptien, Ville du Caire.
Pont-route sur le Nil à Boulac.
Maçonneries.
Détail des culées
et de leurs raccordements avec les murs de quai.

d. h. l. l. / 1892



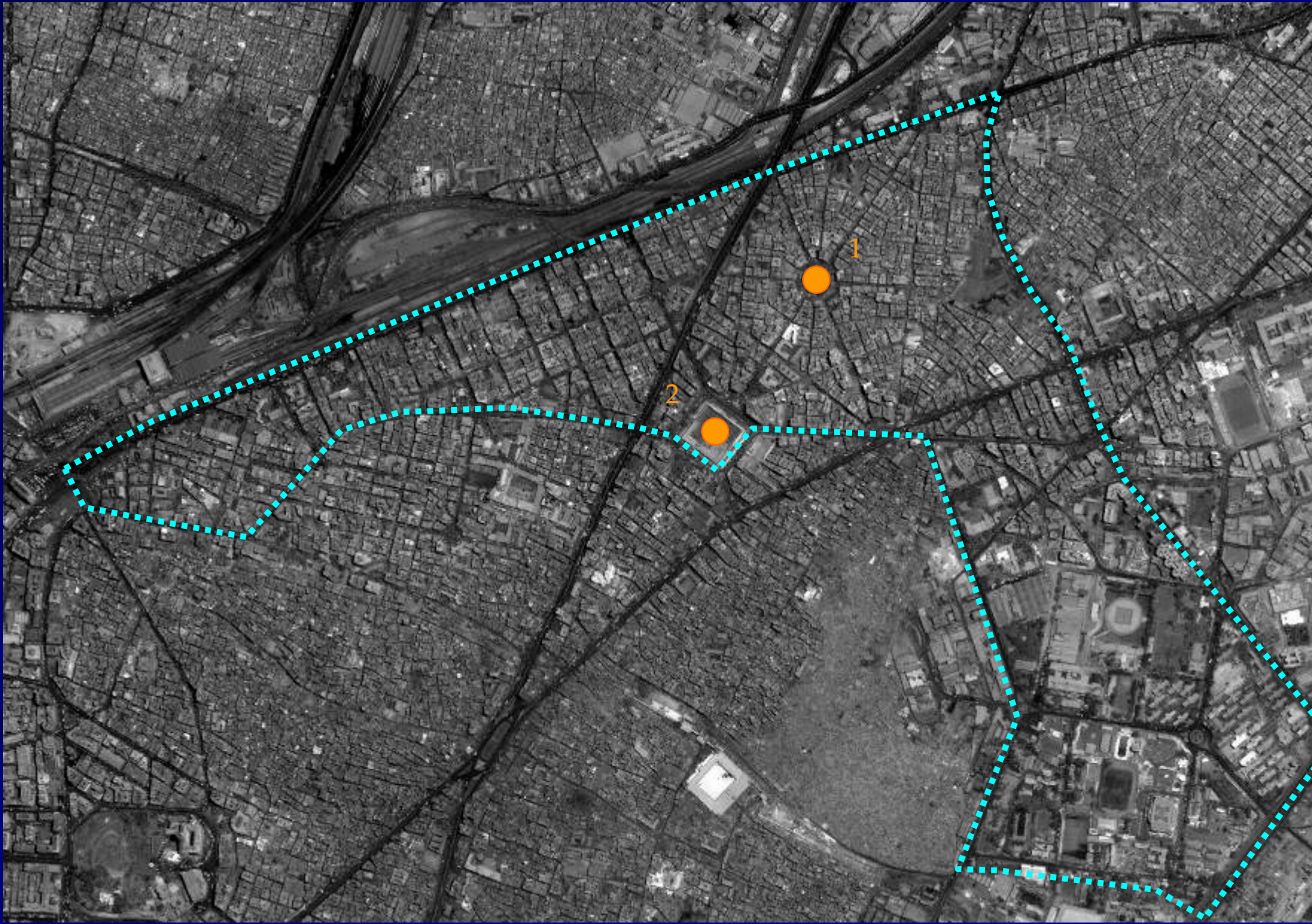
'Zamalek' in Cairo



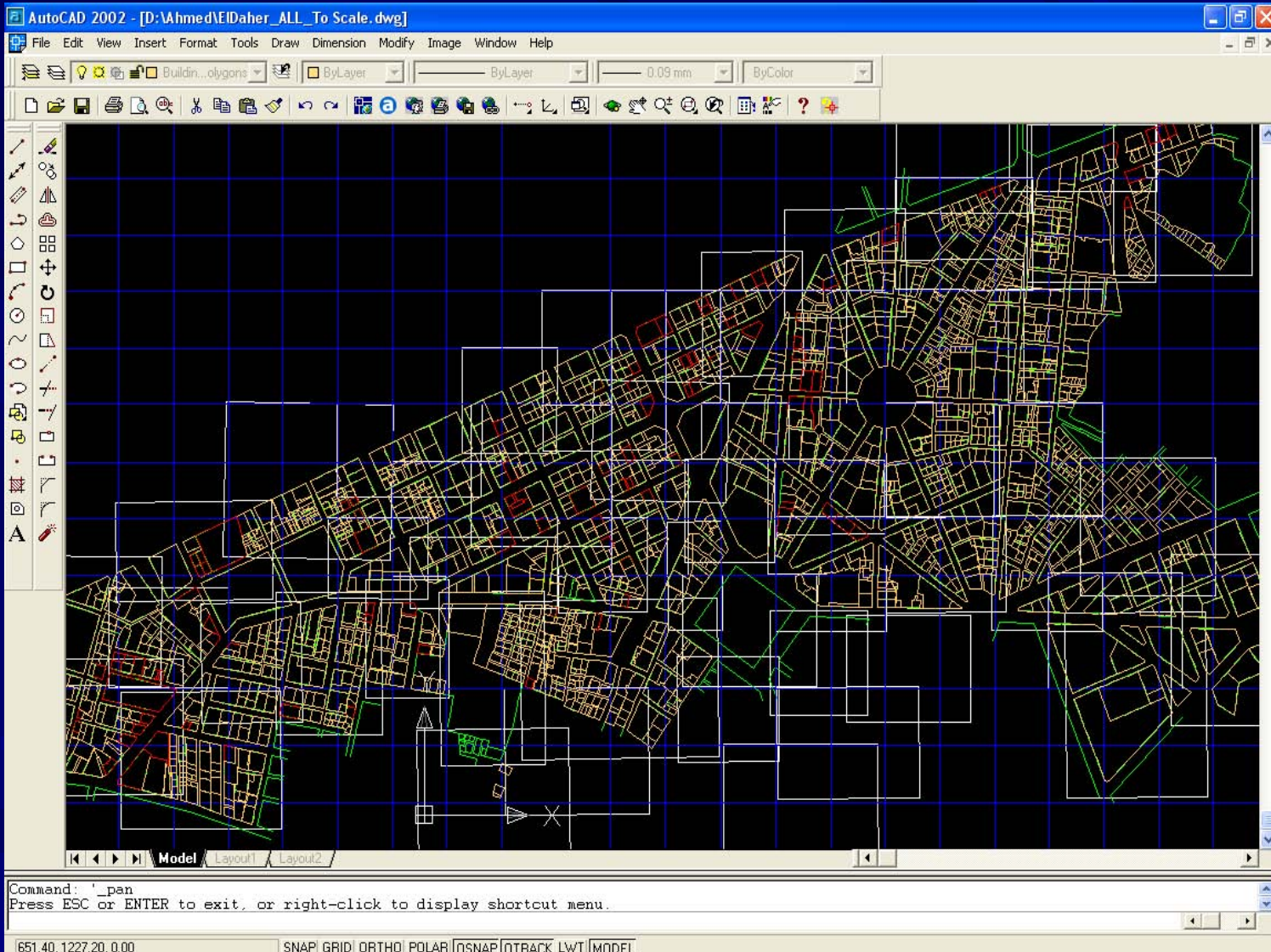
'Daher' in Cairo

1. Sakakini Palace

2. Baybars Mosque



'Daher' in Cairo



GIS
190 buildings
surveyed,
photographed
and documented

'Daher' in Cairo



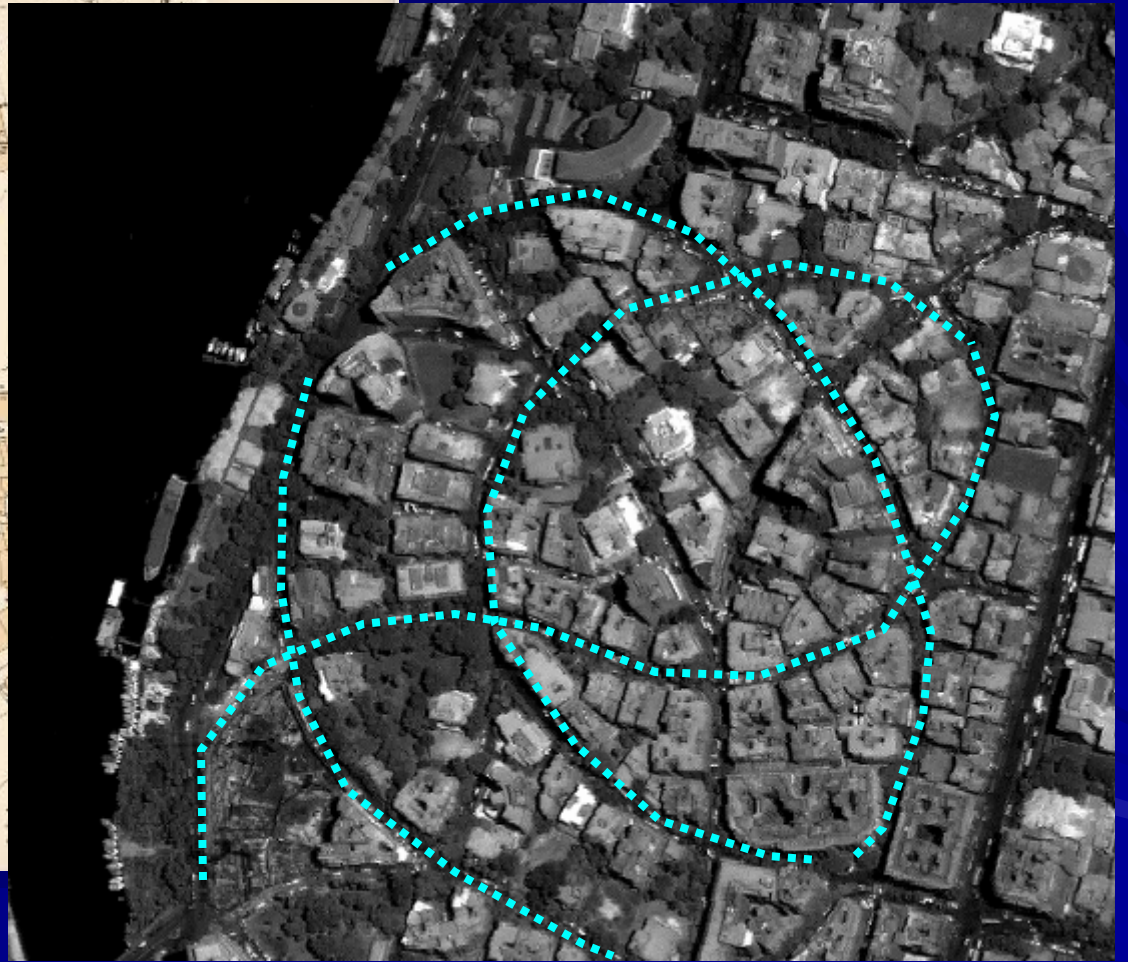
'Garden City' in Cairo

1. Government facilities area

2. Residential area



'Garden City' in Cairo



'Garden City' in Cairo

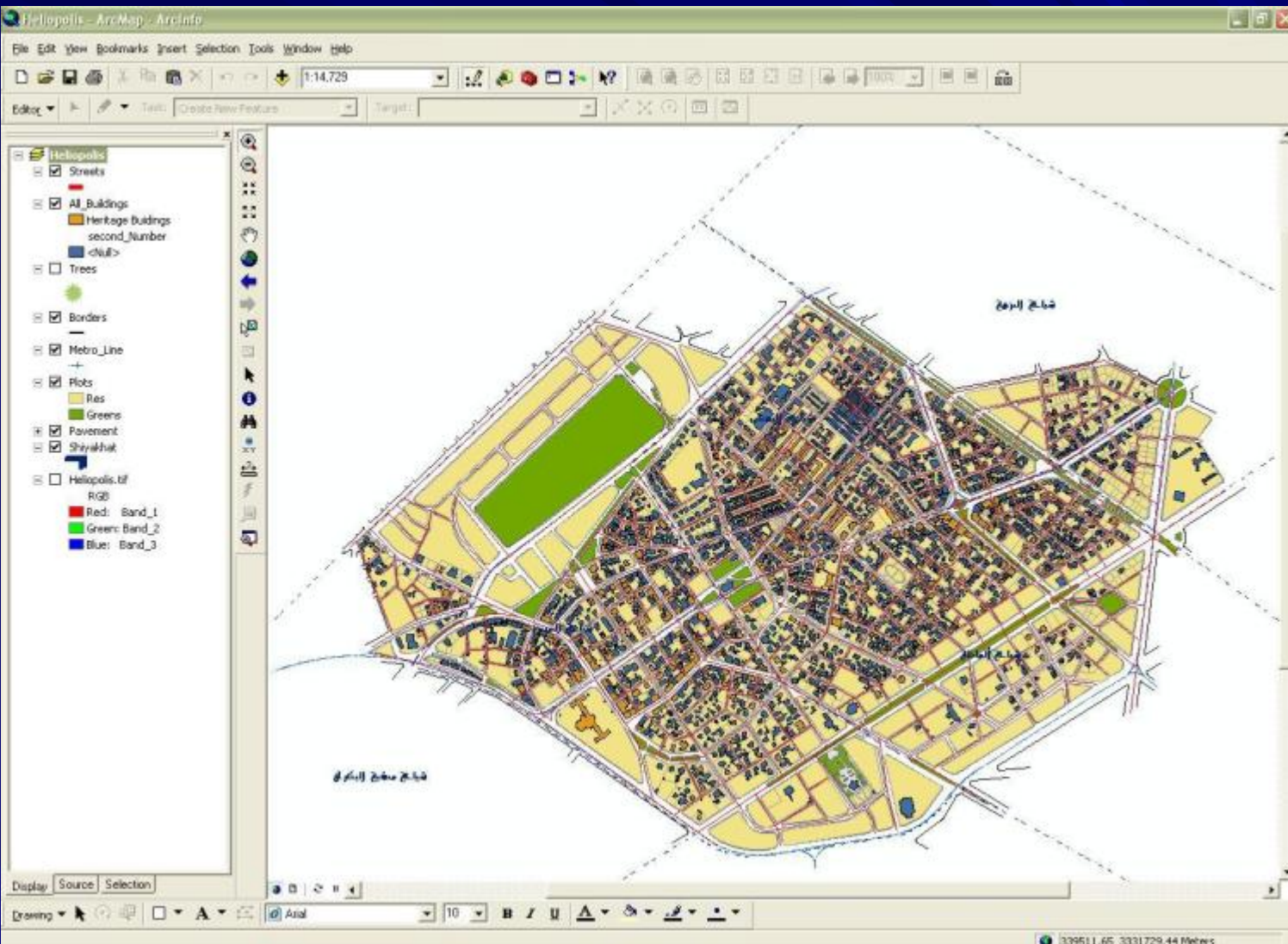


Heliopolis, in Cairo



Heliopolis - The Hindu Palace.

Heliopolis, in Cairo



GIS
900 buildings
surveyed,
photographed
and documented

Mansoura City

in collaboration with the 'Center for Architectural and Engineering Design Support' CAEDS, Faculty of Engineering, Cairo University



تراث مدينة المنصورة

اسم المبنى

BUILDINGS (Status)

- Proposed
- Listed as a monument
- Listed in governorate inventory

MANSOURA (Image)

القائمة الرئيسية طباعة

اسم المبنى الفترة الزمنية الطراز المعماري موقع المبنى

نفاة الخصائص المعمارية الاستخدام اهمية المبنى احصائيات

X = -8714.95899039317 Y = -16442.4267564428 03:18:32 22/05/2008

GIS
100 buildings surveyed, photographed and documented



3 شارع الجيش



11 شارع فريدة حسان



14 شارع خالد ابن الوليد



17 شارع الشريف الراصي



233 شارع الجمهورية



عودة

القائمة الرئيسية

عرض البيانات 5-1 من 36 سجل



www.cultnat.org

Bibliotheca Alexandrina



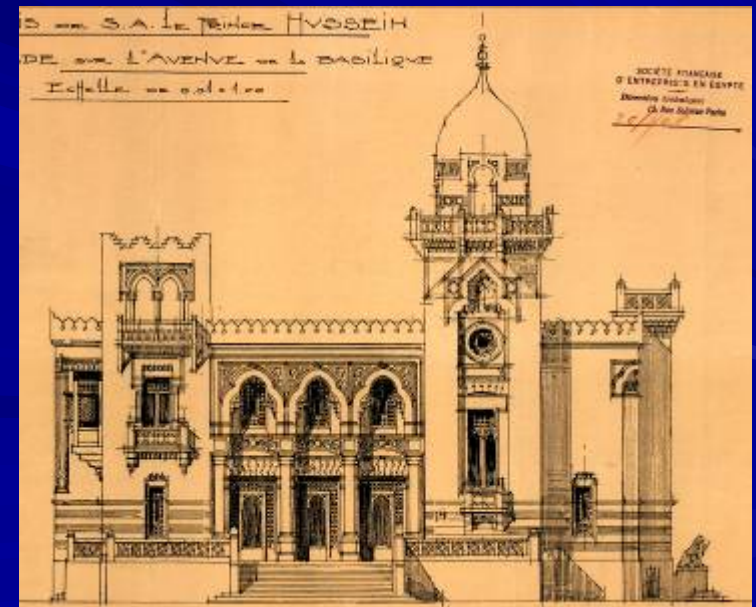
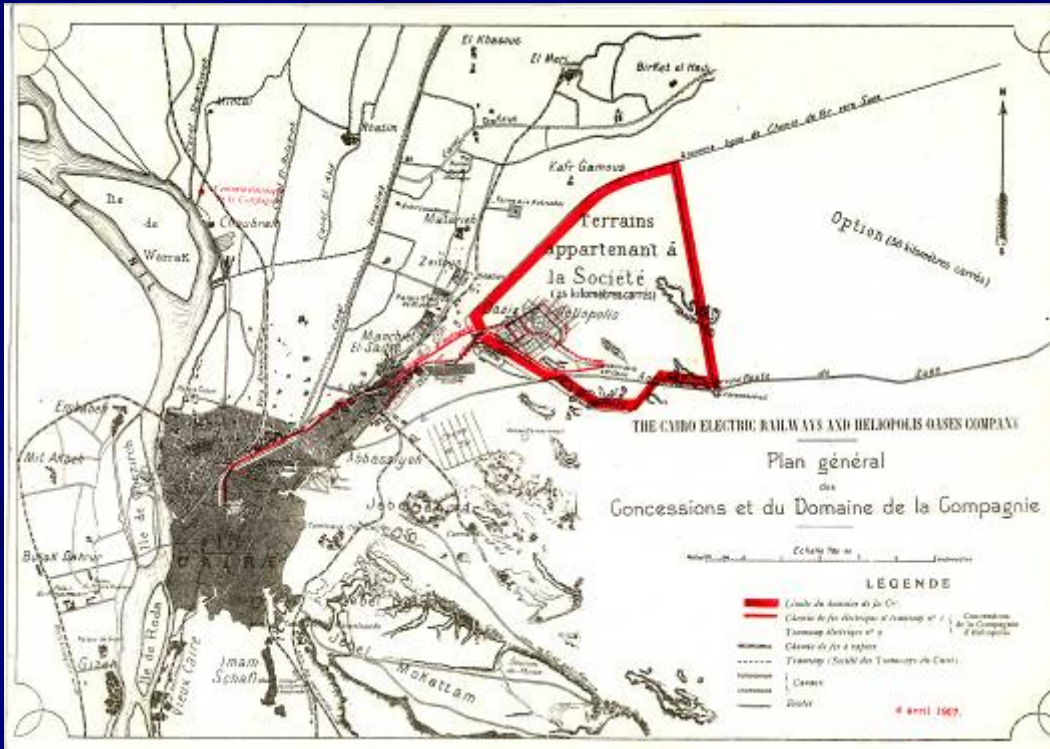
PART II: Digital Architectural Archive

Digital Architectural Archive

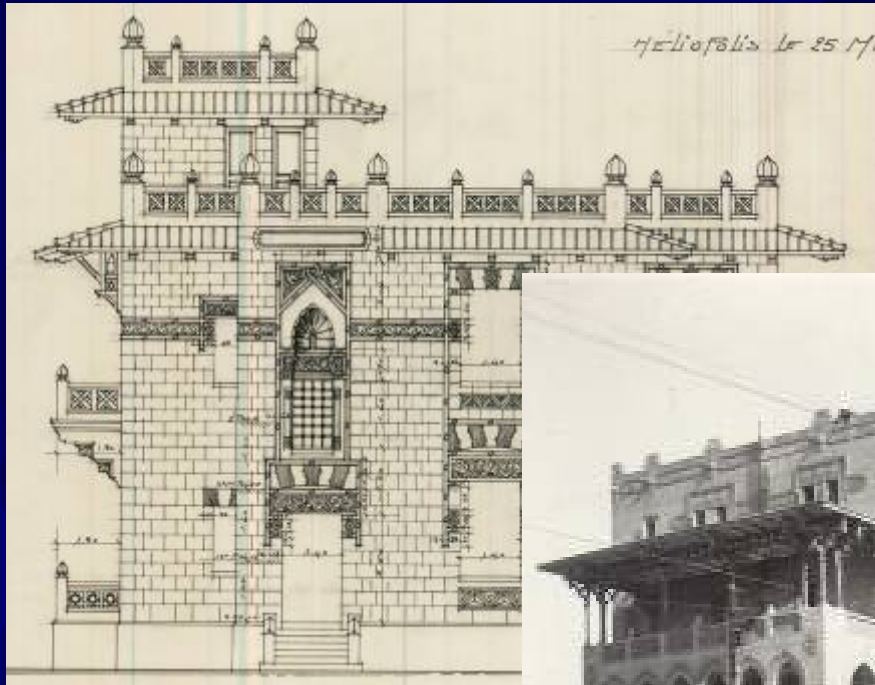
- **Surveying architectural archives in various locations (individuals, companies, public organisations)**
- **Scanning the drawings**
- **Filling a descriptive information sheet for each drawing on a database**
- **Enabling access to these recourses for consultation and research**

The Archives of Heliopolis Co.

The Belgian Co. established
in 1905



The Archives of Heliopolis Co.



The Archives of Heliopolis Co.

مكتبة
مهندسة الهندسة



The Archives of Heliopolis Co.



The Archives of the Arab Bureau

The former Royal and Public Building Authority

Mohamed Ali Pasha (1805-1848) created a buildings Authority (*maslahat al- benayat*) at an unknown date

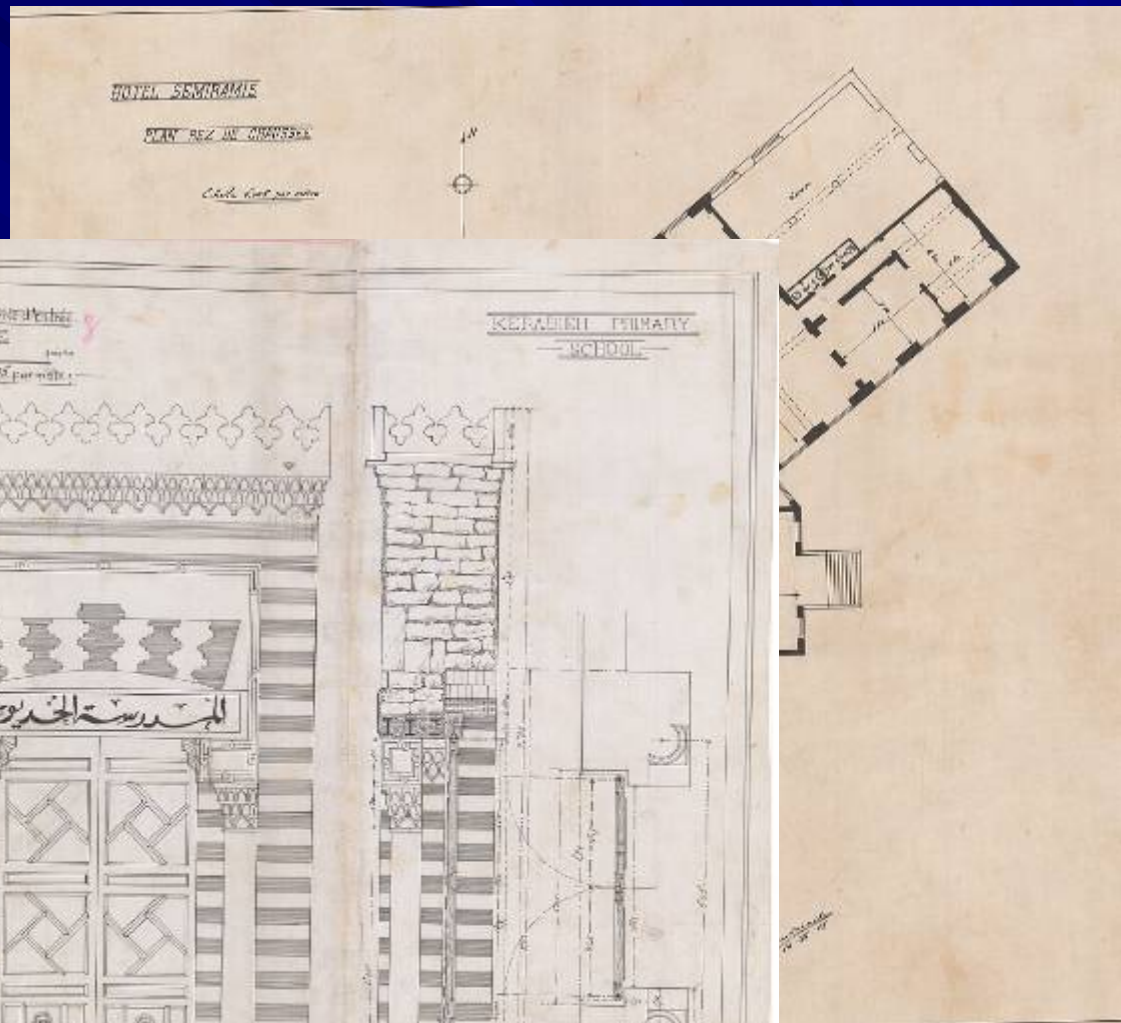
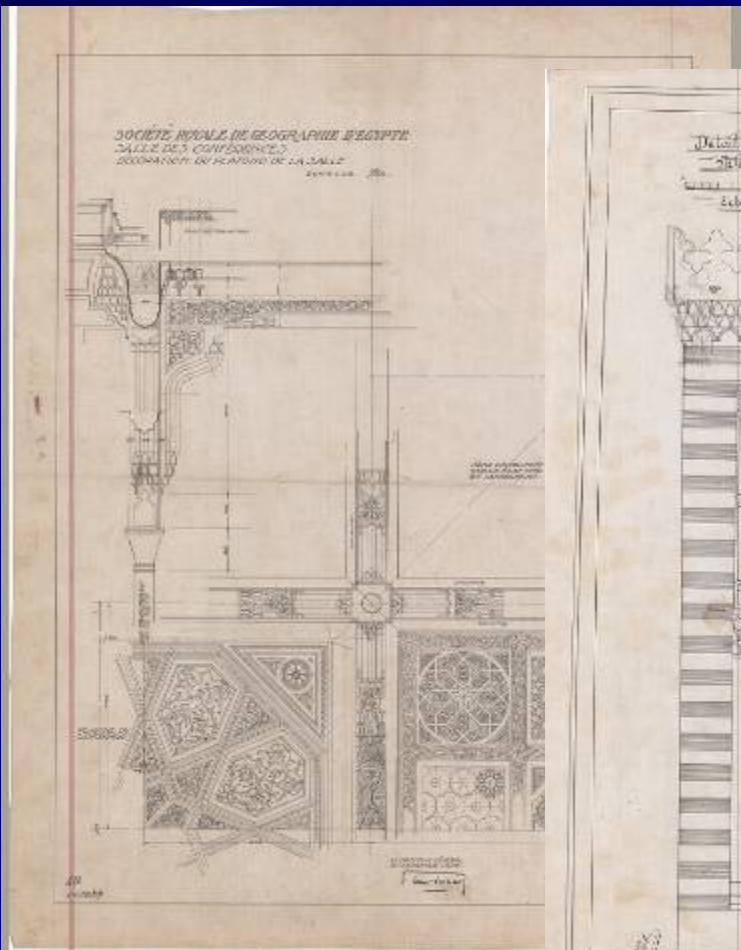
- In 1829 Building Organization (*diwan al- abniya*)
- In 1836 School Council (*majlis al al-madares*)
- In 1837 School Organization (*diwan al-madaris*)
- In 1859 part of the Ministry of Public Works as the Authority of Building Regulations (*maslahat al-tanzim*)
- In 1889 official decree building project is to be approved by *maslahat al-tanzim*
- In 1895 Ministry approved the organization, and defined the new administrative entity

Royal and Public Building Authority

The Archives of the Arab Bureau



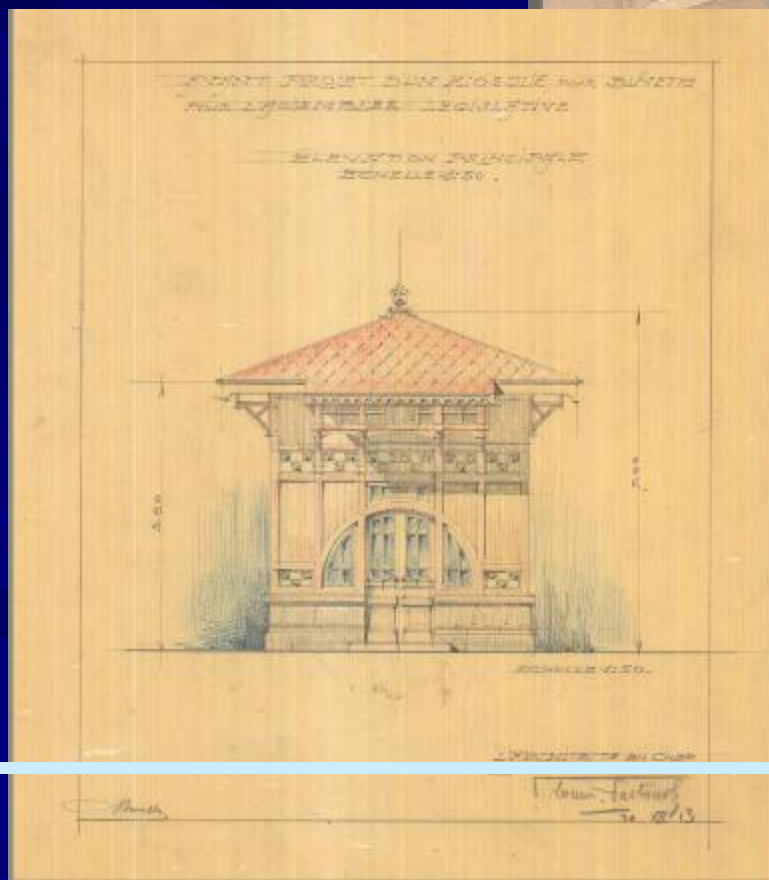
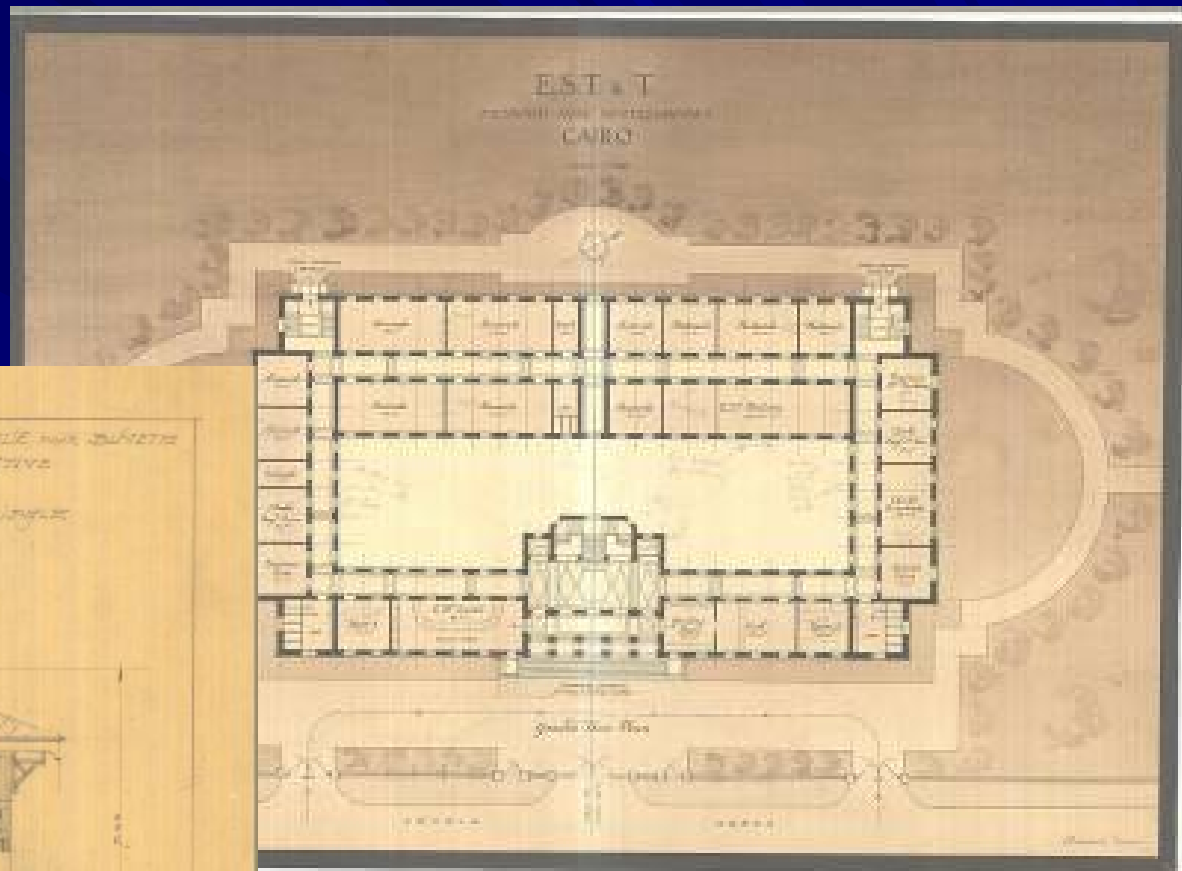
Center for Documentation
of Cultural and Natural Heritage



The Archives of the Arab Bureau



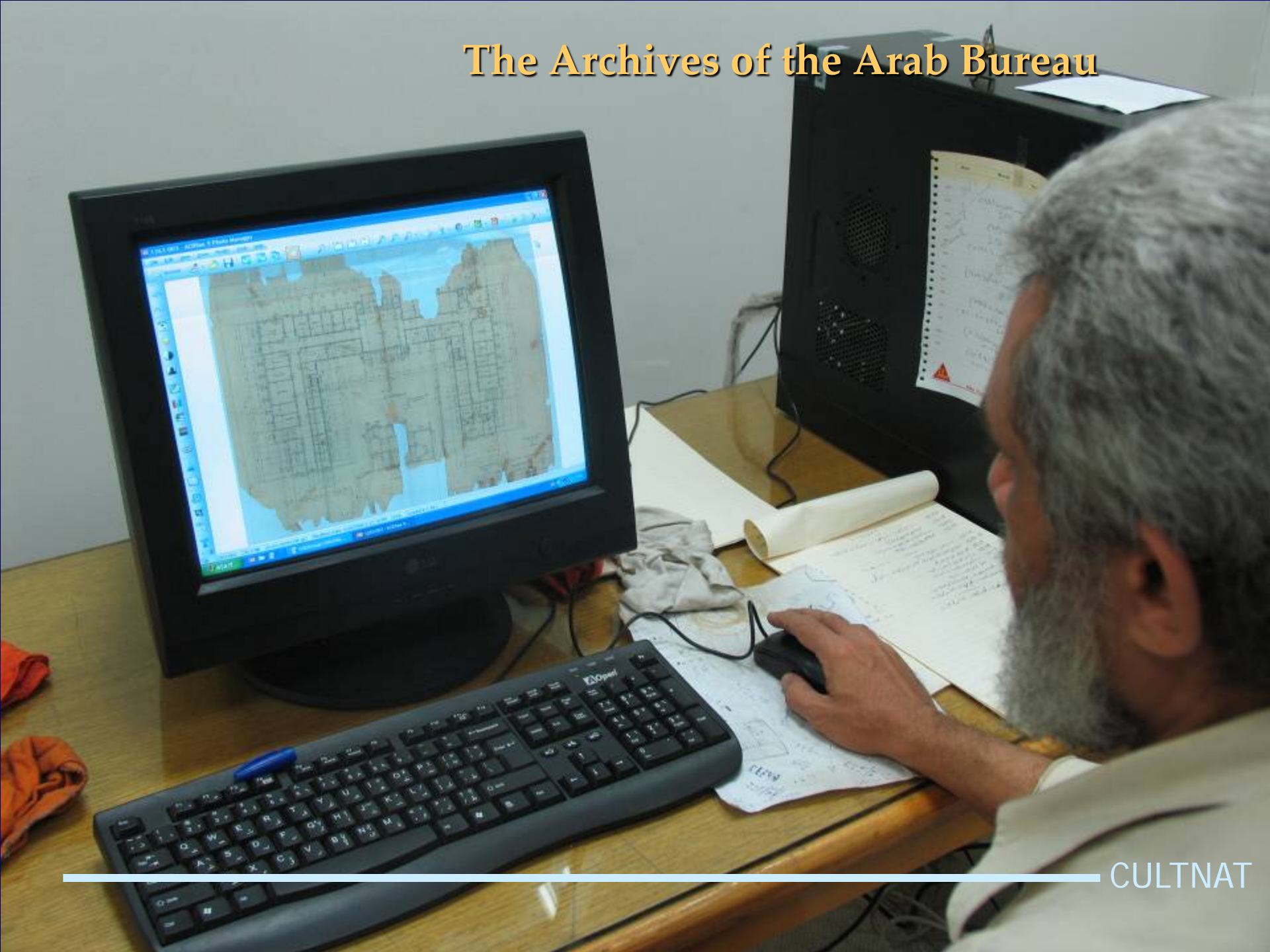
Center for Documentation
of Cultural and Natural Heritage



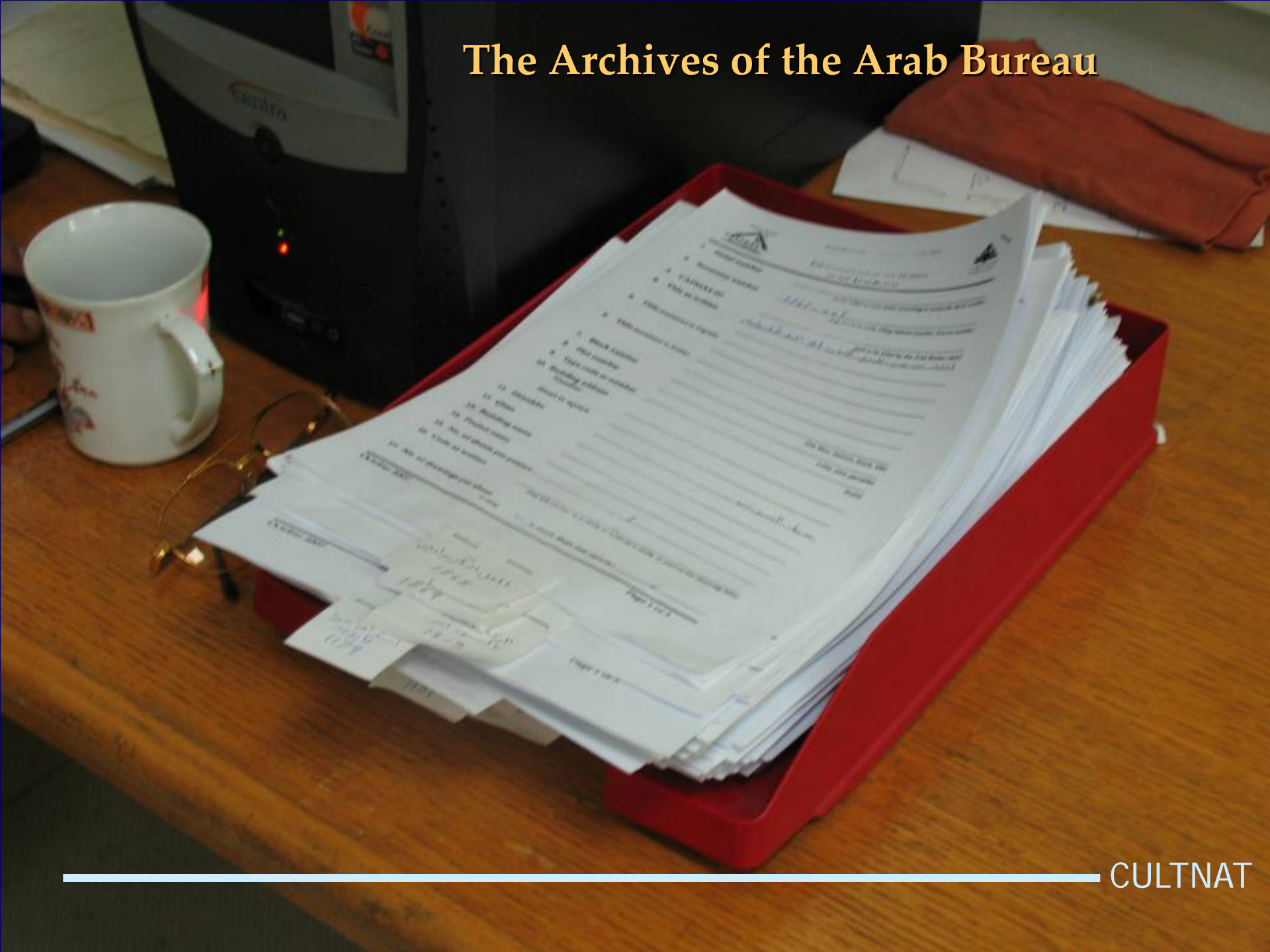
The Archives of the Arab Bureau



The Archives of the Arab Bureau



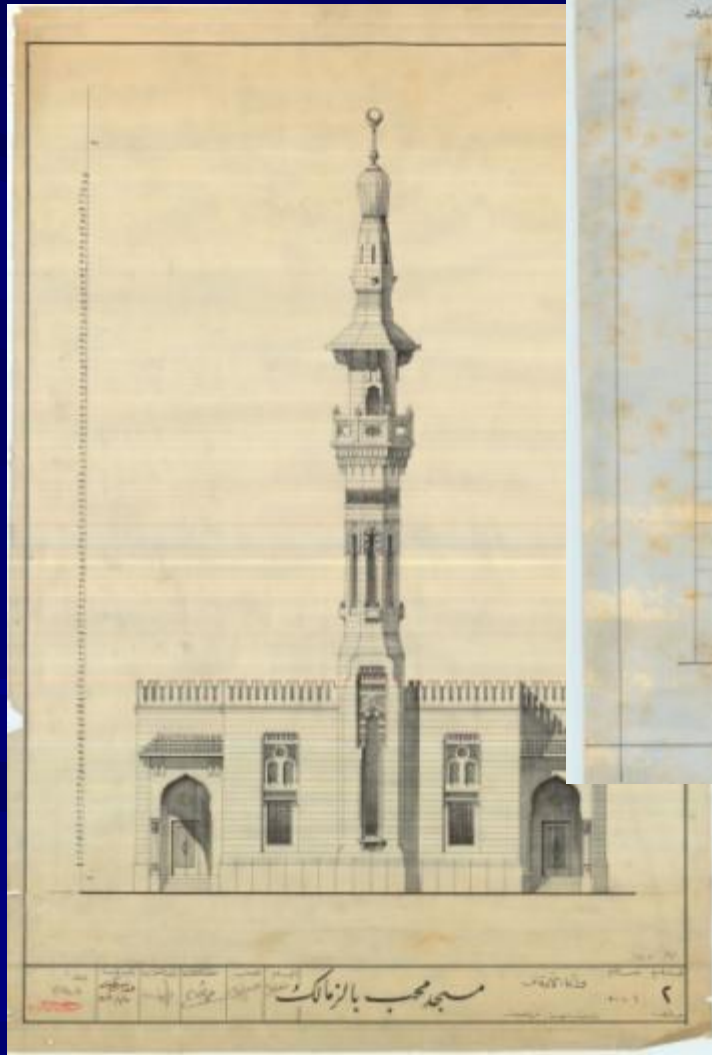
The Archives of the Arab Bureau



The Archives of the Awqaf Ministry



Center for Documentation
of Cultural and Natural Heritage



The Archives of the Awqaf Ministry



The Archives of the Awqaf Ministry



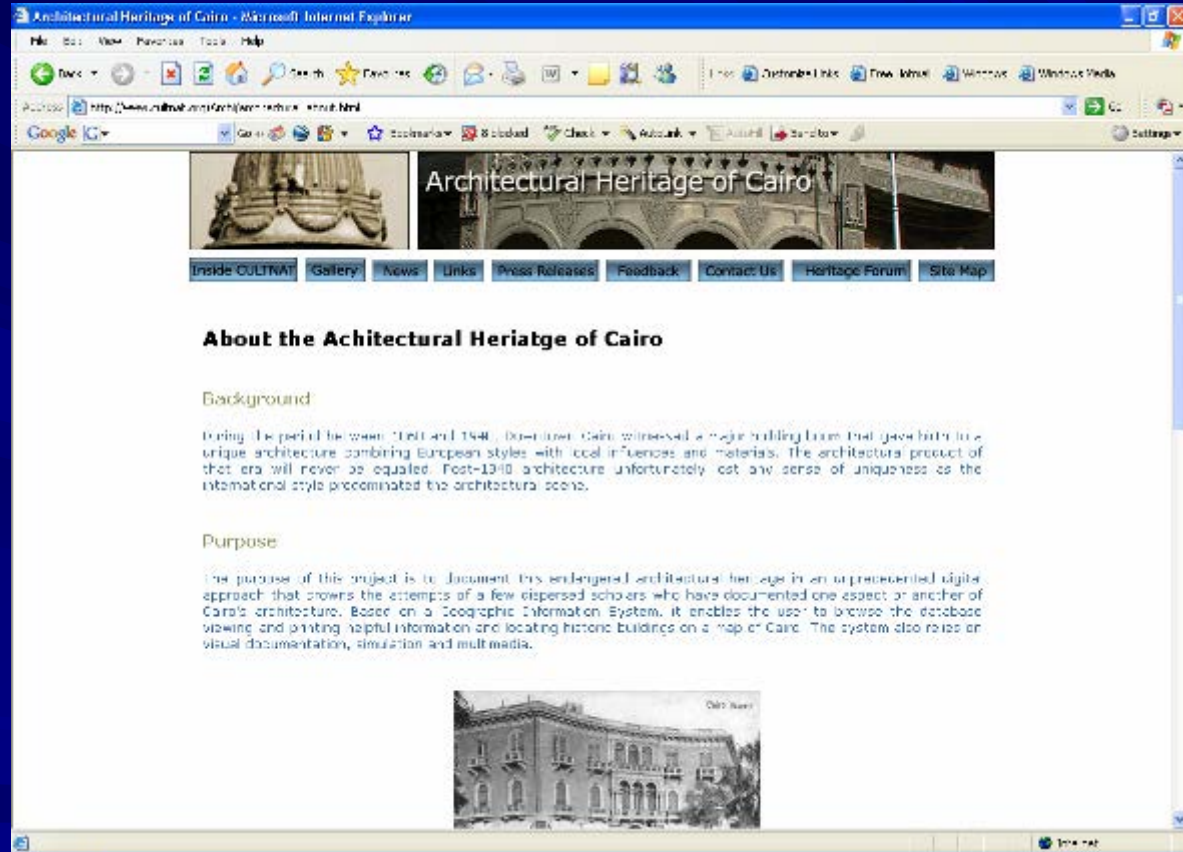
The Archives of the Awqaf Ministry



Raising public awareness...

Dissemination channels

www.cultnat.org





Raising public awareness...

Dissemination channels

www.eternegypt.org provides e-content on:

Egyptian civilisation, culture and heritage

Pharaonic, Graeco-Roman, Coptic and Islamic periods
in three languages (additional two languages)

innovative technologies

www.cultnat.org

www.eternegypt.org

Eternal Egypt... www.eternegypt.org



Technologies

Digital guide

Text-to-speech

3D scanning

Web cameras

Mobile information

Panoramic views

Virtual tours

Animations

3000*4000 pix images





Eternal Egypt... www.eternaegypt.org

Awards

Arab e-Content Award

Best e-Content in e-Culture, WSA, Sharjah, 2005

Best e-Content

World Summit Award, WSIS, Tunis, 2005

Best Innovative or Experimental Application

9th International Conference for Culture and Heritage, Vancouver, 2005





Raising public awareness...

Dissemination channels

www.globalegyptianmuseum.org provides e-content on:
the Egyptian collections in 10 museums

www.cultnat.org

6600 objects documented-photographed

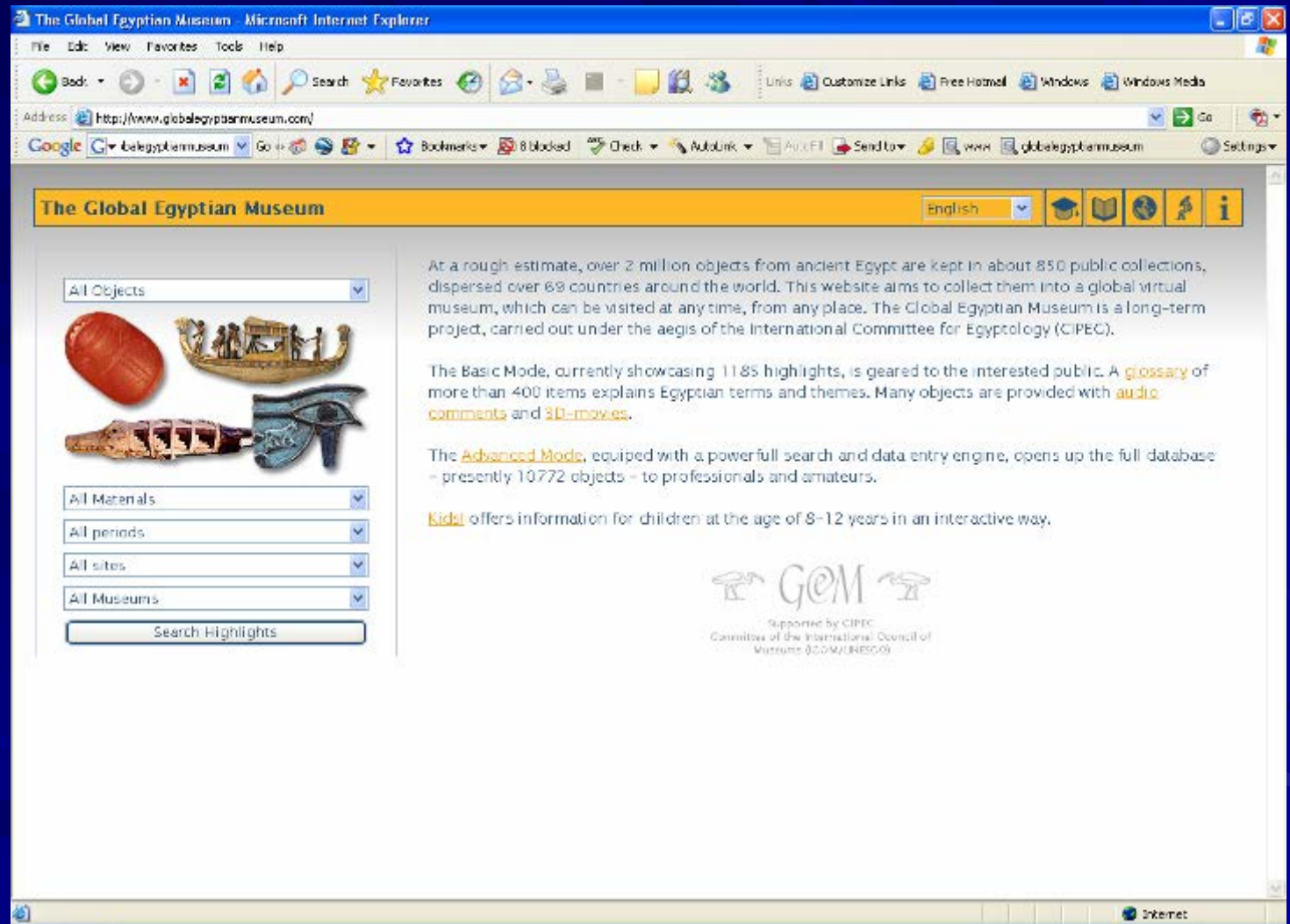
the Multilingual Egyptological Thesaurus

www.eternalegypt.org

in seven languages

www.globalegyptianmuseum.org hyperlinked glossary of over 400 entries

CULTNAT... www.globalegyptianmuseum.org



The screenshot shows a Microsoft Internet Explorer browser window. The address bar displays <http://www.globalegyptianmuseum.com/>. The website content includes a navigation menu with 'All Objects', 'All Materials', 'All periods', 'All sites', and 'All Museums', along with a 'Search Highlights' button. The main text describes the museum's mission and features, mentioning over 2 million objects, 850 public collections, and 1185 highlights. It also mentions a glossary of 400 items, audio comments, 3D-movies, and a search engine for 10772 objects. A 'Kids!' link is provided for children's information. The footer includes the GEM logo and mentions support by CIPEC, the Committee of the International Council of Museums (ICOM/UNESCO).

The Global Egyptian Museum English

All Objects

All Materials

All periods

All sites

All Museums

Search Highlights

At a rough estimate, over 2 million objects from ancient Egypt are kept in about 850 public collections, dispersed over 88 countries around the world. This website aims to collect them into a global virtual museum, which can be visited at any time, from any place. The Global Egyptian Museum is a long-term project, carried out under the aegis of the International Committee for Egyptology (CIPEC).

The Basic Mode, currently showcasing 1185 highlights, is geared to the interested public. A [glossary](#) of more than 400 items explains Egyptian terms and themes. Many objects are provided with [audio comments](#) and [3D-movies](#).

The [Advanced Mode](#), equipped with a powerful search and data entry engine, opens up the full database – presently 10772 objects – to professionals and amateurs.

[Kids!](#) offers information for children at the age of 8-12 years in an interactive way.

GEM
Supported by CIPEC
Committee of the International Council of Museums (ICOM/UNESCO)



Raising public awareness...

Dissemination
channels

websites

CULTURAMA



C
in



Center for Documentation
of Cultural and Natural Heritage

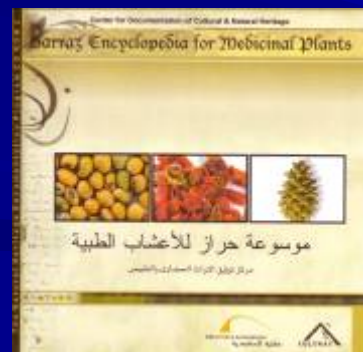
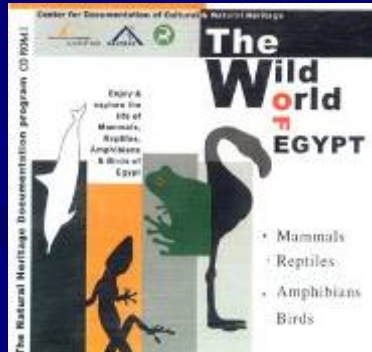
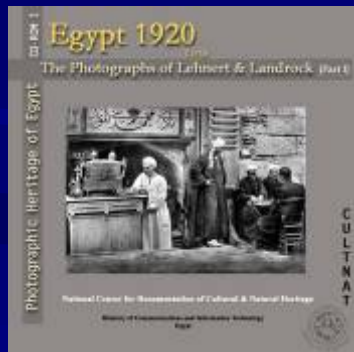
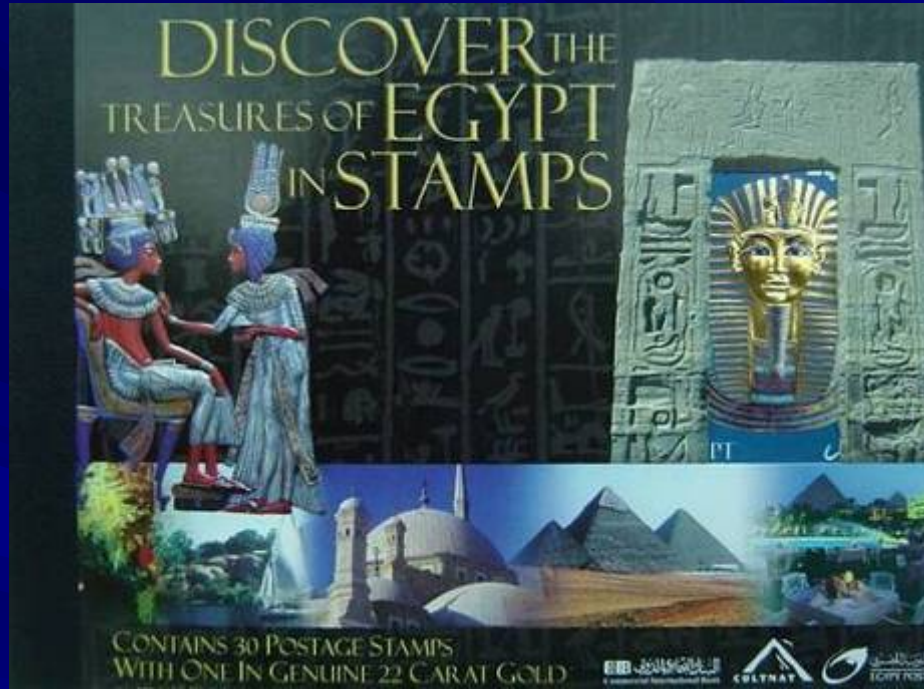
Raising public awareness...

Dissemination
channels

websites

CULTURAMA

publications





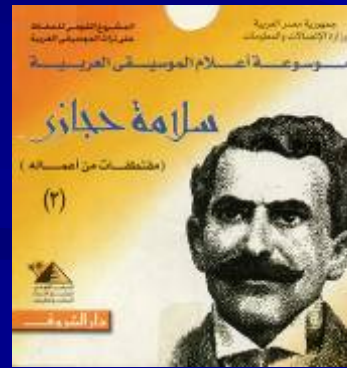
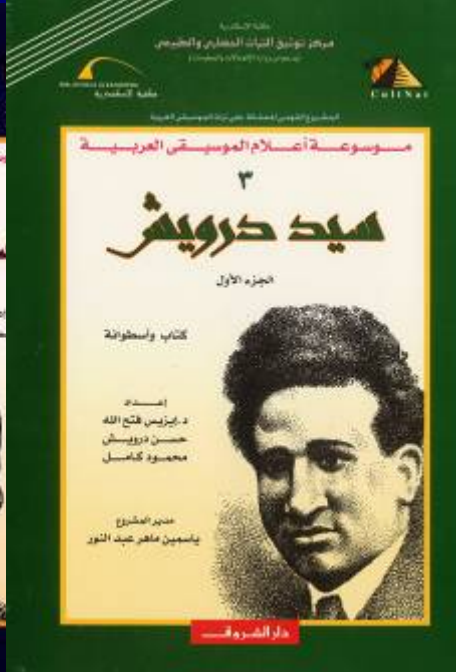
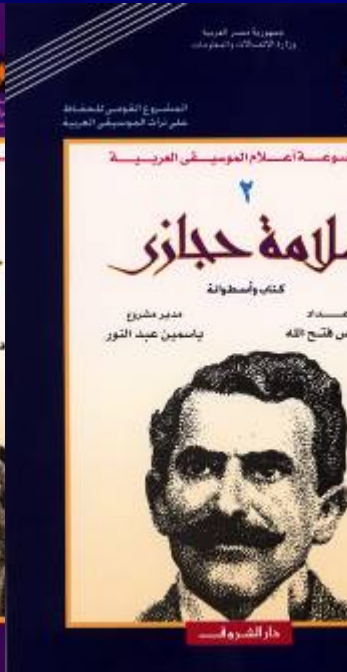
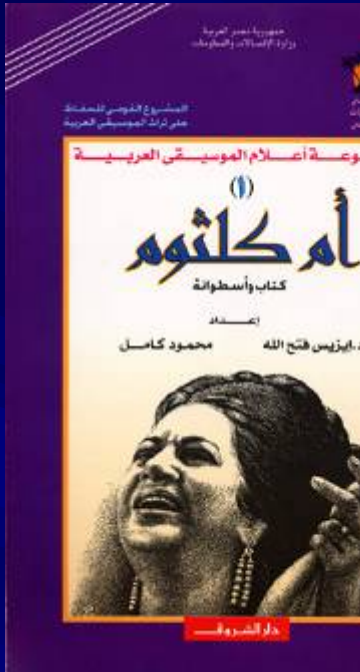
Raising public awareness...

Dissemination channels

websites

CULTURAMA

publications





Raising public awareness...

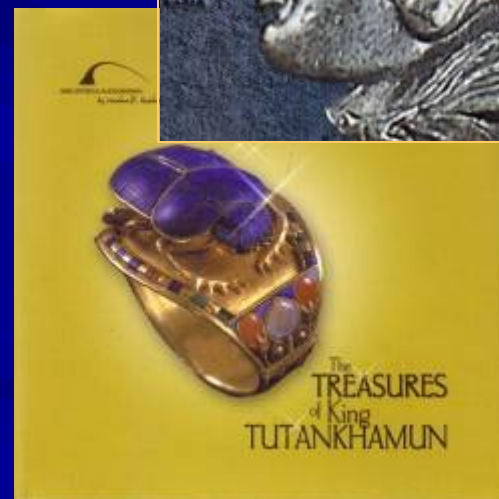
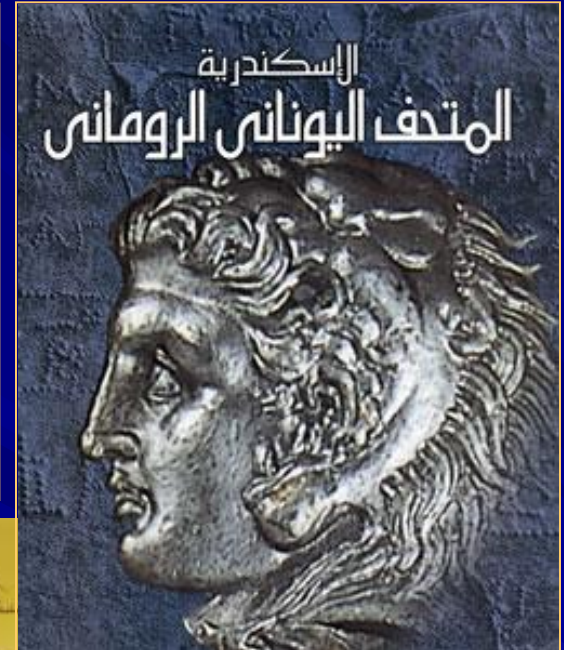
Center for Documentation
of Cultural and Natural Heritage

Dissemination
channels

websites

CULTURAMA

publications





Raising public awareness...

Dissemination channels

websites

CULTURAMA

publications

exhibitions

Micro-Gallery booths

Folklorama

Star Riders

Monthly renewed exhibitions





Raising public awareness...

Dissemination channels

individuals
groups
school classes

websites

CULTURAMA

publications

exhibitions

visits





Cooperation with...

Center for Documentation
of Cultural and Natural Heritage

governmental

The Supreme Council of Antiquities
The National Library "Dar Al-Kutub"
The National Archives "Dar Al-Watha'eq"
Egypt Post
Al-Azhar Library
Cairo University, Faculty of Engineering
General Organisation for Physical Planning
Cairo Governorate
Luxor City Council

private public

Heliopolis Company
Banque Misr

The Geographic Society



Cooperation with...

international

European Commission

UNESCO

UNDP

IBM corporation

Center for Computer-Aided Egyptological Research,
CCER, Netherlands

Institute Mohamed Ali for the Research of the Eastern
Tradition, IMARET, Greece

regional

Hashemite Heritage Center, Jordan

ALESCO

Al-Warraaq, UAE



Capacity building...

CULTNAT

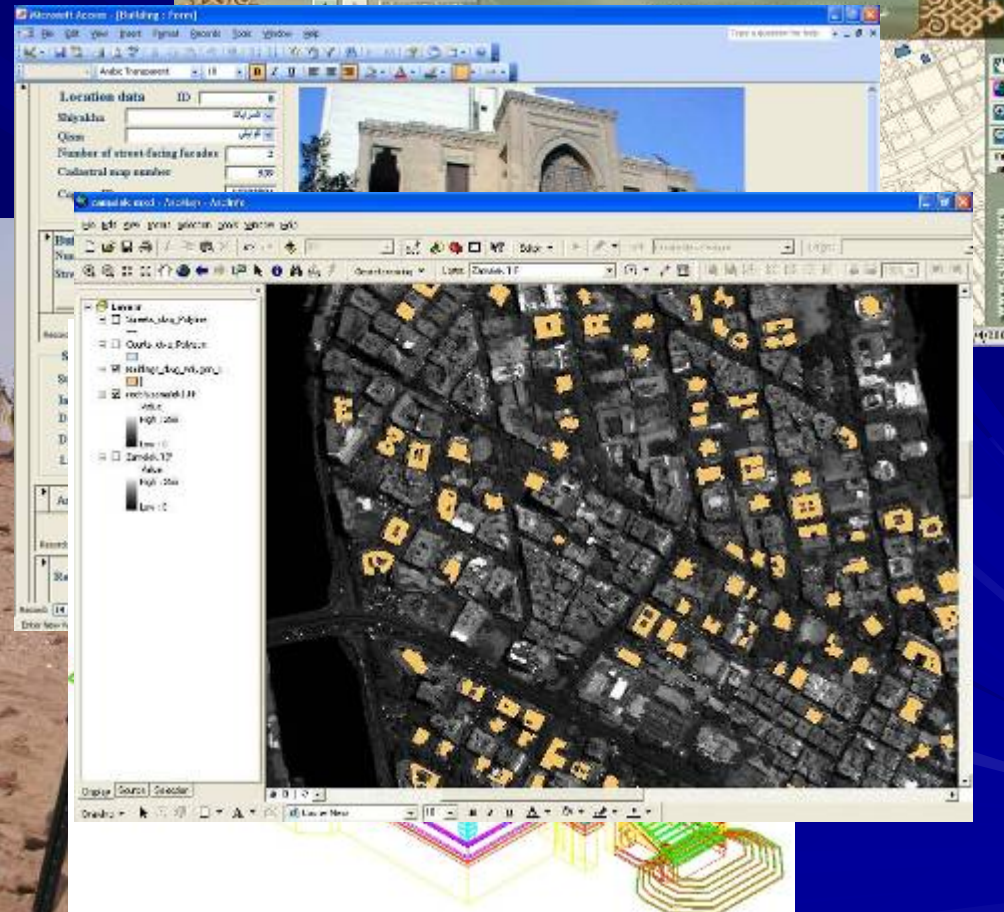
- capacity building of institutions and personnel
- know-how transfer
- experts meetings and round table discussions



I
N
S
T
I
T
U
T
I
O
N
S

Using the latest IT...

- DBMS
- Multimedia
- GIS Applications
- GPS
- Digital Photography
- High Resolution Scanning
- Photogrammetry
- 3D Laser Scanning
- 3D Modeling
- Virtual Reality





Center for Documentation
of Cultural and Natural Heritage

Documentation programs... overlays

Archeological map
of Egypt

Architectural and
urban heritage

Cartographic
heritage

Egyptian folklore

Arts and music

Photographic
memory

Islamic scientific
manuscripts

Natural heritage of
Egypt





CULTNAT... Fulfilling national policies

The establishment of a register on Egyptian heritage

The inter-ministerial cooperation to accomplish the center's mission

The advisory role and assistance to local institutions

The capacity building of personnel and organisations

The cooperation with regional and international institutions

Bibliotheca Alexandrina



CULTNAT...

THANK YOU

www.cultnat.org