

## Digital System suggestion for documenting Egyptian Costumes

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### Abstract:

The study focused on studying the division, classification and characterization of Costumes in international, Egyptian and Arab museums, and studying the division, classification and characterization of Costumes in foreign and Arab encyclopedias and books, as well as studying the division, classification and characterization of Costumes in global and Egyptian (government, private websites), and in view of technological progress in all different fields, the substitution of electronic publications for electronic information which has become one of the most prominent milestones in the transformation from the traditional environment to the digital environment, in order to help speed and ease of circulation, so the digital environment has also been studied to benefit from these studies in documenting Egyptian historical and heritage Costumes in more accurate and specialized ways. The most important means of preserving Egyptian civilization and heritage is documenting it in a scientific, specialized and accurate manner. Digital documentation is the effective role of digital technology. Through the study, I have reached the fact that there is a lack of an integrated, specialized and accurate system of documenting Costumes. So a proposal was designed for a digital system to document Egyptian Costumes characterized by comprehensiveness, accuracy and specialization following scientific methods, it was designed based on six axes (social - physiological - aesthetic - spatial - temporal - technical) and were questioned by academics and specialists. In addition to using, the digital environment to increase the efficiency of the system, and make it more comprehensive and easy to take advantage of circulate, save time and effort. By linking the proposal to a database on a server set for that purpose, (which contains a database that can be retrieved and linked to other networks and can be accessed through a **URL link**, it can be converted to a **QR code**, and which has been applied in the study and thus the system can be reached using this code. Once opening the smartphone camera and placed in front of the **QR code**, it will open the link of the proposal of the digital system for documenting Egyptian Costumes easily and conveniently.

### Key words:

digital system - documentation - Costumes.

**Introduction:**

The technological alternatives came to change all the scientific foundations of those systems that were prevalent since ancient times, and one of the most prominent features of the transition from the traditional environment to the digital environment is the substitution of electronic information warehouses for paper publications, in order to become faster and easier. Since Costumes is the language of every age, it is a basic expression of the nature of the age. Each age has its distinctive attire according to its civilization, climatic environment, resources, customs and traditions. One of the most important means of preserving history and heritage is documenting it in a specialized and accurate scientific style. It also helps enrich Costumes designers by drawing inspiration from historical and Egyptian Costumes, which confirms the importance and necessity of the digital system for documenting Costumes.

**Research problem:**

Despite the importance of documenting the Egyptian history and heritage to protect it from extinction and fraud, no system has been designed to document Egyptian Costumes in a specialized manner. Given the importance of technology and its use in all fields, it became urgent to develop a digital system to document Egyptian Costumes using scientific research methods.

**The research problem is summarized in the following questions:**

- 1- Is it possible to develop a system for documenting Egyptian Costumes for the digital environment in a specialized manner?
- 2- What is the best way to describe the costume and its complement in terms of (pattern, material, design, motifs, techniques, origin ...)?

**Research Aims:**

- 1- Reaching the ideal method for describing historical and traditional costumes.
- 2- Putting an integrated system for Egyptian clothes.

**Research Importance:**

- 1- Shedding light on Egyptian Costumes by putting in place an integrated system for documenting it.
- 2- Assisting academics, scholars, clothing makers, and workers in the field of historical drama (cinema - theater - television) with a documentation system that is a major reference for Egyptian clothing.
- 3-

**Research Hypothesis:**

A comprehensive digital system can be developed to document Egyptian historical and heritage costumes.

**Research Methodology:**

- An applied descriptive approach.

### Procedural steps for research:

- Costumes segmentation, classification and characterization reference.
- Digital Environment.
- Costumes concept.
- Practical application.
- Research Results.

### Practical application:

In view of the importance of technology, the digital environment was used in the applied aspect through:

Design a proposed system for documenting costumes in Arabic and English. Which adopted 6 axes (social, physiological, aesthetic, spatial, technical, and time).

- The proposed digital system has been linked to a database on a sever server that is prepared for that. The system is accessed using a QR code, and this has been implemented with the following steps:

A-Steps to connect the QR Code to the drive Google. B- Steps to create a QR Code.

C- How to use the QR Code to access the digital system

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20 Place										
21 Piece Code										
22 Dedication										
23 Dedication Date										
24 Number of restoration times										
25 Restoration Date										
26 Restoration place	Lab Name	Lab Address								
27 Picture of the restored parts										
28 Weight										

### Rationing tools search results:

- Honesty and Reliability.
- Questionnaire for evaluating the proposed digital system for documenting Egyptian Costumes.

A questionnaire was prepared directed to academics specialized in the field of clothing and Costumes, the field of division arts - to judge the extent of validity and consistency of the questionnaire to evaluate the proposed digital system. The questionnaire includes (6) axes:

The first axis: the social and includes (3) phrases.

The second axis: physiology, which includes (5) phrases.

The third axis: Aesthetic, which includes (3) phrases.

The fourth axis: spatial and includes (3) phrases.

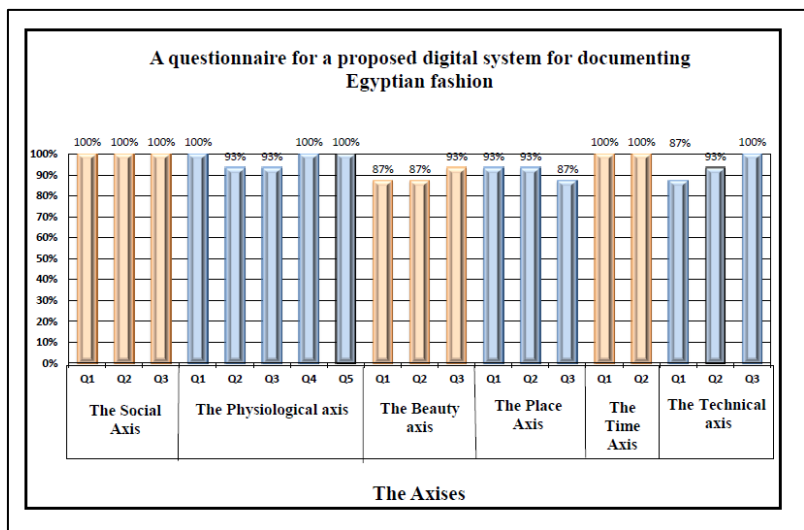
The fifth axis: temporal and includes (2) words.

The sixth axis: technical and includes (3) phrases.

The axis	Items	percentag %e	Evaluation				
			1	2	٣	٤	٥
Social	1- The proposal included the person's rank?	100					100
	2- The proposal included occasions (formal occasions such as coronation of the king, unofficial occasions such as marriage, purification, henna, solace of public occasions such as feasts (Eid Sham Al Naseem))?	100					100

		3- The proposal includes the job (type of profession)?	100					100
٢	Physio logy	1 - The proposal included body dimensions (pattern, flat drawing)?	100					100
		2 - The proposal included the age group of the person belonging to him the clothing piece?	93				٦,٦٧	93.33
		3- The proposal included the anatomical formula of the body, for example, (hunchback)?	93				٦,٦٧	93.33
		4- The proposal included the gender of the person belonging to him.	100					100
		5- The proposal included the clothing item category (outerwear - undergarments - supplements)?	100					100
٣	Aesthe tic	1- The proposed expression of the technical side of the piece of clothing?	٨٧				١٣,٣٣	٨٦,٦٧
		2- The proposal included the structural design of the garment?	٨٧				١٣,٣٣	٨٦,٦٧
		3- The proposal included the decorative design of the clothing?	93				٦,٦٧	93.33
٤	spatial	1- The proposed expression of the environment (desert - agricultural - coastal ...) in which the person belonging to him has the piece of clothing?	93				٦,٦٧	93.33
		2- The proposed expression of the climate of the place in which the person belonging to him lives the piece of clothing?	93				٦,٦٧	93.33
		3- The proposed expression of the terrain of the place (mountains - plains - plateaus ...) in which the person belonging to him has piece of clothing	٨٧				١٣,٣٣	٨٦,٦٧

٥	Time	1- The suggestion's expression for the time period of the clothing segment (Example: 1800-1850)?	100				100
		2- The proposed expression of the timing of wearing the clothing during the day (morning - noon - evening - evening)?	100				100
٦	technical	1- The proposal included the materials of the clothing item in terms of (natural (vegetable - animal - minerals ...) or industrial (textile - mixed ...))?	٨٧			١٣,٣٣	٨٦,٦٧
		2- The proposal included the construction of the clothing piece (piece model - finishing and finishing)?	93			٦,٦٧	93.33
		3- The proposal included decoration for the clothing piece (printing - embroidery - drawing - added pieces - .....)?	100				100



**Results of practical application questionnaires:**

The first axis achieved 100%, the second axis achieved 97.2%, the third axis achieved 89%, the fourth axis achieved 91%, the fifth axis achieved 100%, the sixth axis achieved 93.3%. Based on these results, the upper limit is 100% and the lower limit is 89%, which indicates the achievement of the digital system proposal for documenting Egyptian Costumes for the purpose.

**Research Recommendations:**

1. The importance of the use of Costumes and technology by modern technologists and academics in Costumes documentation.
2. Attention to adopting an accurate, specialized and more comprehensive method for documenting Egyptian Costumes in the digital environment.

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