



Detailed Map Storage And Retrieval System: The Map Library In The Department Of Construction And Projects At The University Of Baghdad As A Model, Iraq (2021 Ad)

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Abstract:

The study highlights the theme of the Koha system and the possibility of investing its advantages in establishing a system for storing and retrieving detailed maps by creating a database that facilitates the storage and retrieval of maps. The study aimed to identify the current reality of the Map Library at Baghdad University, to know the methods (traditional and electronic) and the tools used in organizing the maps used and their appropriateness, to build a database using the Koha mapping preservation and retrieval system. The study used the curriculum (survey and applied). The study found a range of results, including: the process of organizing maps in the map library in the Reconstruction Department did not rely on normative bases and rules, and the beneficiaries rely on the specialized staff in the recovery process and the use of maps because there is no automated system that enables them to conduct the search and recovery process; many maps have not been properly preserved, exposing them to damage and loss, Do not provide the right atmosphere for conservation. Based on indexing and classification rules in the mapping process, the study recommends the loading and installation of the Koha system and the adoption of the database prepared for this study, directing the maintenance and restoration of torn maps and the preparation of electronic copies to ensure their preservation, and providing appropriate requirements for the preservation and organization of maps.

Keywords: Maps, Koha system, detailed maps.

First: the research problem

The Library of the Department of Construction and Projects at the Presidency of the University of Baghdad is the only source in providing the university and all its formations with detailed cartographic resources on all buildings, lands, sewage networks, sidewalks and streets affiliated with the university. This study seeks to answer the following questions:

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- 1- What are the methods and tools used to save and retrieve maps?
- 2- What is the system used to save and retrieve maps?
- 3- What are the strengths and weaknesses of the system applied in saving and retrieving maps?
- 4- What is the extent of providing the appropriate environment in preserving the maps in terms of temperature, humidity, ventilation and other factors?

Second, the importance of research

The importance of the study is due to the importance of maps and considering them as an important source of information for the various formations of the University of Baghdad and the bodies working in them. Therefore, it is necessary to diagnose the strengths and weaknesses of the system used in preserving and retrieving maps and to work on addressing the problems that the department suffers from in preserving these maps by following the foundations and rules Standardization in the process of preparing, organizing and raising the level of services provided by this library to preserve these sources from damage and loss and to provide the beneficiaries with what they need from these sources in the least possible time and the easiest way and shortening the effort to the maximum

Third: Research objectives

The study aims to achieve the following:-

1- Getting to know the current reality of the map library of the University of Baghdad through knowing the

A - The methods used in organizing maps and the tools used in organizing

B - Identifying the appropriateness of the methods used in organizing and storing maps, whether traditional or electronic methods

2- Building a database using Koha system to save and retrieve maps

3- Getting to know the most important information services that the Library of the Construction and Projects Department can provide to its beneficiaries

Fourth: Research Methodology

The study followed each of the following two approaches in its procedures:

1- The survey method: It lies in identifying the actual reality of the study community, which is the library of the Department of Construction and Projects

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2- Applied approach: through the application of the proposed system and the introduction of a sample of the maps available in the library, the sample of the study

Fifth: Data and information collection tools

1- Paper and electronic sources of information: such as books, periodicals, references and other paper-based literature and resources available on the Internet.

2- Interview: with the official of the Map Library in the Construction and Projects Department and some of the employees working in the aforementioned department, in order to get acquainted with the actual reality of the study community, the method of preserving cartographic resources, how to deal with them, and the sites of weakness and strength in preserving them.

Sixth: The research sample

The study seeks to target a set of maps available in the library of the Department of Construction and Projects and build a database that includes a sample of maps, classify and save them using the Koha system

Seventh: The limits of the study

1- Objective limits: a system for saving and retrieval of detailed maps

2- Time limits The time limits for completing the study were limited from 2021-2022

3- Spatial boundaries: the map library in the Department of Construction and Projects at the University of Baghdad

Eighth: A theoretical introduction to detailed maps

1) Concept maps

Iraq is the first home, the oldest of maps, as the oldest geographical maps in ancient civilizations were drawn on its land, and this is clear from what the ancient Iraqis left from the oldest maps in human history, including agricultural maps, road maps, buildings, directions, dimensions and cities, and this explains and reflects the role of ancient Iraqi civilization in the field of mapping and charting that helped the development of science and knowledge in later civilizations (1).

The map has been closely linked since its inception until the present time with the science of geography, as the map is the identity of the geographer through which his scientific value emerges.(2)

If he sheds light on the concept and definition of the map, the researchers see that the word (Map) is derived from the Latin word (Mappa), which means a small piece of cloth. It consists of two pieces: cartes, which means a paper plate, and graphein, which means describing or depicting with drawings.(3).

The researchers gave many definitions that clarified the linguistic, idiomatic and scientific meaning of the word “map.” (4)Linguistically, it was known as “the feminine of the map, and for the geographic people there is a plot on which the image of the earth is drawn, or a part of it is expressed as carta in Latin, and its meaning is a sheet of maps. The researchers defined it as “a spatial organization of information, data and geographical phenomena signed by symbols and signs that reflect their characteristics and characteristics.(5).

In terms of the scientific meaning, it was defined as “a schematic drawing representing the surface of the earth in general or part of it, in which the relative size and location of the part are clarified based on the use of a specific drawing scale for miniaturization, in addition to adopting a specific map projection from among the known elevations, which contributes to clarifying human activities.” and the various natural phenomena of that region.”(5)

2) The importance of maps

Maps are of paramount importance in our lives in general, as they are an important guiding guide in various aspects, and researchers believe that the importance of the map is due to the following reasons” (6):-

- 1- Explain the relationship between man and the environment
- 2- It gives a clear and visible picture of the sites completely through the map in part
- 3- One of the tools used in teaching and learning the study of the earth
- 4- Translate sites with large areas into a thumbnail
- 5- A tool that helps in understanding geographic information in an easy and clear manner
- 6- Giving a mental picture about the nature of places and large spaces
- 7- One of the means to help prepare plans for projects

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8- An important way to monitor the movement of people, transportation and roads

9- It gives important and accurate information that helps population surveys

10- Identifying the similarities and differences between one region and another

3) The basic elements of the maps

Each map contains a set of basic elements that help in identifying the identity of each map and that are useful in the process of using, organizing, storing and retrieval (7):

1- Map title: the name that denotes, expresses, and describes the map and its content

2- Drawing scale: It is the scale used in drawing the map and its location is at the bottom left of the map

3- North direction: This direction is determined to determine the directions of the map frame

4- Coordinates, which are of two types, square and spherical, and they show longitude and latitude

5- The issuer and the year of production: It specifies the entity that issued it, the year in which it was produced, and its location in the lower part of the map.

4) Map types

There are many types of maps and charts, and each type is intended for a specific purpose. In these lines, we review the most important of these types and their classifications:

Researchers believe that maps can be classified according to the content they provide, and each type is distinguished by its focus on specific data, including political maps, physical maps, climatic maps, economic maps, and road maps (8)

There are those who classified it according to geographical content into two parts (9):-

1- Natural maps that deal with the natural aspect of the geographical area, including geological maps, weather and climate maps

2- Human maps that are concerned with the human aspect, such as transportation maps, military, tourist and historical maps, and land use maps

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While other researchers believe that maps can be classified according to the scale used in drawing them, and they are classified into (10):

1- Small-scale maps: they are drawn on a scale of less than 1: 500000, and this scale allows drawing a large area, but it does not show most of the details. On this type are maps of continents, oceans, and atlas maps

2- Medium-scale maps: They are maps drawn at a scale ranging between 1:500000 and 1:25000. This type of map shows smaller areas than in general maps and allows showing a larger number of geographical phenomena and details according to the function for which the map was produced. Examples are plant area maps Natural, urban centers, irrigation and drainage networks

3- Large-scale maps: They are drawn at a large scale of more than 1:100000, which allows for clarification of more details for limited areas. This type of map is used in the statement of properties, details of urban development, buildings, sewage and sewage networks, and this type is also called detailed maps

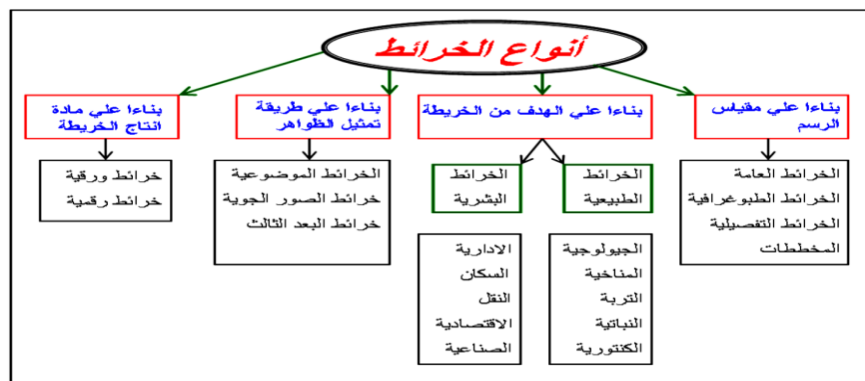


Figure (1) shows the types of maps (11)

Since we are going to build a system for saving and storing maps of this type, we will deal with this classification in some detail

5) Detailed maps or blueprint maps

The term (Plan) is called this type of map, and it is classified among the maps that use a large scale, as we mentioned above. The maps are the name (cadastre maps) and in English (cadastre), which means the details of the properties, and most of those who use this type of maps are the officials of the provinces, cities, institutions, engineers and others (12)

The researchers believe that the detailed maps can be divided into two main parts (13):-

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1- Detailed agricultural maps: This type of map covers the details of agricultural basins, fields and canals. This type of map is known in the countryside as (breaking the reins) maps drawn on a scale of 1: 2500

2- Detailed civil maps: They are maps drawn at a larger scale than the aforementioned type to clarify more details and landmarks and to clarify streets, buildings and other details. The scale used ranges from 1: 10000 to 1: 20000. This type is used in planning cities, institutions, universities and tourism activity services.



Figure (2) shows the detailed map (14)

6) Benefits of using detailed maps or blueprint maps

Among the most important benefits that can be achieved from the use of detailed maps are (15):

- 1- It helps to complete the work quickly and with high accuracy and organize and arrange the work
- 2- Defines and clarifies the tasks required of each individual at work
- 3- An important guide for maintenance work and it is referred to if any malfunction occurs or any problem is found
- 4- It gives a complete picture of the implementation of the building and shows errors before implementing the work on the ground
- 5- It facilitates the process of supervising the implementation of all stages of work based on the conditions and specifications

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6- It gives a complete idea of all the materials required for the work and all that the executive engineer needs

Ninth: The practical aspect of research

1) Department of Construction and Projects at the University of Baghdad - an overview

It is a specialized technical executive engineering department that aims to prepare, supervise, implement and monitor projects and evaluate projects submitted by executing companies working on projects at the university in accordance with engineering designs and specifications, preparing preliminary designs and economic feasibility studies for future projects, as well as preparing the necessary statements for the rehabilitation, maintenance and modernization of buildings and structures. Infrastructure for all university formations, it provides its services to faculties, institutes, centers, internal departments and the office of the presidency of the university

In the past, the department was a directorate with financial and administrative independence known as (Public Buildings Directorate), which included several departments, including the legal department, accounts, implementation, maintenance, follow-up, designs and projects department, as well as the rest of the administrative departments, but in 1982 it shrank and transferred most of its employees to other departments Outside the university, and the aim was to assign the departments of the Ministry of Housing to implement the university's projects, and the Engineering Consultation Office, in turn, worked on preparing the engineering designs, but this goal was not implemented as it was restructured as a division of the engineering divisions that was assigned simple tasks, and the work of the division continued with the same previous tasks with the intensification of efforts Its employees and then the division became after that at the level of a department called the Department of Engineering Affairs and linked to the President of the University until a special structure was prepared for it to be divided into divisions and units

At the present time, the department has been named the Department of Construction and Projects, and an organizational and administrative structure has been prepared for it, and according to the directives of the Ministry of Higher Education and Scientific Research, it is administratively linked to the Assistant President of the University for Administrative Affairs (16)

A) The administrative structure of the Construction and Projects Department

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According to the administrative structure, the department includes three divisions. Each division includes several units, as well as four separate supportive administrative units directly linked to the director of the department. The structure consists of the entities listed below: (17).

1- department manager

2- assistant manager

3- Administrative units directly linked to the department manager

A- Secretarial Unit

B - the administrative unit

C - Fingerprint unit, e-mail and the Internet

D- Administrative Follow-up and Conservation Unit

4- The people that make up the Department of Construction and Projects

A- Projects Follow-up Division and the following units are distinguished from it:

Investment plan projects follow-up unit

- Hidden Arms Unit

Investment projects follow-up unit

- Extra Duration and Pricing Unit

- Unit of initial and final receiving

B - The Project Implementation Division, and the following units are unique to it:

- The unit of carrying out the works in an honest manner

- Unit of the Resident Engineer Department of Jadiriya Complex

- Unit of the Resident Engineer Department of Abu Ghraib Complex

The unit of the Resident Engineer Department, Bab Al-Moadham

C- Project Planning Division, the following units are distinguished from it:

- Unit to study the feasibility of investment plan projects

Assay unit

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Investment Projects Study Unit

- Unit designs

B) Designs unit (the studio and map library)

In order to get acquainted with the nature of the work of this unit, what services it provides, how to organize, store and retrieve maps, their types, and the system used to preserve them, we had this interview with the unit official, Mr. (Zayd Safa Shaker) (18)

Who graciously explained the nature of the unit's work

1) Services provided by the Map Library

The designs unit (the studio and map library) is one of the important units of the Department of Construction and Projects, and its main function is to provide the university, its departments, all its formations, and the Ministry of Higher Education and Scientific Research with all the maps and plans they need from the available plans and maps belonging to the university, and since the maps are not loaned outside the unit and are only used internally The use and benefit of them is by submitting an official letter to the head of the department to benefit from the services of this unit. The provision of the service is by drawing the plans on paper according to the required size through photography or by printing them on a CD, whether architectural, electrical or health maps and drainage networks Health and others, as well as providing them with what they need from the designs and immediate plans that are drawn electronically through the program (Auto code), which is a program specialized in drawing maps on the calculator with high accuracy.

2) Library Collection

There is a large collection of maps included in this library, estimated at about (2000) various maps and plans that include different types of maps affiliated with the university and formations. The types of maps included in this group are:

1- Architectural maps of buildings, colleges, halls and departments affiliated to the university and their formations, symbolized by the symbol AR in the conservation process

2- Structural maps that pertain to existing buildings and constructions, or new and added buildings, and are denoted by the symbol ST in the conservation process.

3- Electrical maps related to the university's electricity networks and all its formations, symbolized by the symbol FL . in the conservation process

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4- Sanitary maps are concerned with maps of sewage networks and are symbolized in the conservation process with the symbol PB

5- Adaptation maps It is concerned with the central adaptation maps in the university and its formations and is symbolized by the symbol HV . in the conservation process

3) Organizing and preparing

An international or global system has not been adopted in organizing and classifying maps, and the matter is left to the unit official to choose the system that he deems appropriate in organizing a group of maps. The organization process is divided into two main parts:

- 1- Traditional organization: the maps are saved with metal and wooden galaxies and metal supports and they are sorted according to their location in each formation, as each group of galaxies was assigned to a specific formation and gave it the symbol and name of the formation for the purpose of retrieval, for example, the formation of the Jadiriyah complex, the Abu Ghraib complex, the Bab Al-Moadham complex as shown in the figure



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Figure (3) shows the metal and wooden shelves used to store maps
 Electronic organization: As for the method used to save maps electronically, a folder is allocated for each formation that includes pictures of the maps affiliated with this formation.

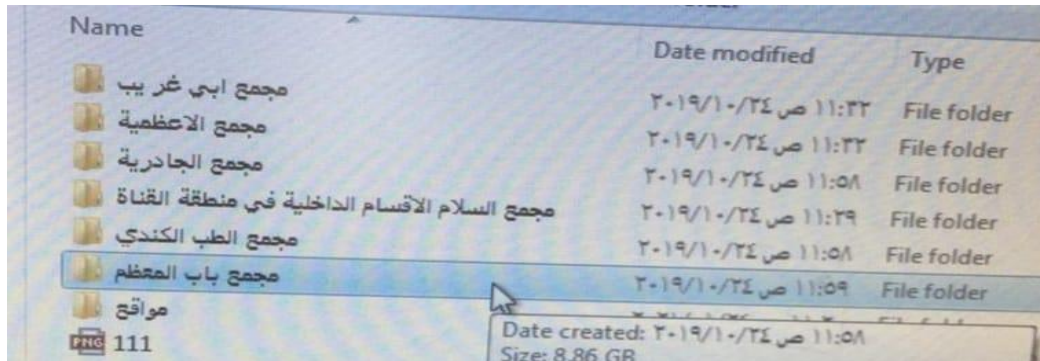


Figure (4) shows the organization of the maps according to the main formations

From each main formation, its sub-formations are subdivided, and a special code is given to each formation through which the required map is inferred in its location on the shelves

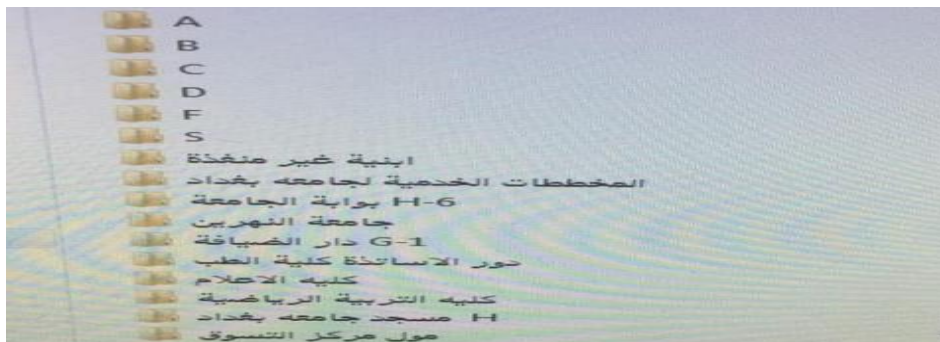


Figure 5 shows the sub-modulations of each main modulation

This method does not give complete information about each map, for example, the scale used, the type of map, the executing agency of the map, the project address, and other information.

2) Building a database using Koha

Koha can be downloaded from the following link

<http://sourceforge.net/projects/kohalivedvd>, where the Koha system is installed in the Linux operating system environment in the (virtual machine box) after selecting the appropriate kernel (either 32pt or 64pt). Open the link <https://www.youtube.com/watch?v=eaO7TQkrfuU>

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When you open the main interface of the system, which includes many tabs for various office work, such as indexing, lending, periodicals, and academic booking, as well as the tab for managing the system and another for tools related to the implementation of various office work, as shown in the following figure:

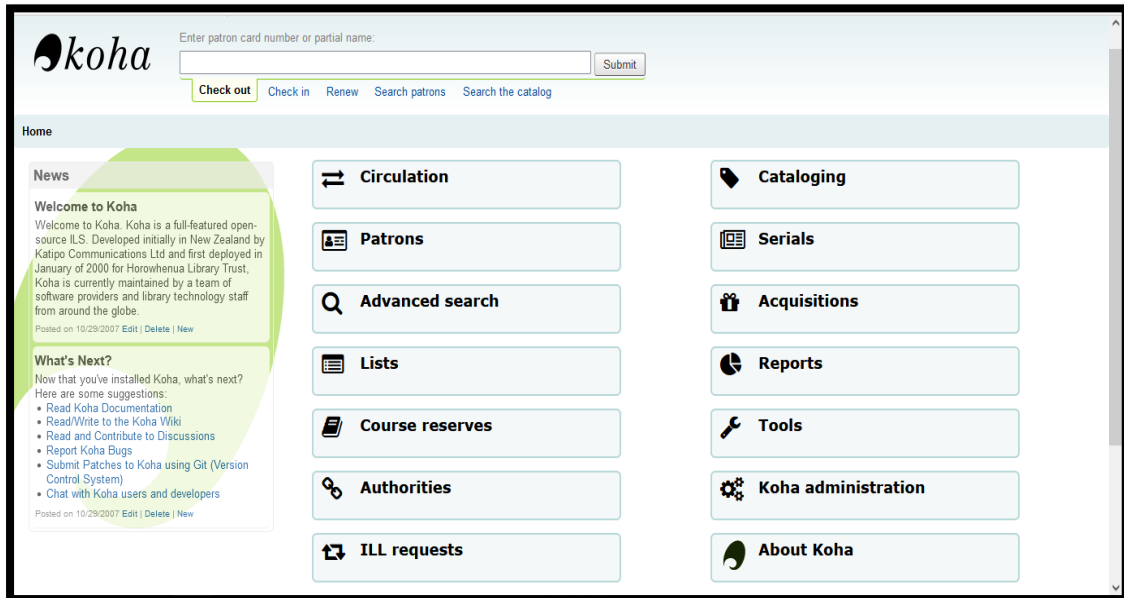


Figure 6 shows the main interface of the Koha system

For the purpose of creating a record for any of the library materials, we must click on the tab of the cataloging subsystem in the main interface of the system (cataloging), then the indexing interface will appear as shown in the following figure:

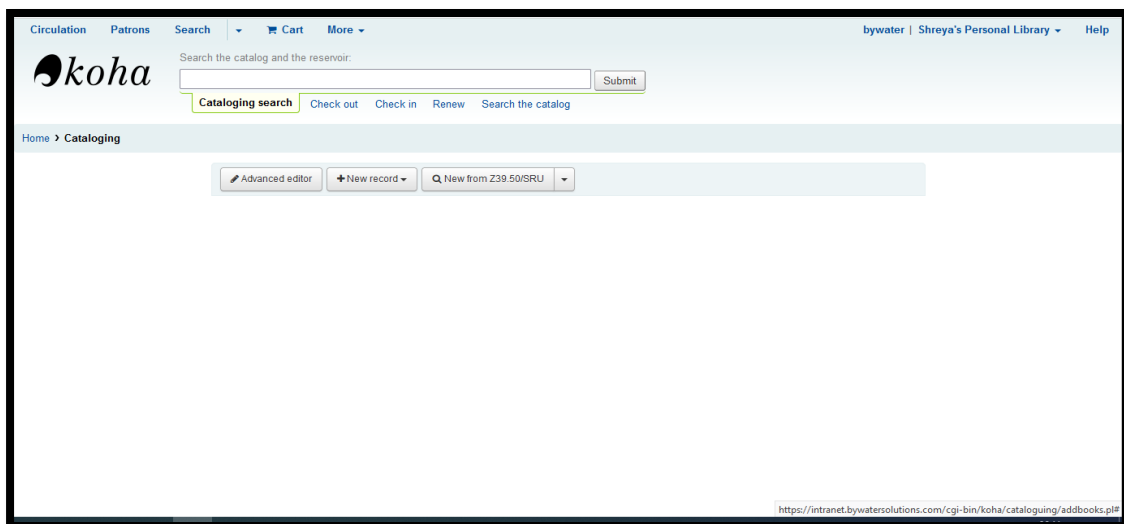


Figure 7 shows the main interface of the indexing subsystem

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In this interface, there are several options for indexing. The third option is for importing records from the z39.50 communication standard (New from Z39.50/SRU). When you click on this option, a window will appear that includes several ports for importing bibliographic records, the most important of which is the Library of Congress, as well as many Fields for searching for information sources such as the ISSN, subject, title, author, classification number and some other fields as shown in the following figure:

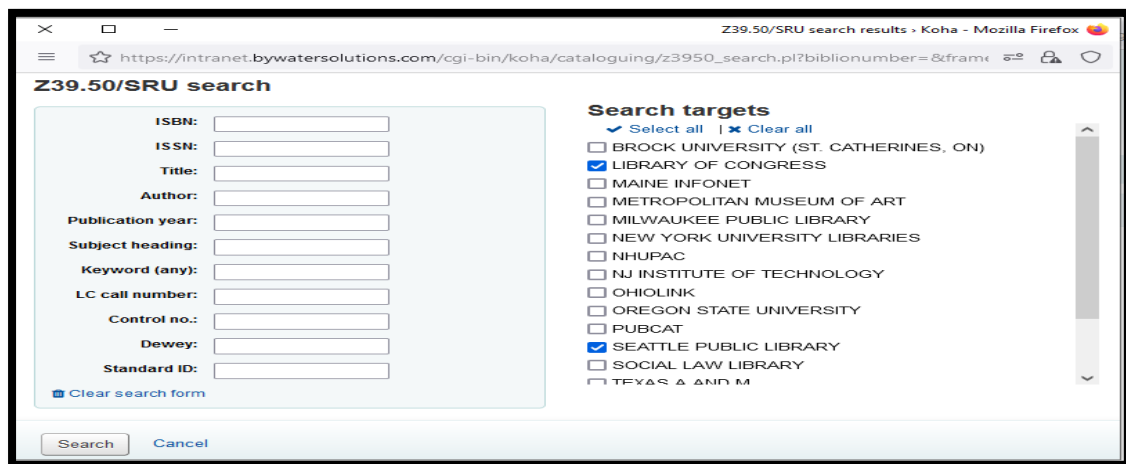


Figure (8) shows the window for importing bibliographic records according to the z39.50 . standard

When searching for keywords on the subject of the Iraq map, for example, we will have many records in the search results, from which we choose what suits our needs as shown in the following figure:

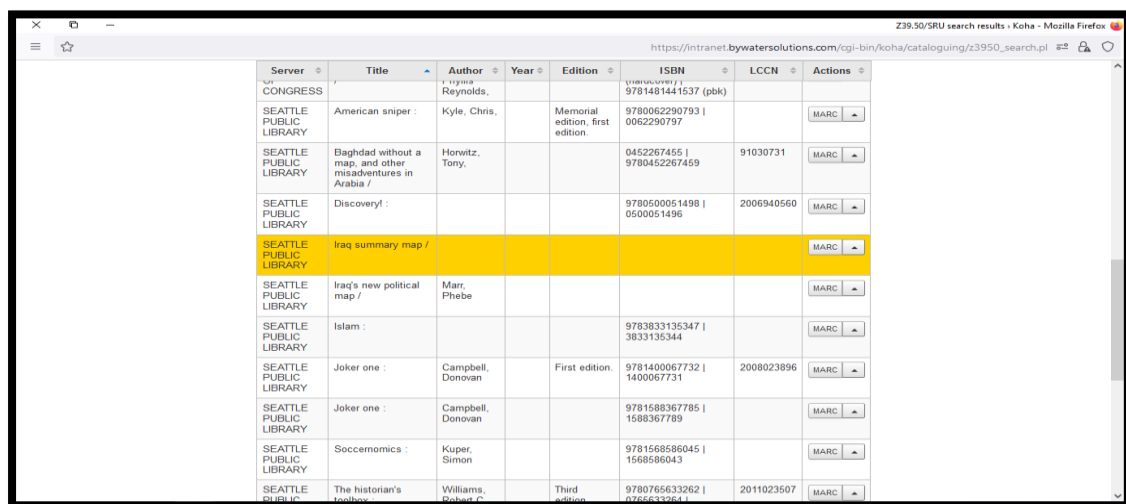


Figure (9) shows the keyword search for map records

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When the search results appear, we can view the record that we want to import by clicking on it to show us all the fields as shown in the following figure:

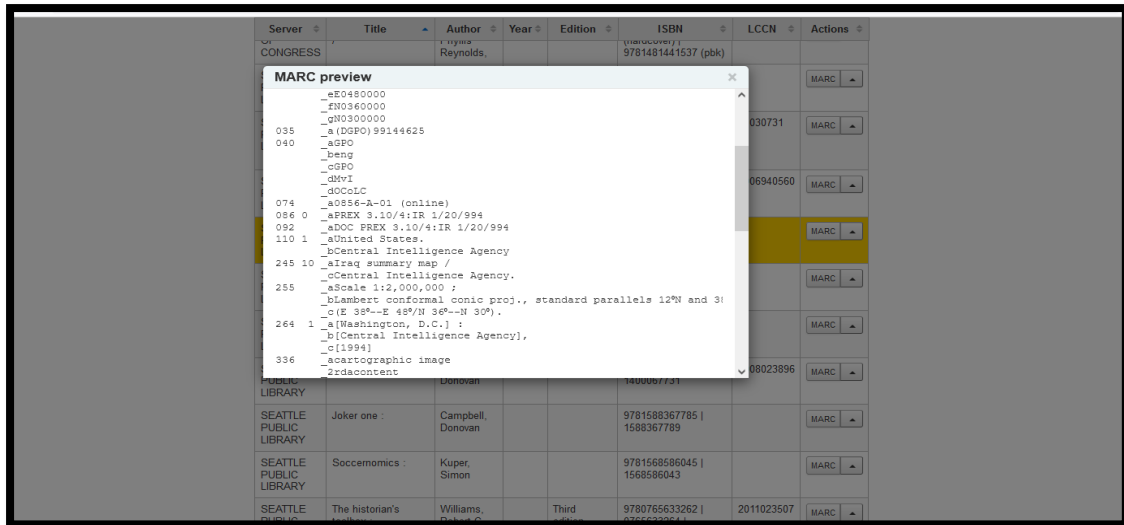


Figure (10) shows the display of the record after importing it

It is also possible to display the bibliographic data in the form of a regular index card by clicking on the (CARD PREVW) option to be more clear, as shown in the following figure:

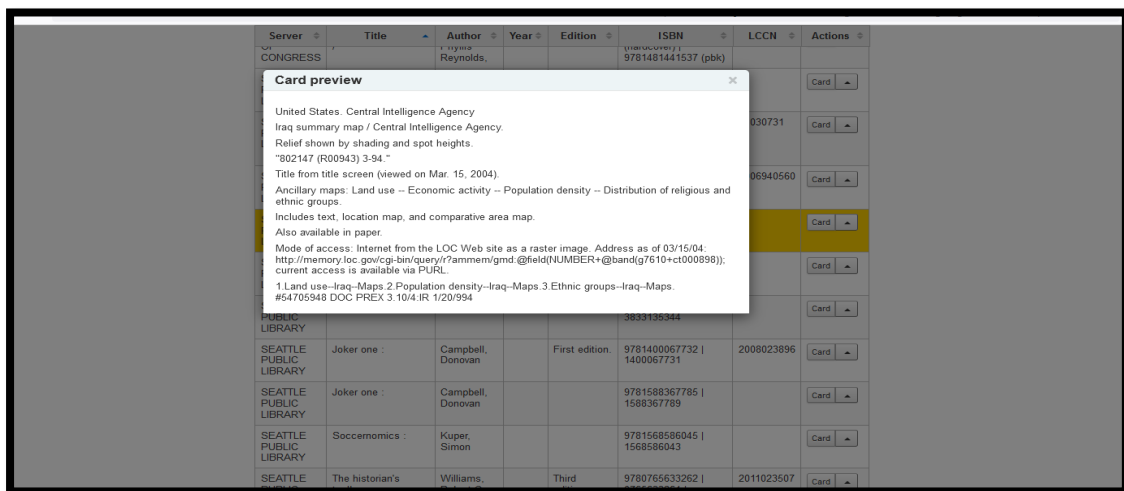


Figure (11) shows the display of data in the form of an index card

After choosing the appropriate record, we can import it into the system and save it by clicking on the third option, "Imprt" located within the options, making the required modifications, and saving the record in the system as shown in the following figure:

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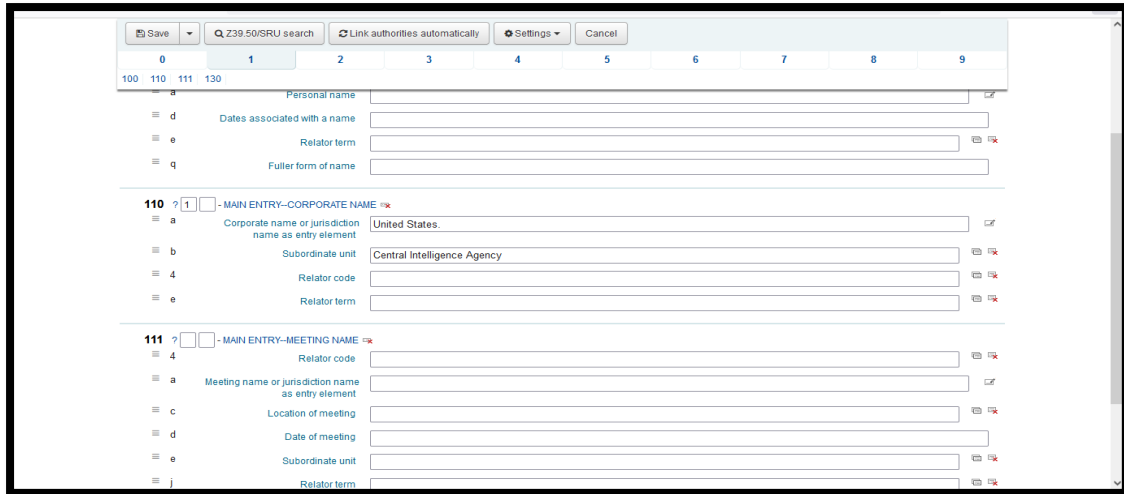


Figure (12) shows the form of the record after importing

As for the second option, it is for creating new bibliographic records by the indexer. When you click on the (new record) option, we will have a set of templates for indexing certain sources of information. We can choose the default frame or the map frame in case there is a single frame for indexing the maps, as shown in the following figure :

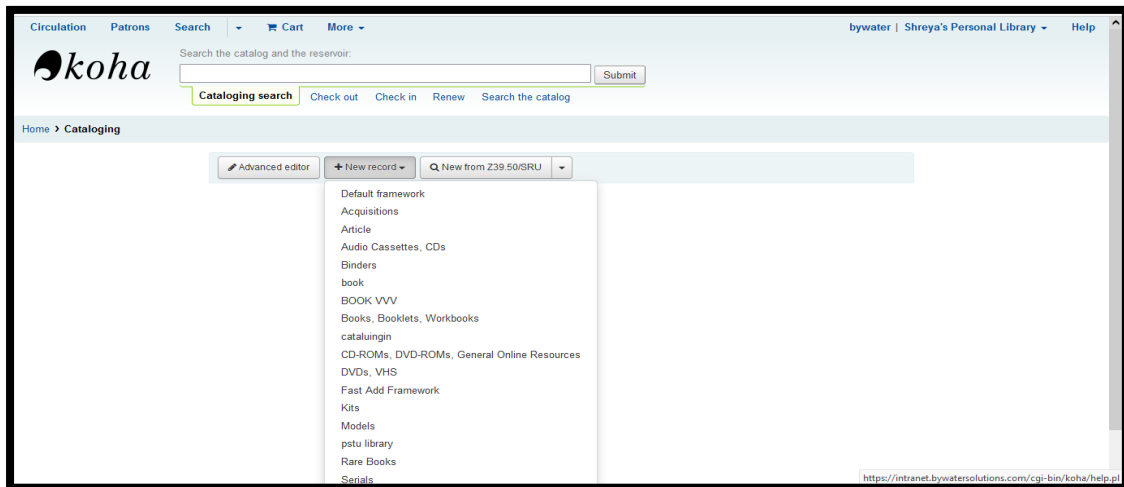


Figure (13) shows the second option for adding new bibliographic records

After the above menu appears through the option (register it new), we can click on the option for the default frame or the option for maps to complete the process of entering the full information about each map. To identify each map, as shown in the following figure:

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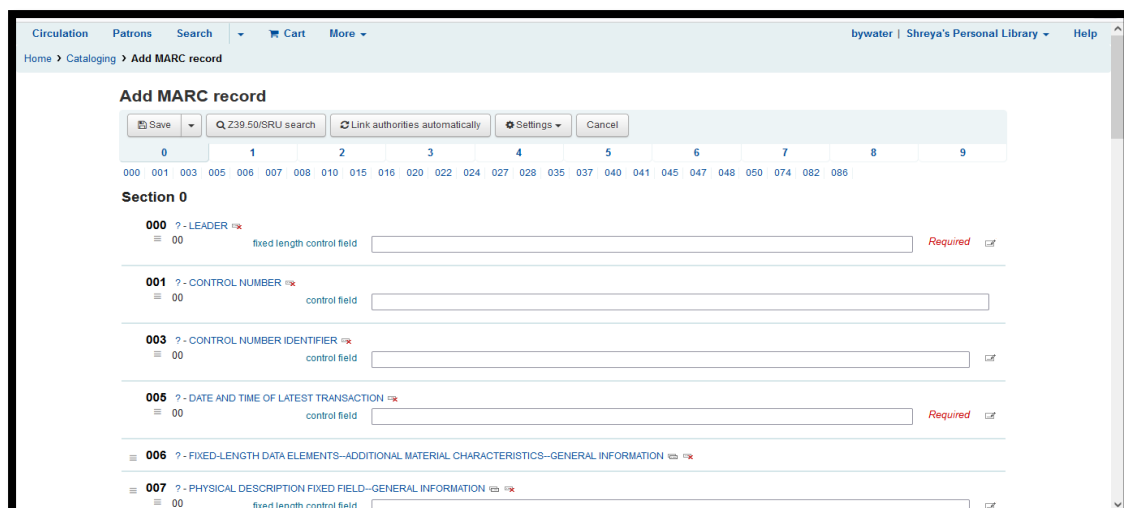


Figure 14 shows the fields of the MARC 21 . criterion

Tenth: the results

The study reached a number of results, which are:

- 1- The process of organizing maps did not depend on normative foundations and rules in the organization process
- 2- The beneficiaries of the maps depend on the employee in charge of the retrieval process and benefit from the maps, because there is no system that enables them to conduct the search and retrieval process for the maps
- 3- Most of the maps in the library are old, dating back to the seventies and eighties, and many of them were torn or damaged
- 4- The majority of the library's beneficiaries are employees working at the University of Baghdad and the Ministry of Higher Education and Scientific Research
- 5- The library lacks an extractor or map finder
- 6- Many of the maps were not preserved properly, which exposes them to damage and loss, as well as not providing the appropriate atmosphere for preservation.

Tenth: Recommendations

The study concluded with a number of recommendations based on its results, which are:

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- 1- Relying on the rules of indexing and classification in the process of preparing and organizing maps
- 2- Working on downloading and installing the Koha system and adopting the database that the researcher prepared
- 3- Maintaining and restoring torn maps and preparing electronic copies of them to ensure their preservation
- 4- Providing the appropriate supplies for preserving and preserving the maps
- 5- Providing the appropriate conditions for preservation, such as temperature, humidity, lighting, and hygiene, to preserve the maps
- 6- Providing a map extractor or scout for easy viewing

Margins

- (1) Duaa Mohsen Ali Sakr. The role of the ancient Iraqis in the field of geographical mapping (selected models).- Maysan University: Maysan Research Journal, Vol. 16, No. 29, 2019, p. 231.
- (2) Kefaa dakhel Abees. Cartography among Arabs: A Study in Geographical Thought (The Idrisi School as a Model), Journal of the Islamic University College, 2010, p. 13, p. 379. Available at the link <https://www.iasj.net/iasj/download/d0272b8f08804bb0> Accessed 7/1/2021
- (3) Muhammad Salem Qarbouj. Digital thematic maps.- King Abdulaziz University: College of Arts and Humanities, a course available at the link [https://www.kau.edu.sa/Files/0059472/Subjects/%D8%A7%D8%A3%D8%A4%D8%A5%D8%A6%D8%A7%D8%A8%D8%A9%D8%AB%D8%AC%D8%AD%D8%AE%D8%AF%D8%B0%D8%B1%D8%B2%D8%B3%D8%B4%D8%B5%D8%B6%D8%B7%D8%B8%D8%B9%D8%BA%D8%BB%D8%BC%D8%CD%D8%CE%D8%CF%D8%D0%D8%D1%D8%D2%D8%D3%D8%D4%D8%D5%D8%D6%D8%D7%D8%D8%D8%D9%20%D8%A7%D8%A7%D8%A%D8%B1%D8%A7%D8%A6%D8%B7](https://www.kau.edu.sa/Files/0059472/Subjects/%D8%A7%D8%A3%D8%A4%D8%A5%D8%A6%D8%A7%D8%A8%D8%A9%D8%AB%D8%AC%D8%AD%D8%AE%D8%AF%D8%B0%D8%B1%D8%B2%D8%B3%D8%B4%D8%B5%D8%B6%D8%B7%D8%B8%D8%B9%D8%BA%D8%BB%D8%BC%D8%BD%D8%BE%D8%BF%D8%C0%D8%C1%D8%C2%D8%C3%D8%C4%D8%C5%D8%C6%D8%C7%D8%C8%D8%CA%D8%CB%D8%CC%D8%CD%D8%CE%D8%CF%D8%D0%D8%D1%D8%D2%D8%D3%D8%D4%D8%D5%D8%D6%D8%D7%D8%D8%D8%D9%20%D8%A7%D8%A7%D8%A%D8%B1%D8%A7%D8%A6%D8%B7)

Almuallem Boutros Al-Bustani; Investigated by Muhammad Othman. Ocean's Ocean: A Extended Modern Dictionary of the Arabic Language. - Beirut: Dar al-Kutub al-Ilmiyya, vol. 9, 2009, p. 86.

Bilal Khalil Ibrahim. The system for saving and retrieval of maps in the Oil Exploration Company: an evaluation study. - Baghdad: Al-Mustansiriya University, Master's thesis, 2016, p. 18.

Ghada Al-Halqiqa. The concept of maps, 2016, available at the link, accessed 29/6/2021

<https://mawdoo3.com/%D8%A7%D8%A7%D8%A%D8%B1%D8%A7%D8%A6%D8%B7>

Zainab Hamed Harbi Detailed Map Storage And Retrieval System: The Map Library In The Department Of Construction And Projects At The University Of Baghdad As A Model, Iraq (2021 Ad)

(4) Ahmed El-Sayed. The importance of maps and types of maps, 2020, available at the link

<https://www.i7lm.com/%D8%A7%Daffon%D8%A%D8%B1%D9%8A%D8%B7%D8%A9/> dated 6/30/2021

Eyman Al-Hiyari. Types of maps and their importance, 2019 Available at <https://www.mah6at.net/Types of maps and their importance> Date of access 30/6/2021

(1) Batoul Tahaina. Types of maps, 2021 available at https://sotor.com/%D8%A3%D{6%DD8%A7%D8%B9_%D8%A7%DtablD8%AE%D8% B1%D8%A7%D8%A6%D8%B7 Date of access is 30/6/2021.

(2) Moamen Mansour fenon. Types of Maps, 2019, available at https://mawdoo3.com/%D8%A3%Daniel6%D8%A7%D8%B9_%D8%A7%D landsD8%AE%D8 %B1%D8%A7%D8%A6%D8%B7 Date of access is 30/6/2021.

(3) Jamal Hindawi. Introduction to Cartography: Classification of Maps and Their Symbols. A lecture at the College of Education, History Division, first year.

Jamal Al-Hindawi. Same previous source.

Aqil Kazem Wali. Maps subject: Classification of maps, a lecture at the College of Education for Human Sciences, first stage.

Hossam El-Din Gad El-Rub. Principles of Cartography.- Egypt: Academic Library Accessed 30/6/2021 Available at the link <https://injarch.com/ar/the-importance-of-complete-architectural-plans/> The importance of the complete architectural plans, 2020 View date 30/6/2021 Available at the link

<https://injarch.com/en/the-importance-of-complete-architectural-plans/> Hussam Al-Din Gad Al-Rub. Same previous source

The official website of the University of Baghdad is available at the link <https://rp.uobaghdad.edu.iq/> Accessed 9/7/2021

The organizational structure of the University of Baghdad. The numbers of the studies, planning and follow-up department, 2020.

Zaid Safa Shaker. The official of the designs unit and the studio, a personal interview, on 10/7/2021.

References

Zainab Hamed Harbi Detailed Map Storage And Retrieval System: The Map Library In The Department Of Construction And Projects At The University Of Baghdad As A Model, Iraq (2021 Ad)

1- Ahmed El-Sayed. The importance of maps and types of maps, 2020, available at the link

<https://www.i7lm.com/%D8%A7%Daffon%D8%A%D8%B1%D9%8A%D8%B7%D8%A9/>

2- The importance of the complete architectural plans, 2020 View date 30/6/2021 Available at the link

<https://injarch.com/en/the-importance-of-complete-architectural-plans/>

3- Ayman Al-Hiyari. Types of Maps and Their Importance, 2019 Available at <https://www.mah6at.net/Types of Maps and Their Importance>

4- Batoul Tahaina. Types of maps, 2021 available at https://sotor.com/%D8%A3%D{6%DD8%A7%D8%B9_%D8%A7%DtablD8%AE%D8%B1%D8%A7%D8%A6%D8%B7

5- Al-Bustani, butros; Investigated by Muhammad Othman. Ocean's Ocean: A Extended Modern Dictionary of the Arabic Language. - Beirut: Dar al-Kutub al-Ilmiyya, vol. 9, 2009, p. 86.

6- Bilal Khalil Ibrahim. The system of saving and retrieval of maps in the Oil Exploration Company: an evaluation study.- Baghdad: Al-Mustansiriya University, Master's thesis, 2016 p.

7- Jamal Hindawi. Introduction to cartography: classification of maps and their symbols. A lecture at the College of Education, History Division, first year

8- Hossam El-Din Gad El-Rub. Principles of Cartography.- Egypt: Academic Library Available at <https://injarch.com/ar/the-importance-of-complete-architectural-plans/>

9- Doaa Mohsen Ali Sakr. The role of the ancient Iraqis in the field of geographical mapping (selected models).- Maysan University: Maysan Research Journal, Vol. 16, No. 29, 2019, p. 231.

10- Ghada Al-Halqiqa. Concept maps, 2016 available at the link

<https://mawdoo3.com/%D8%A7%D8%A7%D8%A%D8%B1%D8%A7%D8%A6%D8%B7>

11- Aqil Kazem Wali. Maps subject: Classification of maps, a lecture at the College of Education for Human Sciences, first stage.

Zainab Hamed Harbi Detailed Map Storage And Retrieval System: The Map Library In The Department Of Construction And Projects At The University Of Baghdad As A Model, Iraq (2021 Ad)

