

## **The role of Interdisciplinary to interpretation of the archaeological context for museum objects**

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### **Abstract**

Museology is a multidisciplinary science, it needs and uses other sciences to prove and verify the validity of its ideas and address it to present topics that explain and list its museum objects, which often contain a set of puzzles that highlight the relationship between person and the surrounding reality in the past and the present. this requires that museums be linked to other analytical disciplines to exchange knowledge and solve problems that cannot be solved with a specific science. As well as the museum activities it conducts are also influenced by a large variety of scientific, social and natural disciplines which define the museum's tasks and research objectives which helps to expand the theoretical core of museum objects.

So, if museology is not interdisciplinary, it will not have the ability to understand the original archaeological context of the objects to be displayed and It will not have the ability narrate a true story that achieves the connection and communication necessary to present its idea and realize its goals.

### **Keywords:**

Museum objects - Interdisciplinary- interpretation - archaeological context

## Introduction

If the social is the basis of the museum, man and his life are always the heart of the museum itself, which means that the methods used in museology are essentially interdisciplinary since the study of man, of nature, and of life depends on great variety of scientific fields which related to different branches of knowledge.

Museums are no longer considered to be repositories of collections but have become centers of culture used all required academic disciplines as well as special skills in museum preparation, preservation and interpretation. Therefore, it needs other auxiliary sciences, and this is not limited to archaeologists alone, but to geographers, anthropologists, historians of art and architecture, ancient botanists and zoologists, and natural history. (M.Dabis; 2004; p.11)

the museums are not only research centers or centers of information, but they 'create' history and information in their representations by using the objects as the 'substratum' of their creation. also it must conduct experiences for audiences and visitors which provide for the realization of the aesthetic value of art, its related disciplines to reach all levels of an audience.

In speaking of interdisciplinary cooperation we have exhibition work particularly in mind - Increasing cases of interdisciplinary cooperation will lead to the possibility of creating museum displays based on full creative cooperation between the museologist and all the specialists of museum disciplines. This will result in a new kind of display and integrated display. Consequently the museum whose staff attains a fully interdisciplinary creative cooperation in producing such exhibitions, can be considered an integrated museum."

### **The concept of interdisciplinarity**

interdisciplinary are a set of knowledge, sciences, and methods that the archaeological researcher's use in all his sources, understanding, scrutinizing and criticizing them, and then presenting his material to the recipient in an acceptable way. (K.Haidar; 1995; p143) These knowledges accompany almost all the stages and steps that the researcher follows to explain his discoveries and objects. He uses some of them during Gathering assets and resources, some of them during research and diligence, and some in interpretation and display. Therefore, the interdisciplinary differ in their importance according to their proximity or distance from the subject to be researched.

There are differences between "interdisciplinary" and "multidisciplinary" teams. Interdisciplinary are when curators of different disciplines – ethnology, art, military history, cultural history – and programmers or designers bring their own perspectives of their discipline and work out a theme. while the multidisciplinary approach, a theme is developed and you bring in objects from different cultures to illustrate it. (R. Sandell & R. Janes; 2007; p.95) however, increasingly the term ‘interdisciplinary’ is used. While multidisciplinary research involves the collaboration of several disciplines working towards a common goal, nevertheless, each remains distinct, producing results which are typically published separately in journals relevant to the disciplines involved. Conversely, interdisciplinary research is associated with the use and integration of theories, concepts, tools, methods, models, data and paradigms of two or more disciplines to solve a problem, and results of findings in jointly authored publications.’ Interdisciplinary research not only borrows from different disciplines but also integrates them, and is characterized as an ‘intellectual landscape of knowledge, not disciplines per se’. In view of these considerations, the term ‘interdisciplinary’ would seem the better fit since museum science research starts from a question, and through the synthesis and integration of sciences and humanities, results in the production of new knowledge.

Hence interdisciplinary collaboration. The breadth of knowledge needed for museum objects has required the integration of an increasing number of scientific and disciplines within museum sciences: from natural sciences and engineering to mathematics, computer sciences, statistics and humanities sciences: archaeology, history, ethnology and social sciences. This leads to an increasing multivocality within the field. Moreover, the significance of language comes to the fore as the field transitions from interdisciplinary towards transdisciplinary research. Transdisciplinary is described as a problem-oriented research that requires cooperation between researchers and practitioners, bridges science with society, and ultimately results in mutual conceptual and methodological frameworks. Consequently, with roots both in the crafts and the sciences, museum science has developed to a large degree along the lines of transdisciplinary research. (S. Golfomitsou; 2015)

### **interdisciplinarity in Museology**

Museology, like any other generalist academic discipline, has originated, developed and assumed forms which are in fact the most appropriate for its development. It is certainly not a basic academic discipline, but it has developed at an information level which is partly based on the results of research in other basic disciplines and partly follows the epistemology of the information sciences. It does not function on the level of applied sciences. It functions at a conceptual level which is different from that of the basic disciplines.

Museology deals with the systematic study of the process of emitting information stored or concealed within the material structure of heritage objects (or musealia) and of decreasing the field of museal indefiniteness of any particular musealia, collection or the museal system. it constantly deals with theoretical and practical questions of identifying museality. Furthermore, on various communication levels museology is involved in establishing links between musealia (with variable quantities of information among which material messages are stable and social ones variable, depending on the interpretation of data) and experts, the environment and potential users. It thus makes possible the transmission, dissemination, explanation and use of information intrinsic to heritage objects or musealia, allowing it to be realized by selection, collection, evaluation, scientific and professional elaboration, protection, storage, display and editing of such objects. Museology operates through museum publications, the formation of museum collections and collective funds and through permanent and temporary exhibitions. (I. Maroevir;1997).

The interdisciplinary in museology aims to employ cultural diversity and the diversity of its knowledge as a basis for building possible new models for social, economic and political development by highlighting the differences, similarities, points of convergence, divergence and points of overlap, to be able to create a discourse for the exhibition and build bridges between audiences, but those bridges are incomplete so that visitors can Through it they can see and decide how they want and then can build their own bridges by using their various methods to make contact with knowledge and this creates opportunities for information and thinking to create new discourses that feed the exhibition itself. It also aims to work with a series of push and pull operations between scientific knowledge and other knowledge to form more than a tangible physical discourse in the work of exhibitions to be able to create a dialogue between the public and the museum collections. For example, if we talk about science museums, they should transmit information about science, but this does not preclude the appreciation of other knowledge that also exists among their audiences. interdisciplinary in museology always asks where to start talking, what is its model or example, and what alternative or even marginal knowledge is fed with it. It also experiments and examines new paths, incorporates new voices, compares visions and variables, stimulates debate about the appropriateness of knowledge, and engages citizens in scientific and technological decisions, promotes collective creativity and encourages communication between scientists and other people.

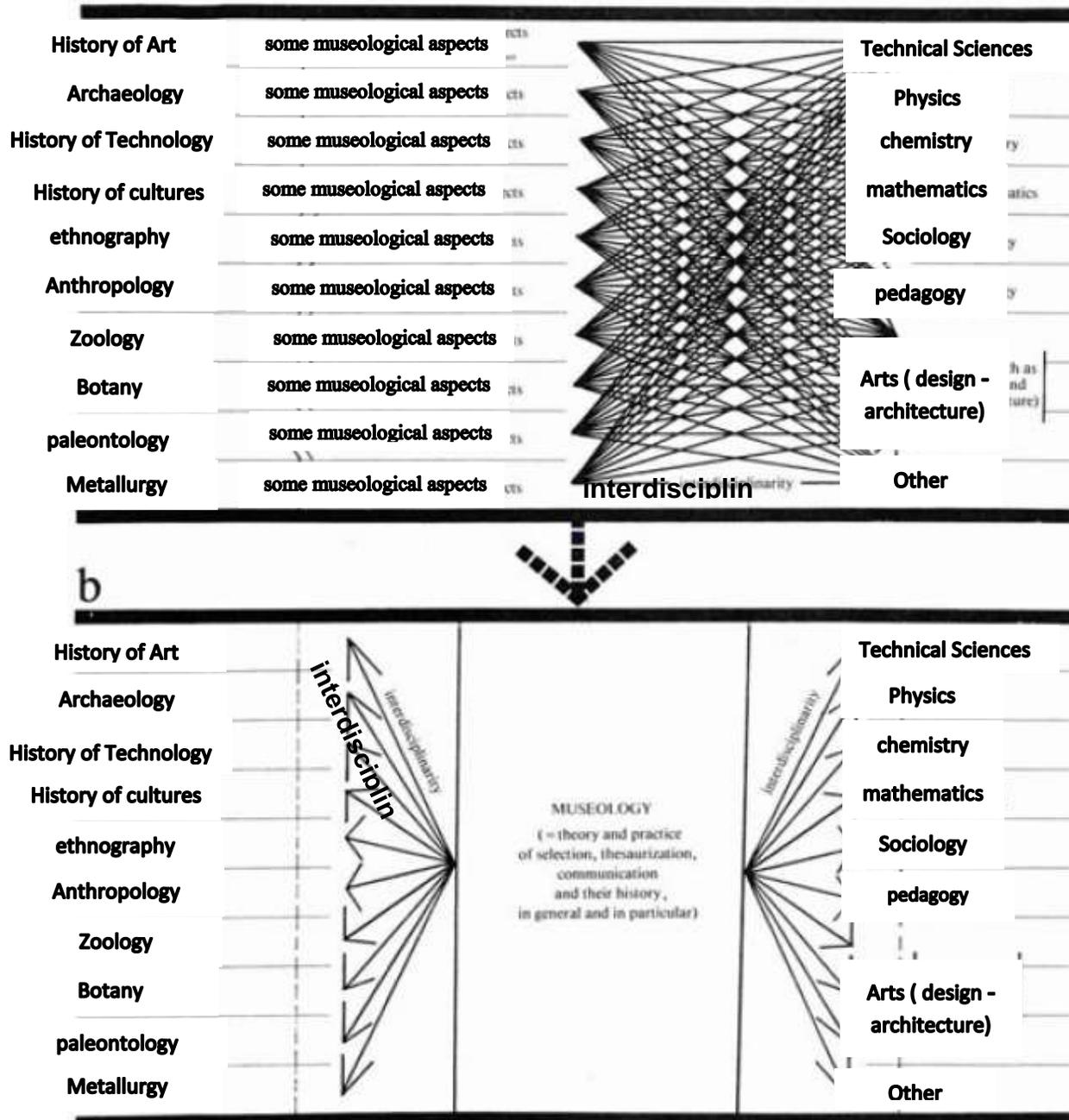
This is what museology seeks, while formal priority was given to exhibitions that are divided into historical periods, ethno-linguistic groups, geographical locations, archaeological or artistic styles, and due to classifications developed by branches of academic sciences (such as archaeology, paleontology, art history and technology), which was limited and only known to specialists without the rest of the society.

Although the theoretical museological thought should open up views, widen the horizon and break through the frameworks and limitations of ancient prejudices. Its ideas must be open and free. They must be within the function of man and society, because only thus can they save the heritage (in the totality of all its meanings) for the future in the active present. (I. Maroevir;1997)

"Museology thus oversteps the borders of its precursor, museum science. and makes vital contact with all related and even far removed branches of science. Thus, the science of museology necessarily functions in connection with other sciences; multi- and/or interdisciplinarity is basic to it. This applies to the most fundamental activity of the museums; not just at the obvious, superficial level of collecting in all disciplines appropriate to museum work (geology, art, history, etc.) (L. Jahn;1982;p.29).

The following diagram shows two different possibilities of interdisciplinarity in museology, perhaps also two states of development of museology:

- a) interdisciplinarity between the "museal sciences" with their special museological demands, using some knowledge of other (non-museal) disciplines like sociology or design (right side); the result of the "interdisciplinarity" would be several pragmatic solutions for each museal science.
- b) interdisciplinarity between a science "museology" and parts of museal (left side) and non-museal (right side) disciplines to solve special problems of museal selection, thesaurization, communication (especially presentation) and their history; the result of this would lead to a steady increase of museological knowledge.



(fig.1) Diagram shows two different possibilities of interdisciplinarity in museology (L.Jahn;1982;p.29)

## **Interdisciplinarity to interpretation the museum objects**

We cannot ignore the superior role that the object plays, given its specific significance, and the various uses and changes it has undergone in the culture in which this object was created. and through other cultures, it was able to control it (trade, cultural borrowing, colonialism, sabotage, etc.) and other new uses and meanings are add to it. also, when the object is collected and displayed in a museum, the professionals working there rely on their theoretical framework, research results, and exhibition objectives, in order to distinguish between the series of uses and meanings that objects had during period of his existence, in addition to the fact that the objects are subjected to re-imposing a new meaning by the audiences and visitors of the museum. According to their previous experience and knowledge. (L.A Castro; 2005)

In order to be able to decode the information inherent in a museum object, one needs to read the language of the object (its form, material and structure) for which the basic academic disciplines such as archaeology, ethnology, history of art, natural sciences, etc. should prove helpful. On the other side the language of objects and contexts can be more direct, more complete and more meaningful than the verbal language of written documents. The results of the communication achieved using such language are transformed to human knowledge only by formalizing them into language understood by all and as unified as possible for transference and dissemination.

The museum should have the ability to absorb theoretical ideas and a willingness to apply them in practice. (I. Maroevir; 1997)

the museum After collects its objects, the museum must identify its archaeological perspective in its archaeological, historical, environmental and anthropological context with the help of other auxiliary and Interdisciplinary sciences to complete the information and make a storytelling that contains interesting topics capable of linking and arranging the objects and events and also dissolve the gap between the past and the present to make an interesting and attractive museum display with it Clear and simplified narratives that are easy to communicate and understand to different groups of society. The museum seeks to collect and link events and analyze the results of previous speculations, and this has helped to provide a narrative means that is unrestricted specific historical sciences in order to tell the story of natural and human objects and things from their discovery to display in order to provide the basis for a new scientific vision based on new horizons and as a result of these actions. the objects collected inside the museums are analyzed and then their relations with each other are reconfigured as a result of the new narrative based on the analysis of previous speculations, and this process has given these objects a new structure that requires new practices to see their details frame instead of superficially looking at those objects or within them.

It is also necessary to provide tools to narrate these historical sciences in a controversial and unrestricted way to highlight the story of these objects from their beginning to their end in the display in order to provide a basic base and build a constructive scientific and practical vision, based on new evidence through time. (T. Bennett; 2004; p.38-39)

The secret to gaining as much information as possible from an artifact rests in the interdisciplinary nature of material history studies and the observational powers of the examiner. A wide variety of relevant sources may be drawn upon to analyses and understand the artifact fully. For example, specialists from other disciplines may be able to answer questions concerning the artifact's structure or composition that few historians could answer. (S.M Pearce; 1994; p.119)

However, museum communication and its interaction with the visitor need to developing a strategy for working with local public through joint efforts of sociologists and psychologists, revealing the target audience within population, and increasing the museum attractiveness for visitors. Until recently, museology has hardly ever paid any attention to the experience accumulated by such disciplines as sociology, psycholinguistics, and psychology. It has become obvious today that the interdisciplinary approach towards studying the museum audience would open new perspectives for creating more explicit and available exhibitions and ameliorating working methods of all kinds of museum institutions. (I. Chuvilova& O. Shelegina; 2014; p.59)

The close connection of museology to many other scientific disciplines leads to its interdisciplinary cooperation and integration with other sciences ... The increasing integration of various fields of knowledge means that the field of activity of one science includes the connection and reciprocal effects of other different fields of knowledge. Thus museology, too, as an independent scientific discipline with a specific subject of study possesses multidisciplinary components (L.Jahn;1982;p.26) so the Interdisciplinarity must be a method for research and action in museology, and therefore the work method of museums.

### **Summary**

Museum is traditionally linked to humanities sciences such as archaeology, history, ethnology and also natural sciences such as chemistry, physics, biology, geology, and materials science, no doubt the museum will benefit from a more inclusive attitude towards interdisciplinarity.

so, the new museum concept should aspire to open up theoretical perspectives in which the tension between material and time could eventually be overcome. to create a spiritual and contemplative atmosphere. It should always leave open space for searching, for attempts, for new concepts.

But it must not sever its ties with tradition, and make the gradual transformation from representative museums to those which represent human beings, time, the context of human life and knowledge.

There exist many as yet unsolved scientific problems in the theory and practice of museology, thesaurization, and presentation, that can only be solved by interdisciplinary work. Especially that museology allows the integration and interpretation of human activities. whose social, human and natural sciences touch aspects of special museology.

Interdisciplinarity contain of the multitude of knowledge required in museum to synthetize and harmoniously integrate the elements forming part of the exact sciences with those issuing from the humanities, thus forming a representative sample of all human knowledge that can be displayed and narrated in integrated interactive stories in museum. Thus museology can be smoothly integrated into interdisciplinary sciences.

## **Conclusion**

Museology creates new theoretical, interdisciplinary approaches and ideas in analyzing the museum as a cultural institution.

"The diverse tasks and various areas of collecting make museology largely interdisciplinary in character. Therefore museology necessarily has to cooperate with other branches of science focusing on their common object of study "the museum and its activities"

interdisciplinarity underpins the museological field, supporting its status as a scientific field among the social sciences and allows a constant interaction between research and museological practice.

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