University museum as a multifunction platform | A preliminary proposal of initiator-activity-function theory

Jeng-Horng Chen

Abstract
In addition to the traditional roles and functions of a museum, some university museums gradually develop a new way of operation, namely as a multi-function platform, to satisfy increasing expectations by offering various kinds of related services to connect the university and the community. Based on recent observation, a simple model about the relationships among exhibition, collection, and platform is proposed in this paper. The model consists of an “Initiator”, a “Main Activity”, and an “Extra Function” with at least four modes describing the order and roles of them. Examples from National Cheng Kung University (NCKU) Museum and other university museums are described.
Introduction

Background and Literature Review

The first and also the most important purpose of a university museum and its collection is to provide a nurturing environment for research to university members, and even to the public (COLEMAN 1942, 5). A university museum is usually a place to collect university history, materials, and artifacts (HEINÄMIES 2008, 33). It also frames its collection and exhibition policies according to the university curriculum (KING & MARSTINE 2006, 266–291). But its management and finance usually depends on the professors, students, boards, alumni, and the public (DYSON 1990, 68).

At the turn of this century, it has been observed that the opportunity for university museums to re-define their roles within higher education institutes has been coming with the transformation of higher education in this century (WALLACE 2003, 5).

New museology has been challenging traditional museums since the last quarter of the previous century. It emphasizes new services responding to the society’s expectations (VERGO 1989). A new challenge for university museums is to reach out to the society and connect with the local community, then improve from the experience of promotional programs and related activities. In particular, university museums need to work on the communication and cooperation with communities, in order to attract those who don’t visit museums. Thus, new promotional activity, marketing plans for certain targets, and new training for the front-of-house staff are all needed (PICKERING 2009).

On the other hand, university museums also face challenges within the campus. In the era of fast information technology, the values of collections and their utilities are doubted and questioned by some people. Others consider the values in teaching and research are the keys to their preservation (SOUBIRAN 2009). However, using museums as important teaching aids or “tools” is not rare (GARRADAS 2010). The problem may be how to properly use, transform, and translate the exhibition and collections. One of the important tasks is to assist inter-disciplinary learning. This idea is also shared by the Museum of National University of Singapore. They explored how to extend exhibitions to multiply learning (LIM 2010). Therefore, the education function of a university museum is not questioned anymore. Nevertheless, it is well noticed (CHATTERJEE 2010), especially in object-based learning (OBL) activities (DUHS 2010) that have been promoted over the last two decades.

Society needs leaders with a deep and broad understanding of humanity, far sighted perspectives and cross-disciplinary integration and communication capabilities in many fields for facing the new challenges. Hence, the education system and related institutes need more foresighted actions. How do we cultivate this sort of future leader within its cultural environment? This is a big challenge for cultural and education policies.

Practical Problems of University Museums

There are at least three kinds of practical problems for a university museum in this rapidly evolving higher education environment. Firstly, for museums in a developing country or a place without a long history, it may not be easy to have a special collection as the first thing of its kind in the world (FINDLEN, 1994: 130). Thus, how do we collect and research valuable artifacts, how do we position ourselves, whether being a science education center instead of a science museum, and whether we lack social science museums are all questions requiring answers (CHEN 2011). In our experience at the National Cheng Kung University (NCKU) Museum, we developed similar ideas and proposed some preliminary concepts of new functions and methods for science and technology museums, such as providing a policy forum in an exhibition as was done in “NCKU-Purdue Cooperation” Exhibition. This aspect was noticed and developed (CHEN & HUANG 2010).

Secondly, since more and more science controversies and debates occur in society, museums can play some active roles in this regard. A British case of two thousand year old bones generated controversies about the cause of death and the interpretation of such. The museum’s exhibition was passively involved in the controversy (SITCH 2009). This shows that museums’ exhibition and promotion activities can generate controversies, but may also propose appropriate solutions. It is worthy to explore and conduct experiments for further studies on proper new roles, functions and methods for a museum.

Thirdly, perhaps with the exception of the university museums of China and the USA, most university museums face a very practical problem of limited resources. This can be due to the...
limited resources of the university’s main body, or the distribution policy adopted by the university resulting in the main investment being more focused on formal education, research facilities and human resources directly, instead of the cultural environment or informal teaching.

Objectives
Based on the above observations, because university museums have dual roles as university and museum, they can be a good test site for innovation research when facing cultural challenges. That’s why the innovative operation and management modes are worthy of study. This approach was also noticed in recent education reform. For example, university museums as an informal education site could be used in the integration of science, technology and society (STS) with professional education (HONG et al., 2010). This is a good opportunity for a university museum to participate in secondary and higher education reform. Therefore, the objective of this research is to build a theory which can describe and help people to understand the relationship among various kinds of university museum roles and functions, especially as a means to inform educational practice. The contribution of this new theory and the operational models it described may possibly help universities in both formal and informal education, and also university museums to build their own multifunction platform for more and more complicated roles.

Research Methods
The research method for developing this new theory consists of three stages: the first is to observe and collect the information of existing exhibition outcomes with experimental parts. The second is to analyze these exhibitions regarding its motivation, purpose, functions, and whether the exhibition has played a role as a platform for anything. The third stage is to develop the theory by organizing the roles of various kinds of activities related to exhibition and other museums tasks.

To clarify the ideas used in describing the theory, we need to define some terminologies used in the following theory. This is a theory about the university museum as a “multifunction platform” where multifunction has many implications. Of course, it indicates that there are more roles or function than traditional exhibition, collection, education, and promotion. It can have many new functions such as entertainment, policy forum, recruiting students, wedding photo venue, etc. Moreover, it also means that these old and new functions work simultaneously. For the platform, it indicates a place where exchange takes place, and it is the medium. But I emphasize that exchanges are not only between curator/museum and visitors, but also between visitors and between visitors and other actants, where “actant” is borrowed from “Actant Network Theory” (a.k.a. Actor Network Theory, ANT) in the field of science, technology & society (STS) study (LATOUR 2005) implying an object, no matter whether it is a life form or not, can act by itself.

The proposed theory in the following section was developed after an analysis of the relationships among museum administrators, curators, visitors, outsourced workers, collections, exhibitions, sponsors, governments, universities, and scholars by ANT. That is treating these actants as independent individuals with their own willings and goals, and making analysis of their relationships through their interactions considering their interests, environments, limits, resources, and possible ways of work. Any possible ways of work is due to the existing of “obligatory passage point” (OPP) which could be one of the actants, as described in ANT. Then, some museum activities were summarized into a few special categories. The proposed theory describes the relationships among these categories, showing various ways of conceptualizing tasks and roles in a museums’ daily work.

Proposed Theory
Initiator-Activity-Function Theory
Usually, in a museum, collections are the base for other activities and hence play a role of initiator or motivation. Then, some activities are designed to use these collections. For example, exhibition is usually the major activity curated using some collection objects to achieve some goals like educating students or promoting the related academic fields. This is the most common way of a museum in daily work. However, sometimes, in addition to the original designed functions, the museum could also obtain an extra, unexpected, accidental function. So, we consider the relationships among the “Initiator” (motivation), the “main Activity” and the “extra Function” in this theory, and thus, name the theory after the first letters of these words, i.e. IAF Theory.
The first mode of the IAF Theory is the most common and traditional relationship among them: the collection as the initiator, the exhibition as the main activity, and the extra function could be the multifunction platform. The idea comes from the example of the "National Cheng Kung University-Purdue University Cooperation" exhibition in NCKU Museum when we discovered that high ranking scholars from academia like to discuss higher education policies in front of certain two exhibition boards that only contain text and a simple list. The place in front of these two boards became a temporary public policy forum. Hence, this "public policy forum" was an unexpected, extra function and we can also view it as a platform for academia to communicate with each other. This story gave us the first mode of IAF Theory, namely Mode A. We then can explore more possibilities of the combination of collections, exhibition, and platforms with initiator, activity and extra function.

Since the university museum may play as a multifunction platform, we can expect that this platform is the major activities while the collections are still the initiator. Thus, for the second mode, the exhibition is the extra function that is carried out additionally as a direct result of platform activity. Is this Mode B possible? In the next section, an example in NCKU Museum will be shown.

The third possible mode of IAF Theory is that when an exhibition is the initiator. This can be quite common when two units are willing to design a new travelling exhibition for culture exchange. So, the initiator is the exhibition in this case. The result is that the major activity designed and prior to the exhibition is to collect new objects for the museum in order to make the exhibition better. However, an unexpected result is the exhibition also plays as a platform in an unexpected aspect, as another NCKU Museum exhibition, “1 C Taiwan”, will show.

One may be curious about what this newly developed platform can do for a university museum. By moving the platform’s role from either the extra function (Mode A & C) or activity (Mode B) to the initiator, we then expect that either exhibition or promotion will be the major activities designed by this platform. In such case, the extra function shall be collection (Mode D)! Is this possible? An example from University of Tokyo is outlined. A summary of the above four modes of IAF Theory is listed in Table 1.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Initiator</th>
<th>Activity</th>
<th>Extra Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Collection</td>
<td>Exhibition</td>
<td>Platform</td>
</tr>
<tr>
<td>B</td>
<td>Collection</td>
<td>Platform</td>
<td>Exhibition</td>
</tr>
<tr>
<td>C</td>
<td>Exhibition</td>
<td>Collection</td>
<td>Platforms</td>
</tr>
<tr>
<td>D</td>
<td>Platforms</td>
<td>Exhibition / Promotion</td>
<td>Collection</td>
</tr>
</tbody>
</table>

One may be curious about whether there are more modes of IAF Theory. Logical possible combinations of these three positions leads to six modes in total. But so far, we have only identified examples in the above mentioned modes. The other two possible modes are “Platform (I) – Collection (A) – Exhibition/Promotion (F)” and “Exhibition (I) – Platform (A) – Collection (F)”, respectively. They remain to be discovered and documented in the future.

Examples in East Asia University Museums

In this section, at least one example will be given for each mode to prove outcomes of the theory. Mode A: as described in Table 1, the history of Purdue-NCKU Cooperation in the 1950’s was designed in a traditional way. So, the collections from US-Aid Projects within various departments of NCKU, such as instruments in teaching laboratories, were the Initiator to finish the exhibition (main Activity). But then, it becomes a good platform (extra Function) for discussing higher education reform. As seen in fig. 1, when Nobel laureates visited this exhibition, they discuss higher education policy with NCKU senior professors.
Mode B’s example also comes from NCKU Museum. The exhibitions of NCKU’s university history collections (a set of formal dress of the first president) is the Initiator because repair and exhibition had become an important issue. Interestingly, after the discussion and an international collaboration of repairing and exhibition, this issue also led to a new platform for education policy discussion (Activity) due to the necessity of proper interpretation of this exhibition in the context of education policy in Taiwan’s Japanese Colonial Period. What is unexpected is that this discussion in the new platform for education policy did not lead to a new exhibition nor any publication, but a special small experimental exhibition of “Customized University Ranking” (Extra Function), as seen in fig. 2, because curators thought a reflection on higher education policy in the contemporary context is more interesting and meaningful.

The example of Mode C is the large scale I C Taiwan! Exhibition held in Czech Republic by NCKU Museum and local museums from July 2015 to the end of January of 2016. It consisted of an international exhibition as the Initiator. Then it needs to acquire new collection materials (Activity) for the exhibition (some ancient Chinese locks donated by a senior professor to NCKU Museum), and then it also became a platform for international academic exchange, cultural diplomacy, and domestic outreach networking. For example, the NCKU president visited several neighboring universities for further cooperation and promotion in the trip for the opening ceremony. Taiwan’s diplomats also expanded their local connection through the preparation process and contact with opening ceremony guests. The last two functions were not expected at all at the beginning stage of curating the exhibition.

As to the Mode D, Tokyo’s newly developed INTERMEDIATHEQUE Museum² is a good example. It is a “public facility jointly operated by Japan Post Co. Ltd. and the University Museum, the University of Tokyo” and located within the JP Tower in the Marunouchi district. It was designed for “interdisciplinary experimentation venturing into cultural creation of a new kind based on the fusion of every means of expression.” (IMT 2017), hence, it is a very typical multifunction platform. So, the platform can be the Initiator as seen in this example. Its main activities then, not surprisingly at all, includes many kinds of creative performance arts (theatrical plays, for example). With an increasingly higher standard of performance created and played at IMT, University of Tokyo gradually found they should start to “collect” these works in some way, namely digitally recording the process of every kind of creation or performance, collecting key objects used in the performance, and some promotional materials such as posters (TERADA, 2017). This is the unexpected function that IMT generates, collections from creativity activity.

---

1 I C Taiwan! Exhibition won the 2nd prize of the 2017 UMAC Award.
2 See: http://www.intermediatheque.jp/
Circulatory operation

To summarize the four found modes of IAF Theory, we can view them in a circulatory operational ring as shown in fig. 3. In the order of Initiator, main Activity, and extra Function, we can draw arrows to connect them. Mode A (in black) initiated with Collection and rotates clockwise, while Mode B (in red) rotates counterclockwise. Mode C (in green) begins with Exhibition and move counterclockwise. Mode D (in blue) begins with Platform and also rotates counterclockwise.

Conclusion

It's possible to develop university museums as multifunction platforms. The Initiator-main Activity-extra Function (IAF) Theory can describe the relationships between platform and other museum activities (collection, promotion/exhibition). There are six logical possibilities of combination of roles in IAF Theory. However, there are only four modes have been identified from real museum cases so far. Real examples are given to show these possible modes. It is anticipated that further research will reveal the discovery of other modes. The perspectives on multifunction platforms are that we may need more experimentation in university museums, which may bring further theoretical development.

Acknowledgements

This research is supported by Taiwan's Ministry of Science & Technology under the project contract no.: MOST 105-2511-S-006-004-MY3.

Literature cited

DUHS, R. 2010. Learning from university museums and collections in higher education: University College London (UCL), University Museums and Collections Journal, 3: 183-186.


Contact
Jeng-Horng Chen, Director of National Cheng Kung University Museum
Address: No.1 University Rd., Tainan, 7001, TAIWAN
Email: chenjh@mail.ncku.edu.tw
http://museum.ncku.edu.tw/

Keywords
University museum - Platform - Initiator-Activity-Function Theory