



Review of Post-Occupancy Evaluation of libraries in Taiwan from the perspective of the architecture profession

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Abstract:

This article reviews the development and performance of library POEs in Taiwan from the perspective of the architecture profession. It points out some differences between general and architectural POEs and suggests a few ways to improve them in the future.

Introduction

"Library is a growing organism." said Ranganathan (1931). The growth of a library can be affected by many things, and one of them is after-use-evaluation. The work of such evaluation is called Post-Occupancy Evaluation (POE). It originated in the 1960's, when American as well as European social scientists adopted the idea and applied it to research on environmental problems, and was subsequently co-opted by architecture researchers and environmental psychologists to study buildings including libraries and their surroundings. In the past thirty years, there has been a lot of work done on library POE that has enriched our knowledge about library services and their performance. From the perspective of library architecture researchers, however, there is still room for improvement due to the differences between architectural and general POEs. This article examines these differences from the perspective of the architecture profession.

Architectural POE

POE is widely used in the field of architecture. Related research has been conducted all over the world. Evaluation is a very important research approach with strict procedures and requirements and has been in the field of social science for a long time. An architectural POE focuses on architectural environments, analyzing and evaluating them based on the performance as well as opinions and feedback from the users. Its characteristics include:

Uniqueness:

Architectural POEs are conducted on a case-by-case basis. Every building is unique with respect to surroundings, size, budgets, services, regulations, users, design, management, etc. Due to these factors, library buildings are different from one another, and so are their users' reactions or opinions about them. Therefore, it is no surprise that the results of a library POE are also unique. POEs often touch a library's characteristics or conditions that are not shared by any other. They can sometimes be used on a group of libraries of the same type, in which case the focus is on some commonalities shared by the group, such as regulations and management strategies.

Feedback:

Another characteristic of POE is feedback. From the results of a library POE, designers or managers realize the library's strengths and weaknesses in its performance and services, thereby making improvements or solving problems that are unique to the library.

Less Theoretical:

Theory is rarely the main issue of a POE because it is not easy for users to point out or give opinions about the theoretical aspects of the design of a building. Therefore, unless the theory or idea behind a particular design is extremely important, it will not be addressed in a POE.

Problem-Oriented:

An architectural library POE is intended to discover, analyze, and understand the library's current or potential problems. Its ultimate goal is to come up with solutions to the problems it discovers. In some contents, it seems like the work of Action Research.(Preiser, 1989)

Design Ideas and Service Features:

Based on post-occupancy data gathered by an architectural POE, one can find shortcomings by evaluating the ideas behind a design or the features of certain services, thereby making necessary improvements. With POEs, designers or librarians can tell whether their creativities in library design have brought about desired effects.

Lippincott's (2006) notion of intended purposes of library assessment includes the evaluation of everything that is related to the services of a library, but this notion can also mean specifically the architectural assessment of a library building. Either way, the more

specific the intended purposes are, the easier it is to assess a library. General library POEs usually put the assessments of architectural environments of a library in the minor part of the work. There is especially a lack of sufficient understanding of people's awareness of surrounding features before they set in judgment on the satisfaction with the spaces and facilities in the library.

Library POE in Taiwan

Library POE was introduced in Taiwan in the 1980's. Since then there have been 2 types of research works: academic dissertations/theses and general reports. From 1980 to 2010 there were 19 theses on library POE (Chen, 2011). Among them 7 are focused on public libraries, 2 on elementary school libraries, and 10 on university libraries. Categorized by topics, 4 of them are about facilities, and the other 15 are about space planning and design. By research subjects, 6 of them are single-case studies, and the others are multiple-case studies involving a group of libraries. By fields of study, 6 of them are master's theses in architecture; the other 13 are in library and information science. Due to differences between areas of expertise, most theses in library and information science are mainly focused on space planning of the library, and most in architecture are focused on environments and facilities.

During the same period there were a total 21 POE articles published in academic journals, conferences, and magazines. 7 of them were adapted from dissertations or theses. Among the 21 articles, 1 is about elementary school libraries, 4 are about public libraries, and the other 16 are about university libraries. Categorized by topics, 7 of the articles focus on certain spaces (e.g., librarian spaces, senior spaces, learning commons, study carrels, etc.), 4 on users' spatial behavior (e.g., way-finding, evacuation, etc.), and the other 10 on space planning within the libraries. By types of publications, 5 of those articles were published in professional magazines, 3 in academic architecture journals, and the other 13 in library science journals.

Result Analysis

POE studies have been widely applied to various types of buildings. In Taiwan, two major problems have been discovered with library POEs:

1. Architecture designers rarely make use of findings from POE studies. They often complain about the lack of quantitative data and unbiased argumentation in POE studies, which renders the results of evaluations inapplicable to the practical work of library designing.
2. Librarians and scholars often complain that architectural library POEs have focused too much on the environments and facilities but ignored the importance of management and services to the patrons. Therefore, the conclusions are not readily applicable to the practical work of library services.

These problems reflect the differences between general and architectural library POE. These differences are explained as follows:

Purposes and nature of research:

Library POEs conducted by architecture professionals often focus on applicability. They tend to emphasize how their evaluation results as feedback can help improve their practical works. POEs conducted by library scholars, on the other hand, often aim at the accumulation and transmission of library-related knowledge. They do not put as much emphasis on the characteristics of each individual case, or on the relations between user behavior and environments. Therefore, general POEs in the field of library science are usually more academic. By means of finding the user behavior and their reactions, architectural POEs intend to assess the efficiency and appropriateness of decisions and innovations in library design (Zimring, 2002). In general library POEs, the results of users' satisfactions in survey usually do not provide enough evidences to provide the goodness or incorrectness of design work which are worthy to the designer in their professional capabilities.

Importance of Criteria:

Criteria, as the ruler and the basis for evaluation as well as data analysis, are more important in architectural POEs than in general POEs. Without criteria, it would be difficult to come to objective, unbiased analysis and conclusions, which in turn would compromise the applicability of the evaluation results. Different criteria usually result in different interpretations of the evaluation data. In architectural POEs, a lot of emphasis is put on factors that affect user behavior (e.g., gender, age, users' majors, frequency of usage, etc.). These factors and user behavior are cross-analyzed so that the effects of the factors can be identified and the nature of the problems can be understood clearly.

Comparability between research results:

POE researchers in different fields of study do not usually share the same conceptions, methods, or objectives. Moreover, POEs conducted by librarians themselves are often different from those conducted by scholars and professionals. Due to the lack of tacit understanding, many POEs are hardly comparable with each other even if they are evaluations of the same library.

Types of Publications:

POE studies have been published on various types of periodicals (e.g., academic journals and professional magazines) in different fields (e.g., architecture and library science). Without compilation from various sources, the readers (including academic researchers and design professionals) have no easy access to every POE study that has been published, which may cause the studies to have a lesser impact than they should on current POE research and related practical work.

Conclusions

Having discovered the problems, the library and architecture professions in Taiwan have come to a consensus on the directions toward which they should be working to promote the value of library POE.

1. ***Evaluation of a library starts with its architectural POE:*** Because they are usually conducted right after a library is built, architectural POEs are often seen as a more direct source of feedback on the architectural aspect of a library. Meanwhile, the physical environment and management of the library are two aspects that deserve continual attention, and therefore library POEs should be viewed as building performance evaluations on a regular basis. As Bennet (2006) notes, if such an evaluation is conducted continually and systematically, it will help the library keep improving.
2. ***Participation and cooperation from both fields:*** The services of a library include the hardware (physical building and the environment) and the software (administration and management). Any library POE should not focus on one side only. Instead, POEs should be conducted by professionals from both the fields of architecture and library science. Only by doing so can the evaluation become more comprehensive and the results more applicable(Chen,2007).
3. ***More Discussion between participants:*** It has been true that many POEs only focus on certain aspects of a subject and tend to ignore others. One of the consequences is that even if there is some valuable information discovered during the evaluation, it will not be discussed unless that information is pertinent to the aspects of interest. Therefore, one way to improve POE studies is to invite researchers and experts from different fields to formal discussions or conferences so that any valuable information or findings can have the attention they deserve and be applied to future work and research on libraries.

It is obvious that the results of a library POE can provide us with valuable information on users' reactions and opinions. More importantly, those results not only tell us what is good about other libraries, which we may not be able to replicate due to our constraints, but also let us know the mistakes they have made, which we certainly can avoid.

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