The application of symbiotic architecture in the public library in Jakarta, Indonesia

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Abstract. Changes in people's habits in seeking information and knowledge have a special impact on people's behavior when visiting and using the library, this is the problem why recently library visitors have decreased this is because it is easier to access information via electronic devices easier so that it has a direct impact on the library itself. From these problems, this study will discuss how people's habits and behavior affect the needs of library space in the digital era. The method used by the author is distributing questionnaires to library visitors containing questions about new habits in the digital age, the questionnaire researchers provide options related to new library concepts, namely the application of symbiotic architectural concepts, where libraries have additional functions that are not only a place to find information and knowledge. however, it has additional functions according to the habits of society in the digital age. The results of this study answered that library visitors prefer to do assignments rather than read or look for books and hope that a special room is provided to do the assignment. On the other hand, the symbiotic architectural concept is accepted by visitors with the choice of green open space as another function in the library.

Keywords: public library, symbiotic architecture.

1. Introduction
The library is a facility that plays an important role in helping in increase interest in reading and community literacy. The existence of a public library cannot be separated from existing educational activities in Indonesia, especially in cities Jakarta. as the most populous city in Indonesia, Jakarta has a burden of problems related to education, according to the Indonesian Education Observer Network (JPPI) noted that six educational problems were in the spotlight in 2019. Most striking is the problem of Indonesia's poor literacy skills. Citing the results of the International Student Assessment Program or Program for International Student Assessment (PISA) released by the Organization for Economic Cooperation and Development (OECD), National Coordinator of JPPI Ubaid Matraji said Indonesia's literacy skills continued to decline.

PISA was released in 2019 no better than in 2015. "Since 2012 our score has been dropping steadily. 2019 was the worst the decline," said Ubaid in the 2019 Education Year End Notes Press Conference in the Menteng area, Central Jakarta, Monday, December 30, 2019 [1].
However, with the current development of technology, the pattern of obtaining information and knowledge of the community underwent drastic changes. Libraries are required to have the ability to adapt to changes that occur in their surroundings if they do not want to be lost to be swallowed up by changes [2].

The habits of visitors who turn into one of the problems that occur in the field. User-oriented is one of the cornerstones in the development of libraries in the era of information technology that causes changes in the behavior of library visitors, digitization requires libraries to improve to adjust the facilities following the characteristics of visitors.

Figure 1. UNAND Library Visitors Orientation 2018.
Source: www.pustaka.unand.ac.id.

UNAND UPT Library conducts research related to visitor orientation in the digital age (Figure 1). 100 visitors can allow to choose more than one answer, the results of the research emerged which turned out, as many as 76% of visitors came to the library to learn independently / do the work. More than those who come to choose or return books that only 68%. Under the characteristics of the digital age as many as 55% come to take advantage of free internet services and the rest no more than 25% use other services such as backup and reference collections [3].

Nevertheless, the identity and strength of the library itself return to its users. No matter how good the library's strength and identity will be strong if the function of the library as a center of information and knowledge is useful and is used to the maximum by the user.

As said in the fifth law of Ranganathan (1945), the library is a growing organism can be interpreted that a library will always grow and develop. The community needs a library so the library will continue to exist. If the library feels its existence is still needed by universities, then it's time for the library to show the "value of its existence" that the library has for its users and its supporting institutions [4].

In the problems described above, libraries must change the service system related to changes in people's behavior by knowing the behavior and habits of its users. Libraries must also be sustainable by presenting new functions adapted from the symbiotic architectural concept of Kisho Kurokawa, with the aim of generating identity and strengthening the meaning of libraries [4].

In the concept of symbiosis popularized by Kurokawa (1991), there is a division of the existence of dualism found in the concept of symbiosis (sacred Zone) and intermediate zone [5,6].

- Sacred Zone

In symbiosis, sacred zones or sacred zones It is very important to know the diversity of cultural differences of others. From the Sacred zone's description, it can be defined that the sacred zone is a characteristic or identity of a culture, or the main point of an object created.
- **Intermediate Zone**
  Symbiotic also recognizes the zone between, in symbiosis recognizing the differences in dualism or opposite spouses such as good and evil, body and soul, man and nature. But in symbiosis, let dualism or this couple live together called the zone between. But in the zone between opposing elements opposed to existing together.

2. **The methodology**
   The method used by the writer in this research is descriptive method. Then the authors collect data related to problems that occur in the library at this time, data collection is carried out by distributing questionnaires to the public about activities in the library in this digital era and responses to the architectural symbiosis concept applied in the library.
   After the results of the questionnaire are obtained, the author will develop a concept and design related to the behavior that occurs in the community when visiting the library. and developing a symbiotic architectural concept into the library.

3. **Result and discussion**
   In the process of data collection, the authors distributed questionnaire questions containing problems that occurred with journal references about the era of disruption in the library. Then 135 respondents were collected who were people who had used public libraries in Jakarta.

   ![Figure 2. Public library visitor chart. Source: Personal data.](image1)

   From the Figure 2 above, 134 respondents, almost all have visited a public library, 99% have visited a library and only 1% have never visited a library. In other words, the library is still one of the facilities visited by almost all people. Out of the 134 respondents (Figure 3), 69% answered that they were satisfied with the public library facilities in Jakarta, and 30% answered that they were not satisfied with the closest location library. From the data of respondents who are not satisfied with library facilities with reasons such as the size of the narrow space, incomplete book collections, and too monotonous interiors.

   ![Figure 3. Public library satisfaction chart. Source: Personal data.](image2)
From the answers collected, Figure 4 shows that 70% of students prefer to do assignments in the library in the second position, namely reading books as much as 16% and 14% are used as student discussion materials. The need for space to do tasks is very necessary because of high needs.

From the above questions as many as 61% of respondents think that what makes a library crowded is its facilities, following 29% believes that a collection of books makes a library crowded and as much as 10% based on the location of the library itself (Figure 5).

![Figure 5. Chart of reasons to visit the public library. Source: Personal data.](image1)

![Figure 6. Chart of public library additional facilities. Source: Personal data.](image2)
As many as 35% chose a special room to do the task as the most choices, as many as 23% chose a special discussion room, then 21% of the open garden as a relaxation facility and as many as 21% chose their special room (Figure 6).

![Figure 7. Chart additional function recommendations in the public library. Source: Personal data.](image)

Figure 7 shows that as many as 75% of respondents answered libraries with open parks are more preferred than libraries with community space as much as 16% and libraries with museums as much as 9%.

![Figure 8. Visitor’s suggestions for the library. Source: Personal data.](image)

Completeness of facilities is the highest suggestion from the respondent. Making a special room for the work needed by students is related to changes in learning patterns (Figure 8). The value of convenience must be increased and must also comply with national library standards. Open space is the input from many respondents about the need for a new atmosphere from the library. Dedicated reading rooms are not combined with collections like most public libraries. Accessibility is no less important than the points above, this factor affects the comfort level of a library.
4. Conclusion
Half of the respondents’ answers were not satisfied with the facilities provided by the library, the answers were again examined with observation data to several public libraries that did not meet the standards. It turns out that the era of digitalization affects the habits of people such as students who prefer to search for data from the internet and do assignments while in the library. Based on the results of the respondent’s research, the community, especially students, need a special room to do work and separate from the collection room, where some libraries have not implemented such a system which, if reviewed with national standards, the user room in public libraries is still too few. cause congestion at any given time. The application of green open space in the library as a presentation of the symbolic architectural concept is carried out by separating the mass of the main library building from the study room, which is then filled with green open space that can be used by visitors as a relaxing area between the two building masses. Thus, the results of the respondents and also the symbiosis concept can be applied in college libraries so that they become attractive and sustainable facilities.

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