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The interpretation of OPAC service in the Library of Universitas Airlangga

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Abstract

The application of OPAC service in the library has been going on for a long time. This service has given many advantages to users as a quick and accurate tool for information retrieval. Even so, not all people use OPAC service; in fact, previous researches reveal that the application of OPAC service is decreasing. Therefore, this study aims to find out what is the interpretation of OPAC by the users of the library of Universitas Airlangga, thus gaining a deeper analysis on the matter. The method used for this study is qualitative method, with purposive sampling as the technique to determine informants, while the techniques of data collection are done by in-depth interview and observation. The result of this study will be explained using Encoding-Decoding concept from Stuart Hall, which produces three position typologies of the users who used OPAC service in the university library. Those three positions are Dominant/hegemonic position where the users understand the meaning directly according to the purpose of OPAC service; Negotiated position reveals the position of the users who are quite understand the aim of OPAC service; and Oppositional position in which the users who strongly object the library's purpose to provide a quick and accurate information provider through OPAC service.

Keywords: OPAC service, encoding-decoding, information retrieval, OPAC, Academic Library

Paper Type: Research Paper

Background

The main activity in library is the information retrieval, in which the users can find any kind of information they need quickly and accurately. The quicker and more accurate the information retrieval is, the better it will be. The librarians have tried their best to help the users in finding information by providing Online Public Access Catalogue (OPAC) service. OPAC is used as an important tool in assisting the users to know the library resources effectively, because OPAC is the representation of all library resources (Kumar & Vohra, 2013).

Following the advanced and massive developments of information and communication technology, OPAC service arrived in the library replacing the card catalogues that were kept in the drawers. The users used to come to the library and check the card catalogues one by one to know whether the collection they need was available in the library. After OPAC service came, the users only need to check through their gadgets anytime anywhere without coming to the library. Even in libraries abroad, their OPAC service is connected and gives access to online catalogues in the libraries of other countries, thus the users are able to know the collections that are available in other libraries (Yesmin & Ahmed, 2016).

On the other hand, the librarians have tried their best to fulfill the demands of satisfaction from the users through all access to the services and facilities provided; because the characteristics of the users nowadays are different from the old ones. Nowadays, users who are used to the interaction of the advanced information and communication technology are often called as net generation, and their lives revolve around speed (Tapscott, 2009). They do not like things that consume their time, therefore, the presence of OPAC service is able to answer the demands from the users; it may help them to find any kind of information needed quickly and accurately.

The application of OPAC in the library has been going on for a long time, approximately from 1990s. It is considered as a tool to find books or references that are kept in the library. This is compatible with the result of this study which reveals that most of the respondents give positive responses to the result from OPAC search engine (Naik & Nikam, 2014). Even so, contrary facts can also be seen from the application of OPAC; it is revealed that OPAC has not yet been operated maximally in the recent years. A research done by Mawati & Nst (2013) about the utilization of OPAC revealed 66.67% library users use it, while 33.33% do not. Similar to the result, the utilization of OPAC in the libraries abroad has not yet operated maximally. The utilization of OPAC by the users is decreasing due to many factors, with many users tend to use another search engine is one of them (Danskin, 2007).

The utilization of OPAC is not yet operated maximally because not all people use it. Even though, on the other hand, it is considered as important since it helps the users to find any kind of information needed easily. Not only that, looking from the characteristics of the net generation as the library users nowadays, they should utilize OPAC to help them find information faster. Therefore, the researchers are interested to re-examine what is the importance of OPAC for the library users as a tool of information retrieval using encoding-decoding concept

from Stuart Hall (1980), thus, gaining a deeper analysis from the matter. The library users who use OPAC have different backgrounds, knowledge, and experiences, therefore they each have different reasons in using OPAC or not to find any kind of information they need. There is no research about it yet and this study is different from previous studies that tend to examine the utilization of OPAC (Ridwan, 2011; McMullen & Gray, 2012; Mawati&Nst, 2013; Emiliyana, 2014; Jauzi, 2015; Nupuradkk, 2015) or examining OPAC service only from the perceptions of the users (Puspitasari, 2009; Monisa, 2013; Respati, 2013; Puspa, 2015).

Literature Review

Stuart Hall's Encoding-Decoding

The encoding and decoding process is explained by Stuart Hall (1980) in the theory of message reception or communication process by ongoing media. Hall (1980) defines encoding as a process done by the messenger and referring to a stage of production of the surrounding social reality of the environment which is then shaped and framed in such a way using the use of the chosen language. Through the chosen language that is used in the message and delivered to the audiences, according to Hall (in Kellner, 2006: 165), it can influence or give effects in creating perceptions, emotional changes, beliefs, ideology, or even the behavior of the audiences. This shows that in order to influence the audience, make the message a meaningful one, and able to be understood as something natural or normal, the message production in this encoding process is a complex and complicated one, not a simple one.

To create a message that is compatible with the way the messenger wants, the encoding process in the message production, according to Hall (in Shaw, 2017: 597), is influenced by three aspects; (1) framework of knowledge, (2) relation of production, and (3) technical infrastructure which are owned by the social reality; then being considered and made as a message to be delivered to the audiences. The narrowness or broadness of the owned framework of knowledge has certain influences towards the message that is being produced. It is not enough to deliver the message through the intentional programs or products with only framework of knowledge. To deliver the message to the audiences, there are some parties from the messenger who choose and decide what kinds of message that will be delivered to the audiences; there is a power relation inside the stage of relation of production which can influence the encoding process. The last aspect, technical infrastructure, is also as important as the other two in the encoding process; the message which is being produced will not be delivered well to the audiences if it is not supported by an adequate and complete technical infrastructure, thus the messenger must give a proper attention to it. From those aspects, it can be concluded that media can be used as a tool of power relation.

From the previous explanation of encoding process, it clearly shows that the parties from the messenger who produce the message through the programs or products which can be consumed by the audiences have preferred meaning through the codes in the message; those meanings are what the messengers want the audiences to receive. The process of receiving codes in messages, so the message can be meaningful, is what Hall defines as decoding process. The decoding process is not a simple one, where the audiences directly receive the message that is made by the messenger. Even though the messengers have tried their best to make the message acceptable to the audiences and compatible with their intentions, nevertheless, the decoding process done by the audiences is very likely to create different meanings in the audiences. This is similar to what Hall stated (in Kellner, 2006: 166), that between the encoding and decoding process, there is an asymmetric structure of meaning. The symmetric degree in this case means an understanding and misunderstanding degree in exchanging messages, and the degree depends on the equality of relationships in exchange which is created between the messenger and the audiences. To put it simply, a meaning from the message is not located on the message, but rather created from the relationships between the message and the audiences. Looking at those kinds of encoding and decoding message, it is very likely for a bias to happen between the meaning of the message which is created by the messenger and the meaning which comes from the minds of the audiences; not only one meaning comes to mind, but many kinds and diverse meanings too, because each person from the audiences is different.

Moreover, the asymmetric relationship from the encoding-decoding process is argued by Stuart Hall (in Shaw, 2017: 597), similar to the encoding process, the decoding process is also influenced by the three aspects, such as framework of knowledge, relation of production, and technical infrastructure which are owned by the audiences in doing the decoding process. The more audiences doing the encoding process towards a particular delivered message, the more various meanings are formed. This is due to the different framework of knowledge from each person in the audiences. Each of the audiences has different social background, cultures, and experiences, thus the framework of knowledge that is formed will be different too. The same thing goes to the aspect of relation of production; due to the audiences' difference towards one another, how the intensity and frequency of the audiences in engaging with the produced messages can influence the way the audiences making meaning towards the message. It is similar to the aspect of technical infrastructure, which is also different from each of the audiences. Technical infrastructure is a tool owned by the audiences to access the produced message. Some have advanced tools, some are medium, and some are ordinary; those can influence the creation of meaning in the audiences. It is considered to be a normal thing if there is a bias in the diverse reception process by the

audiences. There are various meanings appearing in the audiences when they see or experience a particular text. This is due to the audiences being an active party in building meanings; they are not receiving the message passively.

Looking at the diverse meanings that are interpreted from the receiving process of the message, Hall (in Barker, 2004: 288) then differentiates the audiences into three positions. The classification is based on the level of habits in creating meaning in the preferred meaning of the encoding process. Those three positions of the audiences are Dominant/hegemonic position, Negotiated position, and Oppositional position. Dominant/hegemonic positions the audiences as a group that receives the preferred meaning directly, and creating meaning exactly as the way the messenger wants. In negotiated position, the audiences quite understand the message that is being delivered, thus the meaning that is interpreted in the minds of the audiences show the negotiated meaning. Oppositional position consists of audiences who strongly object the message delivered message; the meaning that is created by the audiences is contradictory with the preferred meaning. These positions might be influenced by various aspects; it can be framework of knowledge or relation of production, or perhaps by technical infrastructure that are perceived by the audiences.

OPAC (*Onlines Public Access Catalogue*)

Before OPAC (Online Public Access Catalogue) existed, the information retrieval process in the library was assisted by paper-made card catalogues sized 12.5 x 7.5 cm. The catalogues contain information about the description of a particular collection. For example, information regarding the author of the book, the title of the book, the subject of the book, the editor, the publisher, the city of publication, the size of the book, even the number of pages; the same important information is the classification number of book, where the number will show the location of where the book is being kept in the library. Therefore, the card catalogues can be called as the representatives of all collections that are available in the library because it contains every information that is needed without any exception. Those card catalogues are kept inside small drawers that are organized systematically and alphabetically. The more collections owned by a library, the more drawers are needed to keep it. Hence, it takes a particular room to keep the drawers.

As time goes by, the advanced and massive development of information and communication technology also influences the library. Also known as “library automation”, technology started to get involved in the processing up to the collection service that was done manually. This includes the information retrieval process that used to be assisted by card and is later replaced by OPAC; there are many libraries that still keep the card catalogues, even though it is not used anymore. According to the opinion of Feather & Sturges (2003), OPAC is a bibliography database that describes the collections of a particular library, giving online access to the collections of the library through computer units. These computer units are connected with the online catalogues. The information inside OPAC and the card catalogues are similar; revolving around the description of the collections; what makes it different is that inside the card catalogues, there is no information whether the collection is borrowed or available; meanwhile, inside OPAC, the information is complete with the date the collection is borrowed and the return date. This can make the information retrieval process faster and more accurate, and also decreasing the disappointed feeling in the minds of the users.

The library from Universitas Airlangga (UNAIR) provides OPAC service in computer units which are located in some rooms in the library to help the users in finding any kind of information needed quickly and accurately. The OPAC service of UNAIR library nowadays is more developed; it can be accessed and utilized outside the library, using the personal computer or even mobile phones, making it easier for the users. Library of UNAIR hopes that the users have already accessed OPAC service before going to the library; and when they come to the library, they already know the information about the location of a particular collection, enabling them to go directly to their destination. To let the users know about OPAC service, UNAIR library schedule the socialization about the facilities and services of the library at the beginning of the semester. The information which is being delivered is complete with the information about the website of OPAC service of UNAIR library, at <http://otomasi.lib.unair.ac.id/>

Method

This study uses qualitative method. According to Sugiyono (2005), qualitative method is used to understand meanings behind the appeared data. Social phenomena often cannot be understood based on what people say and do. Every speech and action that people say and do often contain a certain meaning. Therefore, the researchers choose this method to show the importance of OPAC service as a tool of information retrieval. The social setting of this study is in the library of Universitas Airlangga (UNAIR).

Purposive sampling was done in order to determine the informants. The technique of determining informants was done purposively because they were tailored to the objectives, with an appropriate consideration to the research topic. The researchers chose the informants as the analysis unit based on the needs and considered as representatives towards the topic being analyzed (Satori and Aan, 2010). In determining the informants, the

researchers gave requirements such as (1) the informants are active users of UNAIR library and (2) the informants have accessed OPAC in UNAIR library. From those requirements, 3 informants were chosen for this study.

The techniques of data collection consist of two; primary data and secondary data. Primary data was collected through an observation on the behavior of the object that was being analyzed and an in-depth interview with the informants, thus the information gathered could be diverse. Secondary data was collected by the literature review through the books, articles, and previous studies which also talked about the utilization of OPAC in the library. Meanwhile, for the technique of data analysis, this study uses reception analysis; how the audiences create meaning towards a particular text. In this study, the reception analysis used encoding-decoding method from Stuart Hall

Findings

The library of Universitas Airlangga provides OPAC by designing a thorough and significant improvement for the service; the service used to be in the form of card catalogue only, but now it is upgraded into a simple model of OPAC search engine. Currently, the OPAC service is able to be accessed from outside the library anywhere anytime, for the service is also available on mobile devices. There is no other purpose from UNAIR library in upgrading their OPAC service but to assist the users with a quick and accurate information provider service. UNAIR library expects the users to come to the library without having to feel confused about the location of a collection, at which floor, and which room it is on; the users may go directly to their destined location.

However, it can be seen from the result of this study that the OPAC in UNAIR has not yet been operated maximally, some users are ignorant to the OPAC that is provided by the library. This is caused by the miscommunication between the users and the library regarding the purpose of OPAC: providing the users with a fast and accurate source of information. Some users have their own perception of the OPAC system, therefore, not all users make use of the service in the same way. Based on the encoding-decoding concept of Stuart Hall (1980), library users, as the decoder, do decoding on OPAC service based on three aspects; (1) framework of knowledge, (2) relation of production, and (3) technical infrastructure that are understood by the users (Hall in Shaw, 2017: 597). Those three aspects results in the users' different interpretations towards OPAC, for the three aspects that the users understood are quite different to each other.

Framework of Knowledge

The first aspect that affects a person's interpretation of meaning is the framework of knowledge. The knowledge framework that users know about OPAC service is UNAIR library, more or less, may affect their perception of OPAC usage. A broad knowledge of the service has a striking impact of the users' interpretation compared to the impact of a only a slight information. UNAIR library users has different knowledge regarding the matter; some understood OPAC well, but on the contrary, some have only heard about the name.

Online Public Access Catalogue or OPAC is not yet common to library users, there are still users who are unfamiliar to the word:

"Oh so it's called as OPAC, my friends and I usually call it as library computer as in, go check the computer first, check whether the book is there or not." (informant RK)

When the word OPAC is mentioned, the users did not recognize it. On the contrary, when the service is referred as library computers search engine, the users understood it right away. Some users are also familiar to OPAC, some even knows the service well.

"Of course I know it, online public access catalogue is the computer we use to find library collection accurately in no time, right?" (Informant IC)

Information about OPAC in UNAIR library is annually scheduled to be socialized by the beginning of the first semester. UNAIR library OPAC service is able to be accessed anywhere anytime. Even though the library has already been closed for the day, the OPAC service can still be accessed and used. However, this information has not yet been known by the users, and thus, they access OPAC only when they are in the library. To the users' knowledge, OPAC can only be accessed using the library computers. This is the reason why users tend to wait in line to use the library computers every day. As for the few users who knew about the accessibility of the service, they are able to access UNAIR library OPAC anywhere anytime without having to be present at the library.

Each user has his or her own experience when trying to use OPAC to find the collection he or she intended to find. For instance, based on the experience told by Informant IC, he never had any bad experience when trying to access OPAC; even though some of the collections are currently being borrowed and he had to wait for a while to be able to borrow it, the collections he was looking for can always be found directly by the OPAC system. This experience differs greatly with the one experience by Informant HN. There was a mismatch between the OPAC system and the collection that was put up on the shelf:

“There are some mismatch that I found when using the OPAC system. The OPAC listed that the book is there, I even took note of the book number and which shelf it was on. But when I got to the shelf, the book was not there. I tried to look at the books one by one, and it turned out that the one I was looking for was on the shelf beside it. I was quite disappointed because it took me a while to find it.” (Informant HN)

The users' experiences with OPAC also result in different interpretation on it and even affects their behavior on using the system service. Informant RK is another library user who experienced hard time when using OPAC:

“There was this assignment that needed references from some library books. I came to the library right away to find it, and first thing first I used the library computer right away. It said that the book was on the shelf, and that it was available. When I got to the shelf it turned out that the book was currently borrowed. Ever since that time I hardly ever used OPAC again. I prefer asking my friends to tell me which shelves have the books I need.” (Informant RK)

The framework of knowledge which contains experience surely affects the users interpretation of the system and service, for it differs in one user to another.

Relation of Production

The second aspect that plays a pivotal role in shaping the users interpretation is the relation of production. This aspect is based on the relation between the users and UNAIR library OPAC, the intensity and frequency of OPAC usage as the device to assist them to find information regarding book collection. Each user has different intensity and frequency in making use of OPAC service, some depends on it greatly, and some do not, some are even ignorant to it. The users have full control in determining whether they want to use OPAC or not, it depends solely on the users.

Users admit that every time they want to look for a collection, they tend to browse it on OPAC to find out in which shelf the book is on, and whether the book is available or not. The users that are familiar to OPAC and know that it can be accessed anywhere browse the collection in advance before coming to the library. This enables them to be informed on the whereabouts of the books prior to looking it up on the shelf, and make the information flows easier. On the other hand, users who perceive that OPAC can be accessed from the library computers tend to discourage themselves when they find out that the computers are all used. The users claimed that there are no other devices that are able to give them access to UNAIR library OPAC which they need despite of the slight mismatch in the catalogue. This does not affect the users that experienced hard times when they tried to access the OPAC, for they already perceive that OPAC is not a tool that can provide them with the most accurate information.

Technical Infrastructure

The third aspect that affects the means of OPAC is technical infrastructure. Compared to the library technical infrastructure in the old days, library and its users in the current era can not be separated from technology. The OPAC system also affects the good infrastructure of a library. However, users feel that UNAIR library really need to add up the number of its computer. Even with the computers that are available in the library, users still have to line up before they are able to access OPAC. Adding up to that, the alphabets on the keyboards are also starting to fade away; this slow down the process of typing the keywords on the OPAC search bar. On the contrary, taking from prior observations, there are users who do not mind about the small number of computers that are put up on the library, because this users have the knowledge that OPAC can be accessed from personal devices and computers, including mobile phone and laptops that at least use android as its operating system. The flow of information is easier and faster, because mobile devices can be brought everywhere.

Library users nowadays are used to technology, this is as opposed to library users back then who need to be assisted even when they were trying to use the computer. Library users now should not have encountered any obstacles in accessing OPAC. Their technical ability in operating a computer should not be doubted. What becomes a problem in accessing OPAC is not their ability, but from the OPAC service itself in which the server sometimes comes down, causing the service to be unavailable for a temporary time and the users had to wait until the server is back to normal before they can use it again.

Discussions

The difference on the framework of knowledge, relation of production, and technical infrastructure of the users that has been analyzed on the prior n has provided many means and interpretation of the UNAIR library OPAC service. The meanings that have been shaped by the users based on their interpretation of meanings grouped by Hall (in Barker, 2004: 288) into three positions. This grouping is based on the users' preferred meaning in the encoding process of the OPAC service. The library provides OPAC for the purpose providing the users with an assisting tool in finding information about the library. However, the purpose is not always directly understood by the users. The positions are; (1) Dominant/Hegemonic position, (2) Negotiated Position, and (3) Oppositional position.

Dominant/Hegemonic position is the position where users are able to understand the real meaning and purpose (preferred meaning) directly, and interpret it as how it is encoded. The users interpret the OPAC of UNAIR library as the tool to find information in a quick and accurate way. They have a broad knowledge about UNAIR library OPAC service. Not only that, the users admit that, when they come to the library, they often recognize where the collection is located and are able to find to book they want directly. Mobile phones are also used by the users as a device to access OPAC. Some also bring their mobile phones to the collection room; when they need to find a book, they can look at the screen on their hands directly.

In negotiated position, users quite understand the purpose of OPAC service that is aimed by UNAIR library, and the meaning created from their understanding do not fully meet the preferred meaning. This shows how the message that is received by the users are still negotiated. The users perceive OPAC service as a tool to access information that is not too quick and accurate, filled with mismatch, and slower the flow of information. Not only that, users also gave opinion that the OPAC computers in the library are limited, and they have to queue up first before using it. According to the users, the computers are also quite old and therefore need to be replaced with a new one; the alphabets are already fading off, and this slows down the process of browsing. The users in this negotiated position do not have broad knowledge of OPAC; they are unfamiliar to the knowledge that OPAC can be accessed on any other devices aside from library computers.

Oppositional position is the position in which users reject the purpose of the library in providing OPAC service. The meaning interpreted by these users does not meet the preferred meaning of UNAIR library. It is perceived by the users that UNAIR library OPAC service only gives hard times for them when they were trying to browse for a collection that they greatly need. The users are unable to find the collection on the referred shelf, contrary to the information provided by the OPAC that the collection is available. Starting from that point, the users seldomly and no longer use UNAIR library OPAC service anymore. To find the collection they need, the users trust their friends more compared to the machine, because they perceive that their friends are quicker and more accurate compared to OPAC.

The following table lists the typology and grouping of UNAIR library users position in interpreting the meaning of OPAC service based on three aspects; (1) framework of knowledge, (2) relation of production, and (3) technical infrastructure:

Table 1. User's Position

Aspect		Users' Position		
		<i>Dominant/hegemonic position</i>	<i>Negotiated position</i>	<i>Oppositional position</i>
Framework knowledge	of	<ul style="list-style-type: none"> - Have broad knowledge on OPAC - Perceive OPAC as a tool to find information in a quick and accurate way - Have a good experience with OPAC 	<ul style="list-style-type: none"> - Have average knowledge on OPAC - Perceive that OPAC does not always assist users in a quick and accurate way - Tend to have hard times in using OPAC 	<ul style="list-style-type: none"> - Have little to no knowledge on OPAC - Perceive OPAC as an unhelpful tool - Have a bad experience with OPAC
Relation production	of	<ul style="list-style-type: none"> - Have a strong relation with OPAC - Always use OPAC before looking up for a collection - Access OPAC from outside the library - Know the place of a collection before coming to the library 	<ul style="list-style-type: none"> - Have a weak relation with OPAC - Sometimes use OPAC to find their needed collection - Access OPAC only in library - Know the place of a collection when in the library 	<ul style="list-style-type: none"> - Do not have any relation with OPAC - Seldom and hardly ever use OPAC - Know the place of a collection from friends' reference

Technical infrastructure	- Do not only use library computers but also mobile devices	- Only use library computers	- Use friends help in finding information about the library
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CONCLUSION

UNAIR library service provides OPAC for its users to assist them in finding information quickly and accurately. The library encodes OPAC service with messages that are delivered through informations about collection descriptions and their availability. The search bar is not only focused on the “title” or the “author” but also on “subject” keywords that assists the users to find the information quicker. This way, users do not only receive information on “title” and “author”, but also the “subject” of collection. However, not all users are able to interpret the message of the OPAC service that is affected by three decoding aspects; (1) framework of knowledge, (2) relation of procution, and (3) technical infrastructure. This causes many interpretation of meaning on UNAIR library OPAC service.

The various interpretation on the subject by library users are grouped into three positions; (1) Dominant/hegemonic position in which the users are able to interpret the preferred meaning directly as how it is coded—perceiving OPAC service as the tool to provide information in a quick and accurate way. (2) Negotiated position which consider the users to be able to quite understand the purpose of OPAC service—perceiving that OPAC are not always able to provide information quickly and accurately. The last one is (3) Oppositional position in which the users rejects UNAIR library OPAC service as a quick and accurate tool for information retrieval.

Based on the result of this study, it can be found that from the users interpretation on OPAC service through encoding-decoding process, Universitas Airlangga library needs to review the OPAC service it provides once more. This should be done in order to fulfil the users satisfaction. What is served by the system should be in accordance to what is available on the shelf because it plays a crucial role in the flow of information. Therefore, the library should pay attention on that aspect so that there will not be any mismatch that may cause the users to be disappointed and discouraged on the library OPAC. The library should also re-inform that OPAC can be accessed from outside the library, this suggestion is based on the fact that many users are unfamiliar to this information. Adding up to that, the technical infrastructure of UNAIR library OPAC is considered to be inadequate, and the library should add several units of computer as well as replacing the old computers with new ones. For further research, the interpretation of library OPAC service by its users compared to other modern search engines should be thoroughly developed and studied.

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