

User participation in the categorisation of the State Library of Queensland digital image collections: characteristics, motivations and experiences

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Abstract

In 2010, the State Library of Queensland (SLQ) donated their out-of-copyright Queensland images to Wikimedia Commons. One direct effect of publishing the collections at Wikimedia Commons is the ability of general audiences to participate and help the library in processing the images in the collection. This paper will discuss a project that explored user participation in the categorisation of the State Library of Queensland digital image collections. The outcomes of this project can be used to gain a better understanding of user participation that lead to improving access to library digital collections. Two techniques for data collection were used: documents analysis and interview. Document analysis was performed on the Wikimedia Commons monthly reports. Meanwhile, interview was used as the main data collection technique in this research.

The data collected from document analysis was used to help the researchers to devise appropriate questions for interviews. The interviews were undertaken with participants who were divided into two groups: SLQ staff members and Wikimedians (users who participate in Wikimedia). The two sets of data collected from participants were analysed independently and compared. This method was useful for the researchers to understand the differences between the experiences of categorisation from both the librarians' and the users' perspectives. This paper will provide a discussion on the preliminary findings that have emerged from each group participant. This research provides preliminary information about the extent of user participation in the categorisation of SLQ collections in Wikimedia Commons that can be used by SLQ and other interested libraries in describing their digital content by their categorisations to improve user access to the collection in the future.

Keywords: *Participatory Library, User Participation, Collection Categorisation, User Experience, Folksonomy, Information Organisation*

1. Introduction

The State Library of Queensland (SLQ) is a large public library provided to the people of the State of Queensland, Australia, by the State Government. It contains a significant portion of Queensland's documentary heritage, major reference and research collections. In December 2010, SLQ shared around 50,000 copyright-free Queensland digitised images from its collection with Wikimedia Commons (State Library of Queensland 2010). This decision is an important part of ensuring that the State Library's collections are both easy to find and easy to use.

Currently, SLQ does not know the characteristics and motivations of those users who have added categories to its digital image collection on their Wikimedia Commons page. SLQ identified that a preliminary study to understand these users would be very valuable to the organisation and could help SLQ to improve both user participation and access to its collection and possibly inform future digitisation projects. The research outlined in this paper will help to fill this gap by performing a preliminary study on the characteristics and motivations of these participating users. The objective of this project is to examine the users' experiences emphasising users' characteristics, motivations and personal experiences in the categorisation of the SLQ digital image collections. By better understanding its users, the SLQ will have information that may be used to improve user participation in categorising its collection in Wikimedia Common. The results of this project may be used by SLQ and other interested libraries to improve access to library digital images collection.

2. Literature review

Necessary background information and latest knowledge about user participation in the library and information field were obtained from a review of the available published works in relevant discipline areas. This information provides a foundation, assumptions and other information upon which a more nuanced understanding of this topic can be further developed (Sowers, et al. 2001). A study of the literature also provides the basis for developing a framework of questions for interview purposes (Rapley 2004). Topics of the materials for this review include, but are not limited to, users' motivations, users' characterisations and their experiences in participating in the public collaboration activities.

This literature review outlines the changing roles of users in participatory web and user-created content. Discussion about participatory web contextualises the research topic and furthers the discussion about Wiki projects. The participatory web section discusses how libraries have harnessed the participatory web. The discussion then moves to the traditional cataloguing methods and the transition to participatory cataloguing. The drawbacks and benefits of folksonomy as the result of collaborative tagging are explained. Finally, user motivations in Wikipedia are discussed. This theoretical framework is used as a foundation to gain a better understanding of the topic and help the researchers formulate questions for interview purposes.

Participatory web

Advances in technologies have permitted users to participate in creating and managing content on the web. The concept of "participative web" is based on web services that enable users to be more active by creating, contributing, engaging in social interaction, collaborating content and expressing themselves through "user-created content" (O'Reilly 2005; OECD 2007, 9; Parameswaran and Whinston 2007). This has led to a proliferation of wikis, blogs and other forms of participative web.

User-created content services allow users to have their own space on the web and encourage transparency and democracy (Arazy et al. 2009; Kaplan and Haenlein 2010; OECD 2007; Thurman

2008). It empowers users to have “significant autonomy and freedom” to stand up and sound their voices without permission approval process (Arazy et al. 2009, 63). Collaborative projects such as wikis and blogs encourage “grassroots” or “citizen journalism” by providing space to express users’ views and “to publish and promote independent news-related content.” (Thurman 2008, 1).

Wiki projects

The Wikipedia Foundation, through its Wiki projects, has encouraged users to collaborate and participate in creating and editing content on the web. Wiki projects are not restricted only to the well-known Wikipedia encyclopaedia (e.g. Wiktionary, Wikinews, Wikimedia Commons). Wiki projects encourage collaborative authoring on the web by providing a space for content created by the people and for the people.

With minimum control of user-created content that is, when anyone can contribute to a website’s content, concerns arise about the reliability and accuracy of information (OECD 2007, 12). Although these concerns are valid, participatory web allows the community itself to monitor and improve the quality and reliability of the content. Participatory web arising from community-based monitoring leads to a trustworthy collaboration of writers, editors and readers, essentially tapping the collective wisdom. According to OECD (2007), “transparency” and “watchdog” functions may be enhanced by decentralised approaches to content creation” (12). Parameswaran and Whinston (2007) argue that even though Wikipedia quality control is obtained from user feedback, “the content generated tends to be sufficient, in accuracy and comprehensiveness, for most practical purposes” (770) and with “the higher degree of participation from increased visibility, may indeed have led to improved quality, owing to faster corrections of errors and omissions and more comprehensive views” (774).

Libraries and participatory web sites

The implementation of participatory websites in many companies and organisations has inspired libraries to do the similar thing. The use of participatory web in the library setting brings more opportunity for the library to reach out its users (Sodt and Summey 2009). Participatory webs offer libraries “the opportunity and the potential for enhancing access to collections and services through collaboration and participation with clients.” (Partridge and Thrope 2008, 362). Participatory websites enable easier communication for libraries and librarians to collaborate, not only for their internal purposes but also with their users. One example of the implementation of participatory web in the libraries is ‘participatory catalogue’.

Participatory catalogue

‘Traditional’ cataloguing process is normally undertaken by trained information professionals using strict-structured library standards and controlled vocabulary for subject headings. Casey (2007) argues that “this strictly structured catalogue did not offer spell checking for search queries; did not offer natural language searching; did not offer quality relevancy sorting; and unidirectional—users had no way of supplementing keywords, adding reviews, etc.” (17). As such, the participatory catalogue has emerged from the demands by users and libraries’ desire to keep up with current trends in technology and meet users’ expectations.

Participatory libraries empower library users by giving them an opportunity to participate in creating and maintaining library collections. For example, allowing library users to personalise the library catalogue by tagging or assigning their own keywords to describe a library collection (Casey and Savastinuk 2007). Participatory catalogues encourage library users to become more active by providing them personal spaces to express and share their opinions in maintaining library collections. Participatory catalogues also allow users to apply their own keywords to describe the library

collections which supplement of the available subject headings, potentially improving access to the library's collections.

Collaborative tagging

One feature of a participatory catalogue is 'tagging', which allows users to assign keywords, category names or metadata to content or a resource, indirectly classifying the resource (Guy and Tonkin 2006). King (2009) defines tagging as "a way to categorise the Web in personally meaningful ways, and tags are both browsable and searchable." (34). Participatory webs permit users to create tags and categories for resources based on their own needs. Users are able to independently create terms they deem appropriate for their needs regardless of whether the terms are accurate or relevant to others' needs. Tagging is not about accuracy, authority, and not about right or wrong, but about remembering and sense making based on users' needs (Golder and Huberman 2005; Kroski 2007).

Furner, et al. (as cited in Furner 2007, 2) define the characteristics of collaborative tagging as: user-oriented, empowering, democratic, cheap, collaborative, distributed, dynamic, and instructive. Collaborative tagging has become the evolutionary way to organise information on the Web. Kroski (2007) states that participatory web "leverages on the user experiences and wisdom of crowds, the hive mind, in organising and categorising the Internet." (91). Similarly, Quintarelli and Shirky (as cited in Macgregor and McCulloch 2006, 294) argue that "the emergence of 'collaborative tagging' is therefore considered by some as a useful way in which to supersede the subject indexing role of the information professional and to facilitate resource discovery and knowledge organisation over the Web". Moreover, Shirky (as cited in Kroski 2007, 98) makes this more explicit: in the web with "the absence of a professionally designed taxonomy, folksonomies are being viewed as a readily available, 'better than nothing', stand in." Folksonomies make information on the web more browsable and searchable.

Folksonomy vs. Taxonomy

Uncontrolled vocabulary as the result of collaborative tagging is known as folksonomy. Kroski (2007) defines folksonomy as "a non-hierarchical ontology that is created as a natural result of user-added metadata or tagging." (94). In contrast to taxonomy (controlled vocabulary) which has strict rules and consensus, folksonomy permits users to classify with any term without worrying about the rules, leading to a 'bottom-up' classification system. Shirky (as cited in Macgregor and McCulloch 2006, 296) argues that "all users can participate and contribute their own personal vocabularies to generate a collaboratively built 'bottom-up' vocabulary which more accurately reflects users' conceptual model of the world around them."

Allowing users to modify the library catalogue created a "dilemma" for libraries because the library catalogue used to be created by information professionals using strict standards. Folksonomy on the other hand is about "as far from the mentality of the cataloguing rules as you can possibly get." (Coyle 2007, 290). However, Shirky (as cited in Kroski 2007, 98) argues that "folksonomies are a 'forced move', they are coming whether we like it or not." Though there are concerns about vocabulary control, folksonomy is "user-oriented, and accommodates multiple viewpoints of a knowledge resource much better than does a single indexer, however professional." (Hider and Harvey 2008, 307). A recent quantitative study by Cattuto et al. (2007), show that collaborative tagging was accurate enough for users' purpose in categorising and organising information. Despite the disadvantages, folksonomy can supplement, even may improve, certain aspects of information organisation (Hammond et al. 2005). Librarians might as well adapt to it and take the advantages of both folksonomy and traditional information organisation systems and use it simultaneously to increase access to library collections.

User motivations in Wikipedia

Several studies on social tagging showed that generally users could be grouped into those who focused on tagging for individual purposes, and those who viewed tagging as a way to share or communicate meaning to others (Bentley and Labelle 2008; Golder and Huberman 2006; Macgregor and McCulloch 2006; Prasarnphanich and Wagner 2008; Sen et al. 2006). A study by OECD (2007) finds that the motivating factors in user-created content include “connecting with peers, self-expression, and achieving a certain level of fame, notoriety or prestige” (10). Wikipedia has a unique aspect of users’ involvement as it is a voluntary work. Some literature found that the motivation of wikipedians is individual interest (Rafaelli and Ariel 2008; Schroer and Hertel 2009).

Using Wikipedia as an exemplary system, another study by Prasarnphanich and Wagner (2008) finds that predominantly personal interests include achieving personally-valued goals, enhancing own learning and insights, recognition, and feeling of self-satisfaction or self-worth. While, predominantly collaborative interests include reciprocity, future growth of the community, and altruism or pro-social tendencies. The study also found mixed motives where: “many Wikipedians derived enjoyment (personal) from helping others (collaborative)” (127- 128). Though the study used Wikipedia as an example, the researchers believed that “the success pattern evident in the study of Wikipedia can be generalised to other Wiki projects which embed the design principles that stimulate the same social norms or principles (i.e., ‘wiki way’)” (Prasarnphanich and Wagner 2008, 130).

3. The research project

3.1. The research aim

The objective of this project is to examine the users’ experiences emphasising users’ characteristics, motivations and personal experiences in the categorisation of the SLQ digital image collections. By better understanding of its users, the SLQ will have information that may be used to improve user participation in categorising its collection in Wikimedia Commons. That knowledge may be used by SLQ to improve access to SLQ’s digital images collection and the State Library’s catalogue. This project will provide preliminary information that can be used by SLQ and other interested libraries in describing their digital content by their categorisation to improve user access to the collection. This will be achieved by considering the following research question:

How do users experience categorisation of the SLQ digital image collection and what is their motivation to participate?

3.2. Research approach

The data collection and analysis that were performed include Wikimedia Commons document analysis and interviews which will be discussed in detail in the next sections. The Wikimedia Commons document analysis were used to help the researchers gain a better understanding in this topic that would be used in formulating interview questions.

3.2.1. Wikimedia Commons documents analysis

As part of the SLQ image donation’s agreement, Wikimedia Australia provides a monthly report regarding the use of images. Document analysis was performed on the pages and images in Wikimedia Commons that relate to the SLQ collections, especially categorisation and user activities. Document analysis aimed to gather retrospective data as a starting point to help researchers decide what new data needs to be collected (Caulley 1983). For this research, three available reports (January, February and March 2011) on the SLQ Wikimedia Commons

website (http://commons.wikimedia.org/wiki/Commons:State_Library_of_Queensland/Reports) were analysed.

From the document analysis, it was found that user participation in categorising the SLQ digital image collections has had an effect on the image categories. For example, in the SLQ catalogue, as can be seen in **Figure 1** below, an image titled ‘Brisbane views from Bowen Terrace looking across Kangaroo Point, 1851’ (<http://hdl.handle.net/10462/deriv/130384>) originally has five subject headings:

- town views
- rivers
- buildings, structures & establishments
- Brisbane - Views, 1851
- Brisbane (Qld.)

Meanwhile, the same image in SLQ Wikimedia Commons (http://commons.wikimedia.org/wiki/File:StateLibQld_1_110916_Brisbane_views_from_Bowen_Terrace_looking_across_Kangaroo_Point,_1851.jpg) as per 25 May 2012 has five different subject headings to the original one in the SLQ catalogue:

- Cityscapes in Queensland
- Brisbane River
- Buildings in Queensland
- 1851 in Australia
- Ferry terminals in Brisbane

The comparison shows that Wikimedians contributed different categorisations to the categorisations created by SLQ staff. The categorisations created by Wikimedians can be considered as words some people would think of, as opposed to the categorisations from a library structured vocabulary. The difference categorisations used by SLQ staff and Wikimedians to describe an image will provide more access points to the image which will make the image more accessible and easier to be found.



Figure 1 An example of SLQ Wikimedia Commons image

The researchers used the information from document analysis to analyse the Wikimedians categorisation patterns and to decide what new data needs to be collected, in order to help the researchers to devise appropriate questions for interviews. The researchers found that the document analysis method was an appropriate method as a starting point to gather information on categories and user activities.

At the time this research was conducted, there were only three reports available. This condition made the researchers could not maximise the use of document analysis results. However, Wikimedia Foundation has refined reporting process and regular reports will be available from June 2012. Using the document analysis method, user activity statistics in the reports also could be used as a tool to select the most active users for interview purposes in future research.

3.2.2. Interviews

The type of interviews used in this research was semi-structured which allows the questions to be tailored depending on the interview context or situation (Wengraf 2001). Interviews provide the researchers with the opportunity to include focused questions that can fill in gaps, clarify ambiguities, explore new inquiries and make connections among statements (Whyte 1979). The researchers formulated three main interview questions (IQs) from the data collected from literature review and document analysis:

IQ1: How do you decide which category you want to apply in an image?

IQ2: What resource tools do you use to help you in creating new terms?

IQ3: What gain do you expect in categorising SLQ digital image collections?

Interview questions were formulated carefully to answer the research question as stated in section 3.1. IQ1 and IQ2 were developed to gain information on user experiences on categorisation of the SLQ digital image collections. IQ3 was formulated to gain information on user motivation to participate in the SLQ image categorisation activity.

3.3. Data analysis

Overall interpretations of this research were provided by content analysis. Basic content analysis uses a set of procedures to make valid inferences from text (Weber 1990). Content analysis is based on the premise that words from interviews, observations and documents can be reduced or organised into categories that share the same central meaning or connotation (Connaway and Powell 2010). This method of analysis has been applied in qualitative, quantitative and mixed method studies (White and Marsh 2006). Analysis of the interview results began with transcription of recorded interviews followed by coding and/or indexing of the content of the interviews to extract major key information and themes (Rapley 2004).

After data collection was completed, the researchers performed ‘preliminary jottings’. Saldaña (2009) defined preliminary jottings as an activity to “start coding as you collect and format your data” (17). This method was used to avoid memory failure for future writing purposes. The words gained from the preliminary jottings were noted and examined after all fieldwork had been completed.

The researchers selected Descriptive Coding and In Vivo Coding methods for the first cycle coding methods because the methods are appropriate for all qualitative studies, particularly for “beginning qualitative researchers learning how to code data” (Saldaña 2009, 70, 74). This research goal is to explore users’ experiences, so Descriptive Coding and In Vivo Coding are the appropriate methods to prioritise the participants’ voices by using their actual words. It was decided not to conduct a second cycle coding method because of the small sample size. However, in a larger and more

complex research project, more advanced ways of “reorganise and reanalyse data coded from first cycle methods” will be required (Saldaña 2009, 149).

“Themeing the data... [as the] outcome of coding, categorization, and analytic reflection” was conducted after the coding finishes (Saldaña 2009, 139). Then the two sets of data were analysed independently and compared. This method was useful for the researchers to understand the differences between the experiences of categorising from both librarians’ and users’ perspectives.

4. Research participants

The researchers chose four participants (two SLQ staff members and two Wikimedians) for this project. The researchers used a convenience sample based on the SLQ and Wikipedia Australia networks. A convenience sample “involves selecting sample units that are readily accessible to the researchers” (Phua 2003, 198). For participants from the SLQ, the research team was looking for SLQ staff members who previously worked in the Picture Queensland project which included a similar image categorisation activity like the one in the current Wikimedia project.

Meanwhile, the researchers had difficulties in contacting Wikimedians. This issue fits well with a study by Prasarnphanich and Wagner (2008) that finds difficulties in contacting Wikipedians because many of them “do not disclose their real identity or their email addresses, and thus are difficult to locate.” (127). To deal with this issue, the researchers had a meeting with Wikimedia Australia and a SLQ staff member to discuss the best way to choose research participants. One Wikimedian was selected based on the most familiar name from the email notifications that a SLQ staff member received every time a user changed the SLQ Wikimedia content. Another Wikimedian was selected based on the Wikimedia Australia staff member’s networks.

5. Results

The results listed in the next sections were based on the document analysis and interview methods. The researchers used the analysis result, from first cycle coding method for qualitative analysis as discussed in the previous section, to find the main themes for each group participant. The results were based on the two sets of data collection from the SLQ staff members and Wikimedians, and are discussed in detail in the next sections.

5.1. Themes from SLQ staff members

For confidentiality reasons, the identity of each subject will be kept anonymous. As such, the researchers use initial ‘SM1’ and ‘SM2’ as pseudonyms for SLQ staff member participants.

5.1.1. Theme 1: Authoritative schemes

The SLQ staff members are required to use authoritative schemes to describe the resource content of the SLQ Wikimedia image collections in terms of applying categories for images. This topic was introduced in the interviews through questions about how they decide which categories they want to apply in images. Through this discussion, the participants mentioned that they use several schemes to categorise images including APT (Australian Pictorial Thesaurus), JOL (John Oxley Library Subject Thesaurus, developed and maintained by SLQ), LCNA (Library of Congress Name Authorities), LCSH (Library of Congress Subject Headings), GEOSH (Geographical Subject Headings) for geographical entity, and AIATSIS (Australian Institute of Aboriginal and Torres Strait Islander Studies) for indigenous place names.

When assigning categories for images, the SLQ staff members are bound by rules to use authoritative schemes. SLQ staff members have to use authoritative schemes when categorising images in their role as catalogue librarians. The participants stated that JOL and APT are the mandatory subject headings. ‘SM1’ explained that “Some images has one subject heading added and that was from in-house thesaurus kept by the John Oxley Library. The JOL subject headings for these images is kept and added to APT headings. APT is mandatory subject heading because it uses Australian terminology devised for images”. ‘SM2’ added, “The LCSH [subject] headings are used most of the time to provide broader concepts. LCNA [name] headings are used when appropriate. We also use GEOSH heading for geographic locations. For indigenous place names for images with indigenous content, we use AIATIS.”

As catalogue librarians, the participants cannot apply their own words as subject headings. If they cannot find suitable terms, they can suggest new headings to APT. However, they have to wait until APT approves these new terms before the staff members can assign it to the images. This strategy is often used to ensure Queensland terms and descriptions are part of the image description.

Theme 1: SLQ staff members use authoritative schemes to describe images.

5.1.2. Theme 2: Authoritative resource tools

The APT allows its user to participate and enlarge the thesaurus by suggesting new headings. As discussed in the previous section, since APT uses mandatory headings, staff members have to suggest new keywords to APT if they cannot find suitable headings. Though staff members have to wait until APT gives its approval before they can use the terms, this gives them an opportunity to create their own words to describe images.

The participant stated that they tried to assign the most representative categories to the SLQ digital image collections. However, sometimes they had difficulties in applying categories for historical images, because they could not find appropriate words that had been used at that time for a particular subject. In the process of creating new terms, both participants stated that they used authoritative resources to gain knowledge and find Australian terminology about a particular subject. ‘SM1’ said “I use authoritative sources, like the Macquarie dictionary which is the standard Australian dictionary. If the terms are not there, then I search elsewhere, in other thesauruses, encyclopaedias, or other specialised handbooks for example for architecture subject.” ‘SM2’ did not state that ‘SM2’ used a dictionary to help finding terms but mentioned encyclopaedias, other library catalogues and sometimes using search engine Google as resource tools.

The participants also mentioned that their experiences as librarians made this process easier. They hoped that the creation of new headings will make the SLQ images more searchable and accessible to the public.

Theme 2: SLQ staff members use authoritative sources in creating new terms.

5.1.3. Theme 3: Collaborative interests

When assigning categories in images, both participants mentioned that they always try to analyse and assign suitable keywords to images from users’ perspectives. As librarians, the participants expect the categories that they created will make the images more searchable and easier for users to find the images they are looking for. ‘SM2’ said “categorising the collection with appropriate subject headings helps to make the images more accessible to the public.” ‘SM1’ added “our whole aim is to supply categories that include a good representation of that object. We also often give descriptions in the catalogue to enrich the discoverability by adding broader terms or using the same terms to give more

access for the public to find what they are looking for.” Through this discussion, the participants stated they did not have any personal motivations in the images categorisation of the SLQ digital images collections, their motivation is collaborative interest.

Theme 3: The motivation of SLQ staff members is collaborative interest.

5.2. Themes from Wikimedians

Similarly, for confidentiality reasons, the identity of each subject will be kept anonymous. As such, the researchers use initial ‘WK1’ and ‘WK2’ as pseudonyms for the Wikimedians.

5.2.1. Theme 1: Commons categories

Wikimedians have the ‘freedom’ to use their own words in categorising images in the SLQ Wikimedia. Discussion with Wikimedians revealed that Wikimedians do not assign any ‘free’ words to the images. Wikimedians have their own ‘standards’ and ‘rules’ in image categorisation named Commons categories and can be found on Commons: Categories page (<http://commons.wikimedia.org/wiki/Commons:Categories>).

Both Wikimedians stated that they had ‘rules’ in Commons that they had to follow when categorising images. ‘WK2’ said “we have the page on Commons about how to categorise image in Wikimedia Commons. What we do is we use the most specific terms that we can.” ‘WK1’ mentioned “categorisation is probably one of the tricky things in the Wikimedia Commons categorisation systems. However, there is a page in the Commons that explains how to categorise images and we are encouraged to follow it”. The Commons: Categories page contains a quick guide on how to find the appropriate categories which by adding the categories to the file/image, and detailed explanations of how to use Commons categories.

Theme 1: Wikimedians use Commons categories to describe images.

5.2.2. Theme 2: Library catalogues, participatory webs and collaborative agreement

If there are no categories in the Commons categories that describe the concept appropriately for particular images, Wikimedians have to create new categories. Unlike the SLQ staff members who use authoritative sources to find new terms, it is revealed that Wikimedians use information from the metadata of the library catalogue, participatory webs and collaborative agreement with other Wikimedians in creating new terms. When they need to create new categories, both participants mentioned that the image metadata on the library catalogue are their first source. ‘WK1’ said “when I have to create new categories, in the first place, I look to its metadata [on the library catalogue] to see if it provides good information.”

If the metadata is lacking information, both participants do some research first on Google before doing further research for suitable categories in the other library catalogues or other participatory webs like Wikipedia. ‘WK1’ said “sometimes when the metadata is lacking information, I use Google to get a better understanding about the image. Then I often go to Trove [the National Library of Australia online catalogue] which is pretty handy for Australian heritage. However, I never use dictionaries as resource tools. Actually rather than dictionaries, Wikipedia probably becomes my main reference.”

Both Wikimedians for this project are having a wealth of experience in categorising images in Wikimedia Commons. They mentioned that their familiarity with the Commons categories helps in the categorising process and helps them decide whether the creation of new terms is needed. In

Commons categories, there is a page titled ‘Category:Media needing categories’ (http://commons.wikimedia.org/wiki/Category:Media_needing_categories). It contains images that have not yet properly been categorised. Wikimedians who have difficulty assigning suitable categories, will put the images under this category, so that other Wikimedians can add more suitable categories. Both participants also mentioned that collaborative agreement between Wikimedians have a major role in assigning appropriate categories and creating new ones. For example, if a Wikimedian creates a new category that is not based on the Commons categories ‘rules’, other Wikimedians will edit and replace it with the category that does follow the Commons categories ‘rules’.

Theme 2: Wikimedians use library catalogues, participatory webs and collaborative agreement in creating new terms.

5.2.3. Theme 3: Personal and collaborative interests

From the interview it is revealed that one participant’s motivation is for collaborative interest while another said that his motivation is for personal and collaborative interests. ‘WK2’ motivation was for the collaborative interest and participated in Wikimedia to help other people to find images easily and use it well. ‘WK2’s other motivation is to make SLQ Wikimedia a good example of user participation in library collections so that it will encourage other libraries or organisations to donate their copyright-free images to Wikimedia Commons.

Meanwhile, ‘WK1’ motivations are for personal and collaborative interests. WK1’s personal interests in image categorising are to retrieve information easily for article writing purposes in the future and to be a part of a community. ‘WK1’ collaborative interests are to help other people find the images they are looking for, to support and appreciate SLQ donations, to share and demonstrate WK1’s knowledge of the resources content to other people. From the discussion, it can be concluded that Wikimedians are motivated to participate in SLQ Wikimedia Commons for personal and collaborative interests.

Theme 3: The motivations of Wikimedians are personal and collaborative interests.

6. Discussion

The two themes discussed above were identified from interviews with two groups of participants. The findings provide the answers to the research question stated in previous section. **Table 1** below lists the themes from the two groups of participants and clearly shows that two groups of participants used different approaches in image categorisation. SLQ staff members use authoritative schemes to categorise images. On the other hand, Wikimedians have their own ‘rules’ in image categorisation. Authoritative schemes produce controlled vocabulary known as taxonomy. On the other hand, uncontrolled vocabulary as a result of collaborative tagging is named folksonomy. Folksonomy provides uncontrolled vocabulary to offer a fluidity and currency not possible in taxonomy (Kroski 2007). Taxonomy and folksonomy have both advantages and disadvantages. Despite its disadvantages, librarians can harness folksonomies which offer ‘pop-culture’ vocabularies to complement the available categories that enrich the access points to the image. SLQ staff members’ motivation is for collaborative interest, while Wikimedians are for personal and collaborative interests.

Table 1 Research finding themes comparison

Themes	SLQ staff members	Wikimedians
Schemes	Authoritative schemes	Commons categories
Resource tools	Authoritative sources	Library catalogues, participatory webs and collaborative agreement
Motivations	Collaborative interest	Personal and collaborative interests

Participatory catalogue has emerged from the demands by user and library desire to keep up with the change in users' needs. Participatory catalogue encourages library users to be more active by allowing them to apply their own categories to describe the library's collections. The combination of all the categories, whether those were assigned by SLQ staff members or Wikimedians, enriched the image categories and made the image more accessible.

In creating new term, Wikimedians did not use a dictionary as one of SLQ staff tools of choice. This finding is important for further references for SLQ staff in selecting resource tools in creating new terms purposes. In terms of motivation, it was found that Wikimedians' motivations to participate can be grouped into: personal and collaborative interests. This result confirms the findings by several studies on social tagging that grouped user motivations into individual and collaborative interests (Bentley and Labelle 2008; Furner 2007; Golder and Huberman 2006; Macgregor and McCulloch 2006; Prasarnphanich and Wagner 2008; Rafaeli and Ariel 2008; Schroer and Hertel 2009; Sen et al. 2006). Meanwhile, the SLQ staff mentioned that they do not have any personal gain in categorising image activity. However, the fact that the participants work for SLQ cannot be eliminated and might influence the participants' answers.

The finding themes were collected with document analysis and in-depth interview techniques. The researchers found that the literature review was useful for the researchers to gain necessary background information and the latest knowledge about user participation in the library and information field. The researchers also found that the interview method with two group participants worked well and was useful for the researchers to understand the differences between the experiences of categorising from both librarians' and users' perspective. The least successful part of the project was trying to analyse data using document analysis methods. The researchers did not find much data that were relevant because there were only three reports from January, February and March 2011 available at the time this research was conducted.

In summary, this research project is able to answer the research question as stated in previous section. This research was able to provide better understanding of user experience in the categorisation of the SLQ digital image collections.

7. Limitations

There are several limitations of this project that may have affected the research results:

- Small sample size

Due to time constraints, only four participants were interviewed. As such, the result from this project should be viewed as a pilot study as the result can be used to design a much larger and more complex research project.

- Interview participants' selection methods
Due to some limitations in selecting interview participants, participants in this research project were selected using convenience sample based on the SLQ and Wikipedia Australia networks. Therefore, the result of this project may have some bias that cannot be completely eliminated.
- One group participant works for SLQ
The fact that one participant group works for SLQ might have influenced participants' answers in term of their motivations in the image categorising question.
- Only three reports were analysed
At the time this research was conducted, there were only three reports available. As such, the researchers could not maximise the use of document analysis results.

With the project limitations mentioned above, the results of this project may have some bias. However, these limitations can be useful to identify areas that can be improved and find better approaches for further research.

8. Conclusion

Releasing the public library collections to the community is can be consider as a democratic process, to make its contents available for all people to use and do new things with it. It is considered to be what the library is all about, to provide society with access to information. The public have the right to know and use library collections without having to work hard to get it by a permission process. For libraries this is an opportunity to get people skilled and to harness collective intelligence in terms of how libraries can provide better access to their collections. Librarians realise that they need to look outside themselves for inspiration and solutions as library users have expectations that libraries are failing to deliver. The use of participatory web in the library gives users more opportunity to participate and collaborate in creating and maintaining library collections that can enhance access to library collections. Though folksonomy as the result of categorisation created by library users have many disadvantages, folksonomy accommodates collective minds of knowledge resources. Therefore, folksonomy can be used to complement the available categories and enrich the access points to the library digital collections.

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