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You're On the Global Frequency: Social bookmarking and users in an online community.

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January 2009

Submitted in partial fulfillment of the requirements for
the degree of MSc. in Library and Information Science

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Abstract:

The online subculture of Fandom has a history of adapting technology and tools, from mimeos and photocopiers to online tools like blog software as method of providing access to or archiving the output of the community from fanfiction to primers and other information sources. This research examined how the culture had adapted social bookmarking tools, particular Delicious, as a method of sharing information and creating information access points. The research also looked at the development of folksonomies within the culture and how this aided the community and social aspect. The research also looked at how the users become information access points and how the users develop their tags/controlled vocabularies, particularly in regards to how they facilitate the social aspects of bookmarking.

The research found that predominately, users used the social bookmarking tools for personal gain but as a side effect, this benefited the community. The research found that the use of Social Bookmarking tools like Delicious created the primary Information Access Points for the community and the resulting community based folksonomy could be applied to information in multiple situations and provide access to information at a rate that has not been previously seen in the community or culture as a whole.

Table of Contents

Introduction	pg.4
Objectives	pg.5
Background and Context	Pg.6
Literature Review	pg.14
Methodology	pg.17
Results	pg.22
Discussion	pg.35
Conclusion	pg.41
References	pg.43
Appendixes	pg.46

Acknowledgements:

My many and deepest thanks to the follows: Jennifer Meyer, my supervisor Lyn Robinson, the many wonderful members of Fandom, who vouched for me and spread the call for participants far and wide and all those who took the time to fill in the surveys and lend an ear during the writing. Also to Bex who cheerlead every step of the way, likewise my parents.

Introduction:

The subculture of Fandom has a history of adopting and adapting technology, tools and behaviour patterns, both online and off, to provide access to the information and output of the culture. (Bacon-Smith, 1992; Jones, 2006) This thesis seeks to examine how the subculture uses and co-opts folksonomies and related social bookmarking tools such as Delicious to provide access to the culture's output of fanfiction, primers and other information sources, often through new methods of sharing information; how the users become information access points and how the users develop their tags/controlled vocabularies, particularly in regards to how they facilitate the social aspects of bookmarking.

The main approach to this will be partly ethnographic as the online community of Fandom can be closed off to outsiders, but will also require both qualitative and quantitative methods of research with the main forum for information gathering being questionnaires and where possible open dialog. This will allow for both hard numbers and an explanation of the subculture's behaviour in regards to the tools and concept.

In the interests of disclosure: I have been an active participant in Fandom for over a decade, both as a consumer/information seeker and as producer of fannish output. Additionally, I have also been active as an "aca-fan" (a Fandom participant who has undertaken active academic research on the community) in the past, with previous research undertaken on the subject of how the community has adapted

or created tools that allow the community to take advantage of online systems to archive their fanish output.

Objectives:

1. To examine the usage of controlled vocabularies/folksonomies and social bookmarking tools such as Delicious within the online sector of the subculture Fandom with particular emphasis on the role they play in providing access to the output of the culture.
2. To identify the types of users of social bookmarking tools within the subculture and their previous experience with metadata.
3. Identify users within the culture that have become information access points to the other members
4. Examine the development and evolution of the users' folksonomies and how that forms part of the social aspects of tagging/bookmarking.

The aim of this research is to analysis the use of social bookmarking as an information sharing tool within a specific online subculture. Specifically the online science fiction based subculture of Fandom. Fandom has a considerable output of texts derived from popular culture and sci-fi, which prior to the internet, were archived in printed collections (known as Fanzines or 'Zines) or via photocopying. However as the use of the Internet spread into the home, rather than remaining an academic or military network¹, the culture has swiftly moved to creating the output as electronic documents (text files, html) and storing them in web based repositories with attendant tools or communities.

¹ ARPANET, the military and academic based network is the origin of what we know as the Internet today.

These documents are often shared or recommended between members of the community, in similar way to how books are recommended in offline life. The tools of recommendation have changed from hand-coded pages of links to the more fluid and less time consuming use of online social bookmark tools such as Delicious. With the move to social bookmarking tools, a significant side effect is the creation of controlled vocabularies in the sense of folksonomies. One of the aims of this research is to examine the usage of these controlled vocabularies and the role they play in providing access to the output of the community.

The research also aims to identify the types of users of the social bookmarking tools and what role they play within the community. Some users bookmark with a more internal view rather than outwards towards the community, while a second group provide a more community orientated service with some internal view and a final group become common information access points through the community. The identification of these common information access points is another element of the research. The different types of users are also reflected in the development and evolution of their folksonomies, which forms as part of the social aspect of their use of the service.

In order to fulfil these aims and objectives, the community was surveyed by the use of an online questionnaire to gain their opinions and other statistical data, which could then be combined with further background context of the community.

Background Context:

Science fiction and popular culture have, over time, become home to many creative hubs where fans create stories based on Sci-fi or popular culture characters or premises in the textual canon (what is presented as “fact” or “true” in

regards to the show and/or concept) and gather together to share stories and other commentary and output. These creative hubs are collectively known as Fandom and the stories as Fanfiction, while other areas of output can include Fanart, primers (in a sense, cliff-note guides to a TV show/book/movie or characters of them same) and a multitude of other items. Fanfiction is generally the largest and well known of the outputs and is the most common output used in regards to social bookmarking. These hubs existed before the internet and worked mostly on a postal or face to face basis (via conventions).

The pre-Internet methods of sharing their output depended on either closed personal libraries shared between interested parties via post, often known as circuits or collected in low- or non-profit published collections known as fanzines or 'Zines, which were available for sale at conventions. (Bacon-Smith, 1992) This meant that users were only exposed to or had access to the output if they were actively seeking it but buying or borrowing fanzines or joining the circuits. Both of these activities were limited by geographical factors – such as the distance between and the time taken for postal items to reach places such as Australia from the United States, for example.

However, Fandom as a community was amongst the first groups that embraced the widespread adoption of the internet, using newsgroups and then mailing lists such as Onelist (now part of Yahoo!)², or private list servers as the chance arose in order to create communities and to share their interests and the resulting output. As the growth in free web space provided by companies (such as Geocities, Fortunecity), and ISPs and academic institutions, to name a few, increased in the late 90s³, the use of web sites for archiving their output became increasingly popular and they started to co-opt existing tools, such as content

² Onelist merged with rival mailing list provider eGroups in late 1999, eGroups was then acquired by Yahoo! in early 2000 and renamed Yahoo!Groups.

³ The Online Computer Library Centre (2001) found that "From 1997 to 2000, the public Web increased by about 700,000 sites each year."

management systems and weblog software (such as Livejournal, a popular blogging platform created by Livejournal Inc.) as well as creating their own in order to facilitate their ability to archive their collective output of fanfiction and related information. (Jones, 2006)

There are historical roots for this culture of adaptation and development in the pre-internet years as the primary means of archiving and sharing their output then, the fanzines and postal circuits co-opted and used tools such as mimeo and then photocopiers (Bacon-Smith, 1992) when the latter became more generally available to the public and then again later, as computers and Internet access started to become available, participants within Fandom were often part of the early adopters of such technology.(Coppa, 2006) .

With the increased usage of the Internet, a popular method of finding other pieces of fanfiction and other sources of information about the fandom was that of a “rec page”, which was normally a page of hyperlinks collected by a fan as examples of stories they found particularly enjoyable and arranged by some form of classification, such as genre, characters, pairings and media. Often these recommendations came with further information such as a rating system based on level of enjoyment - often the traditional star rating, reasons why the user liked the story, a summary or pull quote and other metadata such as length.

These rec pages were often hard to maintain, with sections becoming unwieldy and requiring regular checks for dead or moved links. They were often hand coded as well, which required an extra time commitment from the maintainer. But the service they provided was not just that of creating links to the community’s output, they fostered community links and became information access points for other members of the subculture - users could find a user that had similar tastes to them and through their recommendations, find fanfiction or authors that they hadn’t found before.

There were also "Big Names", people who ran rec pages that expanded past a page of hyperlinks into full-blown websites. An example of such a user would be Sonja-Marie in the Buffy The Vampire Slayer fandom, who ran one of the largest directories of links to websites and archives that she felt contained the best information or fannish output in the fandom.

In a sense and particularly in the case of the "Big Names", these rec pages and sites were akin to the early directories set up by Yahoo! where links were gathered under categories and subcategories for the users to browse. These directories, both the fan built and the commercial predate Yahoo! and later Google's search engines and some are still accessible but no longer well used due to the shifts in fandom over the years.

Additionally, users could also bookmark (or favourite, depending on their browser) websites within their own browsers and from the researcher's personal experience, these could become rec pages of their own, albeit internal and inaccessible by the rest of the community.

In 2003, the social bookmarking website Del.icio.us opened and by December 2005 it had been acquired by Yahoo! Inc. (Delicious, 2005). As of mid-2008, after a major overhaul that changed site functions and design, Delicious dropped the use of full stops within the name. Delicious is "a social bookmarking website, which means it's designed to allow you to store and share bookmarks on the web, instead of inside your browser." (Delicious, 2008)

Delicious allowed users to add and share websites in a public manner and also allowed the users to import their internal (based within their own computers) bookmarks for tagging and sharing. Additionally, the service allows the addition of tags or metadata, generated by the original bookmarker.

These folksonomies - a mash-up of the words Folk and Taxonomy “created from the act of tagging by the person consuming the information” (Vander Wal, 2007) - have multiple purposes - not only do they provide extra context for a link but they allow the user to find all previous links they have given that tag easily, as well as any additional related tags and in the sense of cataloguing the links, they provide a form of controlled vocabulary.

Finally, the tags are globally accessible across the site, unless the user has opted to use the 'private' function and as such can be used to find links that other users of the service have bookmarked under the same tag, which immediately links the individual user into a world wide community of metadata generating users. This global aspect is found in other systems that apply tags, such as the blogs hosted by Wordpress.

The tags generated by the user can also be “bundled” under a particular subheading, which allows the user even further control over the classification and cataloguing of their bookmarked URLs.

Outside of the generation of folksonomies and the immediate social aspects of tagging, Delicious offers additional features and native tools such as the ability to add people to a network, which gathers all the items the network tag into one page or feed. This plus the other feature of tag subscription allows a user to both connect to various users but it also allows the user to create personalised feeds of information that is relevant to their interests. These feeds could also, through additional tools, be applied to external websites, so you could have a constantly updating list of recently added bookmarks as part of another (often static) website or post a daily "link dump" of links bookmarked within a certain time period and tag to a particular blog.

Fandom saw the potential of Delicious as tool for use within Fandom and the majority of fandom based users have co-opted it as method of storing their bookmarks in regards to fannish output in a publicly accessible manner but still mostly as a personal tool or benefit, while others have seen it as a replacement for the traditional rec page⁴. Regardless of the choice made, both these uses require the development of a controlled vocabulary, albeit one that often has no prior grounding in taxonomy and thesaurus construction.

This lack of prior grounding in taxonomy and thesaurus construction is of particular interest. While information gatherers, both in the guise of actual librarians (Rupert Giles in Buffy the Vampire Slayer, Barbara Gordon in the Batman universe - Batgirl was indeed a librarian!) or in more unusual applications (one can argue a case that crime/procedural dramas such as CSI, House and Criminal Minds, to name a few are information gathers/processors due to the major part that information plays in the successful competition of a criminal case/medical issue/the plot) are common within the texts that fandoms grow around and librarians are certainly well represented within the aca-fans, the average fan is unlikely to have any experience with the academic and standard practices of cataloguing or taxonomies outside of that of an end user.

But yet, given a tool, they have started to create their own standard practices. Donkar (2007) examined “vocabularies [Delicious folksonomies] to determine if trends, patterns and unspoken vocabulary policy exists amongst the users” and this research is continuing on a similar path, as part of the aims and objectives of the research.

Additionally, as people started to use Delicious more, their folksonomy creation practices started to become an additional skill that could be used within fandom as

⁴ The Livejournal user Cimness recently (Jan '09) completed a project to move the content of her old rec page into a Delicious account created specifically for this purpose so she could create and apply a comprehensive folksonomy to the links and free up the time that it took to maintain the original site.

a form of participation or trade. Not everything created in fannish output is text - there is a heavy and longstanding tradition of media production, from Vidders (who create music videos where appropriate footage from shows or films is spliced to music in order to tell a story/highlight a character trait etc. or faux movie trailer-style adverts for shows, to name a few things) and Artists (both traditional pen/pencil/ink and digital computer based artists) - and almost every participant in Fandom brings a skill of some variety to the fannish community. For example, Archivists archive the fic and provide hosting and other technical skills and even the Reader brings a skill to the fannish community by leaving feedback⁵ for the Author.

Some participants have parlayed their use of Delicious into a skill to bring to the table by assisting with the operation and publication of "Newsletters", which are communities on the Livejournal journaling service (Livejournal Inc. (2008) defines communities in this context as "a journal where many users post entries about a similar topic. Users who are interested in a particular subject can find or create a community for this subject.") whose content is generated by a combination of programming code in the form of scripts, the native tools provided by Delicious and backstage work by Delicious users who gather and tag instances of fanfic, meta (externalized and analytical thoughts on a particular subject – for example, racial issues in certain American TV shows) related content posted by other participants of a particular fandom.

The resulting output is then a daily (on average) link dump of new content created within a particular fandom, with relevant tags and other meta-data. Others have become the users that other people regularly check either by directly accessing their public account pages or via the 'network' tool offered within Delicious in order

⁵ Feedback is the dialogue that forms as a result of a major part of the community's activities and can take many forms, from positive reviews to negative reviews (or "flames") of anything provided as output in Fandom, such as an opinion or a piece of fanfiction.

to find new and recommended fanfiction or other output within particular subsections of fandom (these can be pairing as well as fandom based). These users and the Newsletters are often the Information Access Points within a fandom. These Information Access Points can be tied in context with Johnson's research on the emotional connections to information seekers and the overall concept of information sharing as a skill to be brought to the community is extemporised within the work of Tonkins, Kipp and Mathis.

As an aside to the general aim and area of this research, the use of social bookmarking develops additional functions within the community. For example, outside of the recommendation function of the community's use of Delicious, it is also often used as a news tracker, where all posts and other sources of information on a particular event are tagged by individuals in order that they can be collected in one particular location for ease of access.

This is currently being used to great success in regards to a long-running fannish dispute. Like all communities, there is often friction and kerfuffles (minor disagreements) and wank (large scale arguments) are common. The current long-running fannish dispute is over Fanhistory's⁶ repeated attempts to sell fannish demographics and information to the highest bidder with the contents being held on a wiki. The main objections are that the information held is out of date or incorrect and that fandom prides itself on its not-for-profit ethos. The owner of the Fanhistory wiki regularly deletes or edits information that is corrected and shows no regard towards traditional rules of fandom (including: linking real life names to fannish pseudonyms). Information about the whole dispute is being frequently tagged under two common tags, in order to provide ease of access to anyone who is interested in following the dispute's history.

⁶ Fanhistory.com

Literature Review

As subjects, both fandom and social bookmarking do not have particularly wide or traditional spreads of literature. The literature regarding Fandom can often be out-of-date just in terms of how fractured and constantly changing the entire community can be, while social bookmarking literature faces the twin terrors of constant change and very little interest in archiving what came before. There is some crossover between the two areas but to date, it remains a mostly unexplored area.

Henry Jenkins' *Textual Poachers* (1992) is often considered one of the cornerstone books on the subject of Fandom and its output. Jenkins takes De Certeau's (1984) theory of active reading as a form of poaching and applies it to the subculture, particularly in regards to Fanfiction, albeit in a more positive way than the original theorist intended. His exploration of why and what made the community form and create its output is a considerable part of the academic text of Fandom but has not always retained relevancy as the years and the community have changed and passed. Jenkins has remained active in "aca-fan" theory, with an active blog and additional published works that deal with similar sub-cultures (such as gamers and cosplayers) but *Textual Poachers* remains his primary academic text on this particular sub-culture.

Likewise, Camilla Bacon-Smith in *Enterprising Women: Television Fandom and the Creation of Popular Myth* (1992) examines Fandom, Fanzines and the Fanfiction Communities in detail as an ethnographer and provides a great deal of important first-hand knowledge of the culture and community which pre-date this

researcher's experience of Fandom. But this also means that her research does not always stand up to the passage of time, with over fifteen years and multiple technological changes now standing between her and Jenkins' *Textual Poachers* and the current aspect of Fandom.

There are books that have been published within the recent past and have focused in part on the current aspect of fandom and the technological changes, such as Busse and Hellekson's edited collection of essays: *Fan Fiction and Fan Communities in the Age of the Internet* but their reach does not extend to the subjects that this research is examining and in general, chooses to focus more on more traditional academic interests in Fandom, such as community building and why people are active and drawn to the concept of Fandom.

Broughton's *Essential Thesaurus Construction* (2006) provides the majority of the background reading on the subject of Controlled Vocabularies and the creation thereof. It is a book written by and for librarians and other information professionals but retains openness with the subject that can be applied without requiring an academic or practical background in controlled vocabularies construction.

On the side of social bookmarking, there is a small but growing collection of research. Johnson (2004) examines the role of social capital in information seeking behaviour particularly in regards to the "relational factors associated with the choice of people as information sources". While her research does not focus on Fandom, the concepts behind the research and the idea of community allows for some crossover and would be key when considering the aims and objectives of this research.

Tonkins et al (2008) provide a further springboard for this research with their

examination of the community and social aspects of social bookmarking/tagging, particularly on “what extent community influences tagging behaviour, characteristic effects on tag datasets, and whether this influence helps or hinders search and retrieval.” Tonkins et al is particularly interesting piece of research as it is a panel report that combines studies on a variety of different tagging communities, from Code4lib (an "organic community consisting of librarians and library software developers") to the "cognitive and social factors of tagging in China" and many others. While this is all extremely relevant, the section on "Collaborative Classification Practices in Social Tagging Tools" is particularly useful, dealing as it does with the collaborative nature of tagging and had this research decided to go down the route of analysing the tags used by the community in detail, that section would be been one of the key pieces of literature.

Tonkins et al's research is complimented by Mathes' (2004) research which provides a further look at the cooperative nature of folksonomies and social tagging and also provides another springboard point that this research hopes to develop in regards to “what factors directly influence the formation of a folksonomy, and how individual incentives and group communication motivations influence use of the system.”

Kipp (2007) examines the “emotional” aspects of social bookmarking and its tag based vocabularies, particularly focusing on the notion that often “common tags are not directly subject related but are in fact affective tags dwelling on a user's emotional response to a document or are time and task related tags related to a users’ current projects or activities.” This is of particular relevance to the use of Delicious as a recommendation tool and the personal aspects of rating and recommending a story. The very act of Recommending is loaded with personal feelings and is not easily (or ever) divorced from emotions.

In the cross-section of the two subjects that this research aims to investigate,

Donkar's (2007) research on social bookmarking tools examined the "vocabularies to determine if trends, patterns and unspoken vocabulary policy exist amongst the users". The community she chose to examine was a subsection of Fandom that focuses specifically on the popular Sci-fi television show Stargate Atlantis and provides additional information on fandom and its use of social bookmarking tools and functions.

Additionally, Kem's MSc thesis, "Cataloguing the Whedonverse: Potential Roles for Librarians in Online Fan Fiction" examines the place and need for cataloguing and librarians within Fandom's archiving of their output, with a specific focus on the Buffy the Vampire Slayer fandom. While this is particularly focused on the archival side of fandom, rather than the dissemination of archived materials, it is still a relevant look at the place of information professionals/gathers in the community and what we can bring to the skill set held by the community. She raises the point that any such movement towards a use of information professional's skills should come from within Fandom and not from outsiders who have no connection or understanding of the culture. She concludes that the possibility is feasible however, due to the number of librarians and related people who are active within Fandom outside of their careers.

Methodology:

The research question required an almost ethnographic approach to the data collection. This is partly because Fandom as a subculture has been the subject of more than a few academic studies in the past and the undertakers of these studies have not always taken into consideration the wishes and practises of the culture and the effect that the study may have on the culture. As a result, the culture as a community has become a partly closed culture and wary of academic studies, particularly those done by people from outside the culture.

However, the researcher behind this study has been active within the culture of Fandom as a whole for over a decade. As such, the researcher has both the cultural credentials and understanding of the issues surrounding academic studies in the culture that are needed to breach the walls that have been put in place. This immersion and outsider dichotomy does have its disadvantages and this has led to a need for a mixture of qualitative and quantitative research methods as a preventive to some of the common criticism of qualitative methods. Grix provides lists of some of the criticisms aimed at the qualitative methods, such as lack of objectivity and 'anecdotalism' as well as those criticisms levelled at the quantitative methods, such as "the dependence on quantitative methods can lead to a neglect of the social and cultural context of the 'variable' being 'measured' operates" (Grix, 2004) and the reluctance to move from correlation to casual statements within the research.

The methods considered were as follows:

Interviews – one on one interviews with a small group of avid and active users of Delicious with a predominately fannish collection. The interview would be semi-structured to allow for both the interviewee's personal opinion and to encourage the creation of further research points by allowing some digression. The interview would not be used as the only means of data collection.

Questionnaire – The questionnaire would be used to gather general information and to select participants for Interview. The questionnaires would be quite structured in order to collect the quantitative data required as part of the proof for the hypotheses.

And finally, there was the Observational method, where the culture would be observed. However, this method has many pitfalls, including the possibility of the

act of watching causing a change within the object or culture being watched. This method is partly present regardless of actual method choice due to the insular nature of the community and the active status of the researcher within the culture.

Although both methods of data collection are suitable, they are also, as Grix (2004) suggests methods that are better suited to being used collaboratively in triangulation as they both have advantages and disadvantages. Kumar (1999) says that questionnaire questions should be “clear, unambiguous and easy to understand” in order to keep the data useable and Bryman (2001) says that questionnaires can cut down on the ‘interviewer effect’ where the interviewer’s personal characteristics can affect the respondent’s answers. Meanwhile, interviews can provide access to data that would not be otherwise available and the data can often be collated quantitatively and qualitatively.

It was felt that triangulation of the methods was the best way to go and both methods should be combined in some form. As the data being collected required being quite wide reaching and heavier on quantitative data and the difficulties of organising interviews where the participants would be operating on different time zones were numerous, the questionnaire was selected as the final means of data collection. However, the questionnaire included several open-ended questions that allowed for the collection of the more interview suitable data, such as the personal opinions of the respondents.

There was also the added difficulty of another study being done on the subculture at the time of research that backfired and caused a period of distrust towards academic studies. In the light of this, the original plan to run a call for interviews and gather most of the information that way was dropped as the process of being vouched for people outside of the researcher's immediate fannish/community social circle would have been time-consuming.

The questionnaire was created and hosted on Survey Monkey, an online survey host that provides secure and professional questionnaire functions. The questionnaire was four pages long and included a section on demographics, a section on experience, and a section requiring the participants to describe their usage along with the open ended personal opinion questions. (See Appendixes).

Before the questionnaire was opened to the public, it was submitted to a small group of fellow fans who are also either currently active in academia or had a heavy academic background for editing and their opinions and were adjusted where appropriate.

A link to the questionnaire was posted to the researcher's fandom related account on main means of communication within the culture, the online journal system Livejournal Inc., along with an explanation of the purpose of the survey and the ethical issues that were under consideration. It was specified within the information that respondents were to be eighteen or over and that while names (either real or the fandom pseudonyms) were required, they would not be used within the final research in any form other than a numeric identification system on quotations if required. And that by completing the questionnaire, they were consenting to the use of their responses and acknowledging that they were over the requested age.

This was considered to be the most practical way of collecting Informed Consent and providing a means of meeting the ethical requirements in the research.

The full text of the invitation, including the statement of consent, can be found in the Appendixes.

In order to reach the widest audience, the questionnaire information also included a request to pass the information link on to anyone the original audience felt would be of use and as such the pool of respondents was increased by use of a technique known as 'snowballing', where original respondents provide further respondents without the researcher 'cold calling' or 'spamming' their possible respondents and alienating them in the process. A voluntary process of vouching took place during this, as those who chose to pass the link on, often provided some form of vouchsafing towards my experience and participation within the subculture, which is turned helped my research pass through the barriers that had recently formed against academic research of the community.

The questionnaire was originally set to run for a week with re-advertising if required but the response was such that it more than exceeded the hoped for total response of 60 within two days of submission. The final count stands at 218 responses which was a great deal more than had been expected.

While Survey Monkey provides some forms of data analysis, it also provides the option to export the raw data into a form that most statistical packages would accept. The data collected by the questionnaires was exported and further analysis was done via Excel.

While almost all the respondents completed the survey, some respondents chose to skip certain questions. This led to an attempt to counteract this by forcing a response to certain questions - mostly these were the questions that would provide the quantitative data, the choice to answer the open ended interview/personal opinion questions was left to the respondent - before the next page could be accessed which may have caused some respondents to exit the survey before completion but allowed the researcher to have some control over the data and meant that there was less chance that future responses would be

unusable.

A copy of the full survey can be found in the Appendixes.

Results:

The questionnaire by far exceeded the original target of minimum 60 responses with the final total coming out at 218, of which 210 were completed correctly. Eight sets of responses were discarded due to multiple questions left unanswered, rather than one or two or because they exited the survey prior to completion – the number was greatly reduced by editing the questionnaire to force responses.

Demographics:

The demographics of the questionnaire takers are not strictly relevant to the overall aims of the research but allow a picture of the community to be built. In order to build up this picture of the respondents, a series of demographic questions were asked at the start of the survey. This provided the research with the following information.

Within the two hundred and ten (210) respondents, the gender distribution broke down as follows: 96.7% (203) of the respondents were female, 1.9% (4) of the respondents were male and 1.4% (3) preferred not to state their gender. This matches with the researcher's experience of fandom as a primarily female space, which is particularly interesting in context of culture's take-up of technology.

Predominately, the age range of the respondents was **18 – 24**, with 41% (86) of the respondents selecting that range. The next most common age range was **25 – 29** at 31.0% (65) followed by **35 – 39** with 11.4% (24), **30 – 34** at 10.5% (22) before dropping significantly to **40 – 44** at 3.3% (7) and **45 – 49** at 2.9% (6). No respondents fell into the 50+ age range but this is not to say that there are not

community members in that age range.

In regards to time spent active in the community, the majority of respondents fell into the **6 – 8 year** range, with 38.1% (80) selecting that range. **9 – 11 years** was the second most common selection, with 26.7% (56) respondents. These were then followed by 21.4% (45) at **3 -5 years**, 9.5% (20) at **12+** and 4.3% (9) in **0 – 2 years**.

IT Skills:

The respondents were asked to assess their IT skills and rate them on a scale where one (1) is poor, four (4) is average and seven (7) is excellent.

Predominately, the respondents rated themselves above average with 31.4% (66) selecting **5**. This was followed by a tie where 25.2% (53) selected **4** (average) and another 25.2% (53) selected **6** (good). 10.0% (21) selected **3** (below average), 6.2% (13) chose **7** (excellent), 1.4% (3) selected **2** (slightly poor) and 0.5% (1) selected **1** (poor).

This provides a picture of the respondents that indicates that the majority of the respondents are female, fall between the ages of 18 and 24, have an average time in fandom of 6 – 8 years and rate their IT ability as good, with an average rating of five (5) on a scale where one (1) is poor and seven (7) is excellent.

After the demographics section was completed, the rest of the questionnaire dealt with the research data.

Social Bookmarking:

1. How do you use Delicious?

None of the respondents skipped this question. The main uses of Delicious in the context of this research broke down to a majority of **Personal and Fandom Together** with 51.4% (108) of the respondents choosing that as their usage, while the remaining hundred and two respondents broke down into 32.4% (68) who used their Delicious accounts for **Fandom Only** and 16.2% (34) of the respondents selected **Personal and Fandom Separate Accounts**.

2. If you use your delicious account for both personal and fandom content, which is the most predominant? (Leave blank if this does not apply to your use of the service)

In order to get a figure for fannish usage from the respondents that mix or separate their accounts, they were asked to specify their predominate usage. Of the hundred and thirty four respondents who answered this question, the majority used their accounts for fannish matters with 90.3% (121) selecting Fandom as their predominate use of the service. The remaining 9.7% (13) respondents felt that their primary use was actually personal, on top of their fannish use.

3. For Fandom Only or Predominantly Fannish, how would you describe your use? (Tick as many that apply)

They were then asked to select what they felt best described their usage for fannish purposes. Two hundred respondents answered this question with ten choosing to skip. From this, the predominate use of the Delicious service was **To keep track of fanfiction read and enjoyed** with 97.5% (195) of the respondents selecting this as a use. The next biggest use for fannish purposes was **To publish or otherwise generate recommendations for others** with 46.0% (92) selecting this as one of their uses and then, finally 30.5% (61) selected **To keep track of research/information collected to write fanfiction**.

This question also had a personal opinion section where the respondents could enter additional information about their use of the service for fannish purposes. Thirty eight respondents chose to add additional information about their use of the service and this brought up several new uses that fit in with the research's aims.

One of the new uses was that of tracking their own output with multiple respondents saying things such as:

"...track my own fanfiction and their occurrence on delicious."

"To monitor how many people are reading and reccing my fic, since many more people will tag and rec in Delicious than will leave comments⁷."

"To keep track of other people who have delicioused my fic."

Other respondents used the service as a 'to read' function, whereby they added links to fanfic and other output that they had found but had not yet had the chance to read and assimilate into their tags. Such as:

"...To keep track of fanfiction I'd like to read, instead of leaving lots of tabs open in my browser"

"...To save links to To Read fanfiction."

It also, as many respondents noted, provided a back up function against a browser crash.

"...I used to have eleventy billion windows of fanfic open all the time, and lose them all when my browser crashed, and now, I put them in delicious & they're there whenever I want them."

Other uses included: using the service in order to power a "newsletter" and to track other people's recommendations.

⁷ On the Livejournal Inc. software, the primary way of responding to a post, regardless of whether it is fanfic or otherwise is to leave a comment. This then becomes shorthand for feedback – ex. I only got 12 comments on that story.

The respondents were then asked whether or not they used the Network function of delicious. The network allows you to add the usernames of users who post items that you are interested in, which means that anything they bookmark is collected into one aggregated feed that can be accessed from the Network tab in the Delicious account.

4. Do you use your Delicious Network as a tool for finding recommended fanfiction and other information?

Two hundred and ten respondents replied to this query, with no skipped answers. The results showed that predominately the respondents do use the Delicious Network as a method of finding recommended fanfiction and other information. 87.6% (184) selected **Yes** against the 12.9% (27) respondents who selected **No**.

In order to find what the usage of the other tools provided by Delicious was, the respondents were then asked a series of questions relating to this area of use.

5. Have you used any of the additional tools offered by Delicious, such as the ability to subscribe to a particular tag or the blogging related tools (blog post, network badge, tag cloud etc.)

One hundred and ninety nine of the respondents replied to this query - eleven skipped it, despite the 'no' option. The results were surprising in that the majority of the respondents selected **No** with a percentage of 64.8% (129). The remaining seventy respondents were split between **Yes - Occasionally** at 18.6% (37) and **Yes - Regularly** at 16.6% (33), which shows a surprising lack of usage of tools that could both aid the user and the community.

The respondents were then asked to fill out a personal opinion question, if they had selected either 'Yes - regularly' or 'Yes - occasionally' in the previous question. This question was to find out which of the offered tools were used and why.

6. If you answered yes [to question 5], which tools did you use and for what purpose?

Sixty Nine of the seventy respondents from the previous question answered this question. The primary answer was tag subscription with the majority (sixty seven of the responding sixty nine) saying that they used the tag subscription tool - this is another aggregated feed which instead of pulling from selected users like the Network, pulls any link tagged with a particular tag from the global pool of users and thus bringing in items that may not have been bookmarked by the users' immediate circle or network - and commonly, because it provided access to links from outside their network.

Other benefits were: the ability to see what was available in a fandom, without having to actively scour through the different archives and communities and to keep track of rare or less common pairings or fandoms, with respondents saying:

"...I subscribe to a number of different tags so that I can track posts related to a subject of interest; I find this particularly useful when I want to keep up with new fic but don't have the time to get very involved in the fandom."

"Frequently I use the subscription tool to track newer and emerging fandoms and pairings which are harder to hunt down by surfing fandom and journal sites alone."

"...subscribe to a tag to find new fanfiction in a fandom that is not my primary fandom (i.e., not on my LJ flist)"

"Subscribing to tags to find fanfic with somewhat less popular subjects."

"I use the tag subscription to keep track of rare pairings and fandoms."

Others use it as a method of finding users with complementary tastes in fanfiction that are out of their immediate social circle. "[I] subscribe to users whose taste in fic seems to complement mine."

Another respondent noted that she "...subscribe[d] to particular tags instead of using the network tool to find recommended fanfics and track things [she was] interested in."

A few of the respondents were active with the fandom newsletters and as such provided usage information for tools that the research had not considered, such as the API and their own scripts.

"API and JSON feeds, to create master lists, reclaims and non-daily fannish newsletters. Blog post, to create automated daily fandom newsletters."

and

"I subscribe to several tags, as well as having a bunch of people in my network -- all pretty much to find fic recs. I am one of the editors of a fandom newsletter, and we use delicious to create our daily posts for us."

Other respondents also used the blog posting function (which posts all the links bookmarked in a time frame to a blog on a daily basis), the tag cloud function (suggested tags based on a main keyword tag and then populated by the most common tags used beside the keyword tag) and the network badge, which is a way of alerting other users to your presence on Delicious and can give additional information like: total bookmarks held and most popular tags.

While the majority of the responses were positive, one respondent noted that there were problems with the tag subscription tool - "I have used the tag subscription feature in the past, but found it inefficient, mostly due to the inability (as far as I can tell) to use wildcards. e.g., instead of subscribing to one: *Die*Hard*, which would return LiveFreeOrDieHard, DieHard4, Die_Hard_4, DieHard4.0, etc., I instead would have to subscribe separately to every single variation" - while another noted that she gave up on using the subscribed tags because her "network's bookmarks provided more fic than I could read so stopped checking the subscriptions."

The next questions focused on the more cataloguing related side of Delicious, starting off with the usage of tag bundles. These are meta-tags, which can be used to contain related tags. These bundles can then be usable as menus on the sidebar of a Delicious account or as direct links to a feed that aggregates all the included content. For example: a bundle called 'Academic' could contain all the tags the user considered to be academic related, such as 'folksonomies, semantic web, knowledge management' or it could be used to collect any links tagged with genres like: alternate universe, hurt/comfort, gen, het.'

7. Do you use the tag bundle function on your own tags?

Of the two hundred and ten respondents, the majority selected **Yes** 80.8% (160) and 19.2% (38) said **No**. Twelve respondents skipped this question. The question also had an opinion section, which five respondents filled out. Their responses, while a very small minority of the responses, all came down to their usage being for the containment factor. As seen by these quoted responses:

"Half-heartedly. I try to bundle authors and I try to bundle fandoms, but I'm not the most organized person on delicious by a long shot."

"to help me keep my fannish links separate from my non-fannish links."

Some users found that the tag bundle tool no longer worked in a manner they

found helpful and they had instead resorted to "bundling" within the tags by applying tags such as: [fandomname:pairingname]

The next questions focused on the community aspects of tagging. While a user could tag a link using random words that mean something to the user but nothing to anyone else, the community aspect, the "social" in the social bookmarking would fail to work and the various tools and communities would not be built or used. At the same time, a user does not have to tag for the community only – the point of the service is for the user to find their own bookmarks as well as others' bookmarks.

8. Do you tag strictly for yourself or do you take into account that others may use your bookmarks?

Of the two hundred and twelve respondents, the majority of the respondents selected **I tag for myself but I am aware that others may use my bookmarks** with a response rate of 78.0% (156). 17.5% (35) selected **I tag strictly for myself** and 4.5% (9) selected **I tag for the use of others predominately**.

Again, this question had a personal opinion section that allowed the respondents to give further information if they wanted. Ten of the two hundred and ten respondents opted to do so. One of the common themes from the responses was that they considered other users by providing additional information in the tags, in particular in regards to pairing names, which is a piece of metadata that most users would consider vital.

Traditionally, pairing (normally romantic) are indicated by the names separated by a virgule. To use a traditional example: Spock/Kirk. However, the naming convention can vary between fans and often surnames are used instead of forenames – McKay/Sheppard instead of John/Rodney – or a mix of both. There was also a brief vogue for pairing "smushes", where a pairing name is combined to create an often nonsensical word/name such as JoLa (Joey/Lance) or Shweir (Sheppard/Weir). This can be further complicated by the geographic location of

the fandom – Western Fandom uses the previous described formats but the Eastern Fandom, coming from a background of anime or manga will use 'x' as the convention.

What a user is searching for in regards for fanfiction can be impacted by the choice of pairing name tag applied to the link as these tags will not come up as alternates unless the original user has applied them. This can be seen in the following response, where one of the respondents offered the following on the subject of extra metadata in regards to naming conventions.

“When I am tagging a rare pairing I will use several version of their name (i.e. mckay/keller and rodney/jennifer) to make it easier for fans of the rare pair to find them.”

There is other information that can be included, one respondent noted that “I try to use the most commonly used format for pairing names and fandom abbreviations. (E.g. SGA [Stargate Atlantis], McKay/Sheppard) But I also use tags that might only make sense to me like "weekendboyfriends" to refer to a canonical time period.”

That respondent provides an example of tagging for themselves while still being aware that other users are likely to view their tags in order to find links that fit their search criteria.

The results from this question tie immediately onto the results from the next question.

9. When you apply tags to a link, what information do you try to always include and is this affected by your answer to the previous question?

Of the two hundred and ten respondents, two hundred responded to this question, which was a personal opinion question. The primary theme from the responses

matched that of the previous question, with the majority of the respondents noting that they included at least some, often particular tags to aid others who would come across their bookmarks or explained that they also added tags that would be specific to their needs when it came to the retrieval of the information. The remaining respondents either did not tag for others or did not provide any useable further information.

The answers to the question also provided a more solid look at what folksonomy the users are developing - the commonality of particular terms shows up, much as Donkar's research looked at the development and commonality of a particular fandom within the sub-culture.

Some examples of the information that the respondents always try to include is as follows:

"For fic, I always put the fandom, a very generalized rating system (a rating of how much I enjoyed it, not rating like G/R/NC-17), whether it's novel-length, and the main characters in the story."

"I include fandom, pairing, type of fan work, year, word count, and any information I can think of that might make it easier to find a story when I'm looking for it. For example: SGA, Sheppard/McKay, slash, firsttime, AU, pirates, pining!John, fic, 2008 [w]30000-49000." This respondent also noted that if she wasn't tagging with an awareness of others, she would tag in her native language, rather than English.

"I have a set system of tags, so that all of my tags look alike and are in the same order. fic (or occasionally vid, art, etc), gen/het/slash, other descriptors

(casestories, post-series, episodocoda, aliensmadethemdoit, etc.), fandom, characters &/or pairing, rating (3, 4, or 5, though coded), author, word count range"

Not all the respondents specifically stated if this was affected by their previous answer, although one can make a case that it does affect as those who do not tag for others would not include tags that would be useful to anyone but themselves.

The final set of questions deal with the community behaviour from the point of accessing other users' bookmarks. Both of these questions were personal opinion based and were set up for open essay responses.

10. Do you visit other Delicious accounts outside of your network regularly and if so, what brings you back to those accounts?

Of the two hundred and ten respondents, one hundred and sixty two respondents replied and forty eight skipped. The majority of the respondents did visit users' accounts belonging to members of the community that they did not have in their networks. The remaining respondents did not visit accounts belonging to users from outside their networks.

The reasons given by the respondents varied, but curiosity and knowledge of shared fandoms came up multiple times. This can be seen in the following responses.

"Yes. I visit delicious accounts of friends who share similar tastes in fic to find stuff I might [have not] read yet."

"I visit other accounts regularly but not the same accounts. I search and/or browse and when I see someone with similar tastes to mine I look through their bookmarks."

“Yes. I regularly visit accounts outside my network either because they're temporarily prolific in a fandom I'm momentarily interested in or because their commentary on fic is interesting to me”

The final question dealt with what information would they find useful when visiting someone else's account.

11. What tags/information would you find useful when viewing other users' bookmarks?

Of the two hundred and ten respondents, one hundred ninety six respondents responded and fourteen respondents skipped this question and completed the survey. The responses matched quite closely to the information that the users included in their own tags.

Some of the examples provided by the respondents are as follows.

“fandom wise? Stuff that I don't input myself like word length is nice to see; personal notes on fic are great too (makes them into little recs/reviews)”

“Fandom, character, genre, and some indication of enjoyability level. Some people only tag things they really liked (I do that) but some people (bookshop comes to mind!) tag literally every single story they read.”

“It depends on what I'm looking for -- I tend to search based on fandom and genre, so it helps when they tag things using tags I would use. (I basically "search" delicious by looking at bookmarks recently tagged with words of interest to me.”

“The same kind of information that I tag for and maybe additional specific tags that I haven't thought of yet but would be perfect to describe a certain group of stories. Everything that makes finding fiction easier. Tropes, kinks, pairings, het, slash, gen, fic, vid, fandom, word count, etc.”

“Pairings. Descriptions are also key as titles are hard to judge the story on.”

“For tags, the more detail the better, though also the less personalised the better. If someone uses 'omgfluffybunny' to mean 'john/Rodney', I'm not going to know and I'll just end up confused.”

Discussion:

After collecting and analysing the responses, one thing is quite clear, the use of social bookmarking tools and the creation of tag based folksonomies has become quite a significant method of finding and storing the communities chosen output.

A common theme that ran through the responses was that of searching Delicious for fanfiction to read, particularly when users were just getting into a fandom or were looking for good, well written fanfic in their current fandom. The size of the response to the call for participation in the survey, which exceeded the original expectation shows usage of the tool is quite significantly spread. Additionally, while the community as a whole is vast and no one can be expected to know everyone, the amount of unknown to the researcher usernames given by the respondents show that the call for participants 'snowballed' outside of the researcher's own community activity. The researcher was also informed that a member of Delicious' staff had linked to the call for participants on a semi-official Delicious Livejournal community, which expanded the reach further than anticipated.

The research had four main objectives to gather information for or against. These were

1. To examine the usage of controlled vocabularies/folksonomies and social bookmarking tools such as Delicious within the online sector of the subculture Fandom with particular emphasis on the role they play in providing access to the output of the culture.

2. To identify the types of users of social bookmarking tools within the subculture and their previous experience with metadata.
3. Identify users within the culture that have become information access points to the other members
4. Examine the development and evolution of the users' folksonomies and how that forms part of the social aspects of tagging/bookmarking.

As Donkar's research looked specifically at the usage and development of individual folksonomies and how the users use them to catalogue their own bookmarks, this research did not retread the same path and instead focused on how the users used the community created folksonomies to access the information and out put of the culture. This was demonstrated by the majority of respondents, most of whom had exploited the tools offered by the social bookmarking website, Delicious in order to track information, either by adding users with similar or complimentary taste or by harnessing these tools in order to provide a service to fandom in the form of a Newsletter or a regular recommendation post. This ability to track the community's output was a recurring motif in their responses and shows a definite trend towards the creation of information access points.

The shift of fandom from the structured mailing list to the looser community of Livejournal and other similar blogging platforms has had a knock on effect on the ease of finding information. When Jones (2006) looked at the adaptation of these platforms into archiving tools, it was noted that one of the side effects was a diffusion of the fannish output. When anyone can archive their fanfiction simply by publishing it on their Livejournal, it becomes harder to find than if they had posted it to a specific mailing list – fandoms often had at least one major mailing list that covered every genre and several well known lists that would be more specific – or the major archive – often attached to the mailing list. Social bookmarking has become the bridge across this gap between community and output and in turn, has become a community driven tool. The Newsletters are not staffed by one person but a group and these editors rely on the individuals in the community to use social bookmarking tools to publish, bookmark and apply tags that allow the

editors to find the items to publish in their newsletters, which in turn are powered by the tools offered by the social bookmarking software.

The second objective of the research was to identify the users of social bookmarking and their previous experience with metadata. While the research did not find data that dealt specifically with their experience of metadata, this is something that could be examined in more detail in the future. The users of social bookmarking in the community could however be identified. As a general group, the respondents to the survey were by default users of social bookmarking and within that group; it was possible to see the different trends. The two main groupings that can be extrapolated from the responses are: Community Orientated and Self Orientated.

Predominately, the majority of respondents (the 82.5% of respondents who selected either **“I tag for myself but I am aware that others may use my bookmarks”** or **“I tag predominately for others”**) fell into the Community Orientated user group. This was because while they tagged for their own retrieval, they also kept in mind the likelihood of other users accessing and using their tags or links, while the remaining respondents (17.5%) selected **“I tag strictly for myself”**) fell into the Self Orientated group.

The communal nature of social bookmarking means that those who tag for the community provide access points to everyone, including those who do not tag for the community. While this is not strictly fair, because the self orientated group benefit from the work of the community orientated group, this imbalance is one that forms in any kind of community based situation and is often taken for granted. From with this particular culture, it can also be seen in the output – writers will write, some readers will read and respond with feedback and others will read and leave no response.

Writers will complain but rarely stop writing – although some of the more attention seeking members of the community will flounce off and that will be one of their justifications. As of the time of this research, the researcher had not seen equivalent cases attention seeking flouncing in the social bookmarking community within the culture, probably because the user still gains a benefit from using a

social bookmarking tool personally that remains without the communal aspect – it will still be an access point to fanfiction output that has been read previously and enjoyed and can thus still provide the user access to that, while writing and gaining no response can be disheartening.

The third objective of this research was to identify users within the culture that have become information access points to the other members. Unsurprisingly, there were no single named individual with majority recognition, the sub-culture is wide spread and ranging and each fandom will have its own players. What the results did show was that the social bookmarking software becomes the access point, with a common thread from the respondents being the use of Delicious to find popular fanfiction from fandoms that the user is just getting into. With that comes the use of the tools provided by the software to gain further information by subscribing to popular tags or adding users with similar or complimentary taste to their networks.

The use of social bookmarking provides a more tailor made approach to information access. Johnson (2004) talks about the use of social capital in information seeking between people, while their research dealt specifically with offline situations, it can still be applied here – in regards to this research, it can be extrapolated that users who tag predominantly for the community are more likely to show up in multiple users' networks. This can be because their choice to tag for the community provides the access to the information that users search for above other users who do not tag for the community, which gives that user a boost in terms of social capital, particularly if their bookmarks are then recommended to other users or regularly used by the Newsletters.

A common theme in the responses from the participants in this research was that if they found someone's tags and bookmarks of use and interest to them, they would add that user to their networks in order to benefit from this knowledge. This immediately creates an information access point for the user and snowballs on as output accessed by user B from the newfound user A is then passed on to users C, D & E in their network, who then pass it on and so on throughout the community on a 'six degrees' style radius, which in turn creates further information

access points as the information shifts through the users.

The fourth objective of this research was to examine the development and evolution of the users' folksonomies and how that forms part of the social aspects of tagging/bookmarking. The response from the participants in this research shows that the folksonomies they develop evolve in parallel layers. The first layer is their own personal tags that often make no sense to anyone but the original user – as an example, one respondent tags stories that made her cry with “ohmyheart” and another used “weekendboyfriends” to signify a time period in her fandom that she was particularly fond of – and these tags can evolve as they are used more frequently. The “ohmyheart” respondent noted she started to use that tag so frequently, she had to develop a system involving extra vowels to indicate the level of sadness (i.e.- “ohmyheart”, “ohmyheaaart”, “ohmyheaaaart” etc.) These tags are obviously only immediately usable by that particular respondent.

The second layer to the users' folksonomies is the more traditional and community based layer. As previously mentioned, there are naming conventions that apply to pairing names across fandom that date back to the 1970s – as a side note, the use of the virgule in Western Fandom traditionally indicated same sex romance (slash), while the ampersand indicated opposite sex but this has since fallen to the wayside and the virgule has become the default romantic designation - and a collection of widely used genres or tropes has formed over the years. These culture wide categories allow the users to tag links in a manner that allows other users to get a snapshot view of the content.

This also allows a user to filter the results they get – if they are not interested in a particular pairing then they can discard any link that is tagged as containing that pairing, likewise with genre or tropes. Or, if they are interested in a particular pairing and a certain trope, Delicious will then allow them to see what links have been tagged by other users as containing both those required items. This links in with Kipp 's (2007) research on the "emotive" aspects of social tagging – predominately, as the response to this research showed, the users add the stories or other output that they enjoyed. These saved links are then further categorised in an emotional manner with the application of tags (and any description given in

the notes field) such as the respondent who tags "ohmyheart" for sadness or the respondent who tags for a particular timeframe and if a rating system (such as stars) is applied, then there is a further emotional layer contained in the metadata.

This emotional layer can not be removed – and with the exception of the Newsletters, which are generated by scripts, it is always present in a user's experience. From personal experience, there are links to fannish output in the researcher's own account that have a warning for tear-jerking. These stories are not often accessed by the researcher because the emotions that they bring can be too strong but they were bookmarked in the first place because they created such a strong emotional reaction. The emotional content plays a useful part in the community based layer – a view that allows extrapolation from another users emotional tags a general expectation of the items emotional content – something tagged "ohmyheaaaaart" or "heartbreaking" would not imply that the associated link only contains kittens, rainbows and sunshine and if the viewing user was not looking for a sad fic, they would have the information that would allow them to avoid selecting that link.

Overall, the evolution of the community based layer of the folksonomies is gradual – there is no central figure declaring a convention as so, instead they grow up from a single use and then appropriation and this is aided by the social aspect of social bookmarking because it increases the amount of people who become exposed to a term and if it makes sense as a term for categorising fannish output, it can go “viral”⁸ within the community's cultural descriptors and thus become widely used in the folksonomies that develop around the community.

There is also a community expectation of what tags or metadata should be included. The responses to this research from the participants highlighted this, with the majority of the respondents citing the terms that they would expect to see

⁸ Viral in this situation is linked to “meme”, a neologism coined by Richard Dawkin's in his 1976 book “The Selfish Gene” as “unit or element of cultural ideas, symbols or practices; such units or elements transmit from one mind to another through speech, gestures, rituals, or other imitable phenomena “ and has expanded with the internet. Notable examples are the “All Your Bases Belong to Us” meme, “LOLCats” and the “Obama is my [noun here]”.

in other users' tags as their response to the final question on the survey. There is a commonality running through the suggestions that indicates a communal standard of appropriate metadata that contributes to the evolution of the community based layer of users' individual folksonomies. This expected metadata contains primarily identifying tags such as: fandom, pairing, genre or trope, with additional tags such as author, word count (or range) and rating mooted by the respondents as 'nice to have'. These tags are the closest to the traditional taxonomy based model – while there is no Anglo American Cataloguing Rules for the community based layer of the culture's folksonomies, there is an expectation that comes from the users' encounters with these traditional models in their offline lives.

Conclusion:

As an overall goal, this research met all the original objectives, with the exception of metadata experience, however, it was felt from the researcher's experience with the community, that the general community had experience in metadata that did not come from an academic or information professional background and came instead from using and adapting tools that brought them into contact with metadata based systems.

The research did suffer from the periodic freeze outs that the community apply to academic studies as a method of protecting themselves. The active status of the researcher was a large factor in the successful take up of the survey – had this not been a factor, the research would have been seriously hampered – but it would have been easier to reach people without constant vouching from other fans and other methods could have been applied, such as interviews. Another factor that did partially affect the research was the major overhaul that Delicious went through during the information gathering period – during this overhaul, it looked like some of the tools the research would look at would be taken away and as such, the survey had to hedge its bets on naming specific tools, in case they did not come back after the redesign.

However, outside of these issues, the research went smoothly and there are multiple strands that can be drawn into a conclusion.

In conclusion, the research found that Social Bookmarking tools like Delicious currently create the primary Information Access Points for the community and while this has moved it away from named individuals, the benefits are immediately noticeable – there is far more of a community element and that affects almost everything outside of the users' personal folksonomy layer.

The community aspect of the social bookmarking tools helps generate situations which in turn cause the evolution of folksonomies. A naming convention can grow from one user tagging a story and then spread through the rest of the community, likewise a genre or trope name can do similar. The information access points can grow as people access a fandom's output by adding that fandom's newsletter to their Livejournal Friends list (another glorified RSS feed) and by clicking on a link from a posting generated by data from the community folksonomies, the user may then add that link to their own, which in turn provides access to the users who have that user in their Network.

Even the personal layer is not immune from this community driven evolution – other users will also apply tags such as "heartbreaking" to a story, which then turns that term into another genre or trope which may or may not go viral in the community.

Additionally, the ease of use and the decrease maintenance time benefits fandom because the flow of information is continuous – instead of setting aside time to update the hand coded rec page, the user bookmarks links as and when they come across it, applying their tags – which when using both Delicious itself or the browser extensions or add-ons that it offers comes with the additional feature of pre-emptive tagging based on what others have tagged the link with already – so the information access points are constantly opening and the access to fandom's output increases dramatically.

The community has adapted yet another tool as a method of benefiting the culture as a whole and this adaptation has lead to the development of a community based folksonomy that can be applied to information in multiple situations and provides

access to information at a rate that has not been previously seen in the community or culture as a whole. They are, to call upon another pop-culture reference in this case, Warren Ellis, truly on the Global Frequency.

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