The Social (Tagging) Act of Reading

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ABSTRACT

On Flickr, a Web-based service for managing and sharing digital images, reading and tagging come together in ways that reveal how people -- as individuals organizing their own photographs as well as making them available for discovery by others -- think about reading when they attempt to depict it in images and in words. In this pilot study of the tags assigned to a sample of 100 photographs tagged with the terms *book* and *reading*, only 80 of the 561 total tags were used more than once. The broad range of unique tags suggests an idiosyncratic approach to labeling that makes it difficult to draw conclusions about images of reading. Consequently, additional searches were conducted on Flickr and the results are reported and interpreted. The paper concludes with a discussion of proposed follow-up research.

Topics

Cultural information systems
Information organization

Keywords

reading, books, social tagging, Flickr, photographs

1. INTRODUCTION

Mitchell Stephens in *The Rise of the Image, the Fall of the Word* describes three places -- a physician's waiting room, a child's bedroom, and a passenger jet -- and asks "What's missing from these pictures?" His answer: "Reading is now missing from countless scenes it once dominated: at kitchen tables, on buses and trains, in beds at night, on couches, even in some classrooms."

, p. 8] Reading of literature in particular is less present in American lives, according to a National Endowment for the Arts survey, which in 2004 identified "an overall decline of 10 percentage points in literary readers from 1982 to 2002, representing a loss of 20 million potential readers." [6] At the same time, scholars of print culture have produced quantities of studies

of reading, both current and historical. The work on current reading practices often uses ethnographic methods to observe and interview readers while the historical studies draw on the customary sources of historians, archival and published texts, to reconstruct readers and their experiences. Their work documents the political, social, individual, and cultural functions, uses, and meanings of reading in diverse circumstances and locales.

Reading would at first glance seem to have nothing to do with collaborative or distributed tagging of information resources, especially images. Both are of interest to researchers and teachers of library and information science (LIS), albeit to different and probably not overlapping communities of interest, despite the fact that neither reading nor tagging is considered core to LIS paradigms or to the LIS curriculum [4], [9]. Print culture theorists understand reading as both a solitary and a social act. Similarly, social tagging of information resources has both individual and social aspects. One place where reading and tagging come together is Flickr, a Web-based service for managing and sharing digital images. Images tagged "reading" constitute a new body of documentation for print culture scholars, who typically have relied on the word to study the word, but they also offer a body of data for LIS researchers interested in understanding the phenomenon of collaborative indexing and what it can tell us about amateur or what Beghtol [1] has called "naïve" information resource description and organization. Corinne Jorgensen [4] has pointed out that there are now three ways to provide intellectual access to images: human-assigned controlled vocabulary terms, computer-generated indexing, and social (or distributed or collaborative) tagging. She suggests that social tagging may help reduce the "semantic gap" between human indexing with its interest in contextual meaning and automated indexing with its focus on describing the content and characteristics of the object represented in an image.

On Flickr, reading and tagging come together in ways that reveal how people -- as individuals organizing their own photographs as well as making them available for discovery by others -- think about reading when they attempt to depict it in images and in words. How people conceptualize and represent reading in the early 21st century matters to students of print culture interested in the continuing and changing activities and behaviors associated with literacy and to students of information interested in the continuing and changing activities and behaviors associated with resource description for organization and retrieval. Consequently, this paper marks the beginning of a research project designed to uncover and analyze modern-day graphic and textual representations of reading in everyday life. The preliminary work reported here focuses on identifying what is depicted images

labeled with the tags *books* and *reading*. This work will serve as a foundation for further research into the relationship between reading and tagging as social acts but also as an intellectual interaction characteristic of life in the Information Age.

2.   METHODS

Approximately 55 million photographs are on Flickr. [3] The number fluctuates as new photos are uploaded and as existing ones are removed. A simple keyword search of the full text of Flickr for *reading* yields more than 700,000 results (after deleting those where the keywords *pennsylvania*, *penn*, and *pa* also occur in an attempt to eliminate photographs of the city of Reading). When the search is limited to tags only, the result is almost 109,000. This pilot study used two methods to reduce the number of results for the purposes of this report. The search query included the words *reading* and *book* limited to tags only, bringing the total results to 11,213. A random sample of 100 of these results was selected for the study. The 100 photographs depicted a range of compositions including individuals and groups handling books, still-life compositions involving books with other objects such as coffee mugs and eyeglasses, shots of individual books both open and closed, and stacks or piles or shelves of books. The researcher viewed each of the 100 images and their tags and recorded and tabulated the tags.

To address Mitchell Stephens's assertion about where reading occurs, additional searches were conducted using keywords such as *train*, *bus*, and *airplane* combined with *book* and limited to tags only. The point is not to prove that books still have a place in the Information Age as evidenced by their robust representation on a photo-sharing site, but to explore what constitutes "reading" to the collective mind of Flickr image taggers and to elicit questions for further investigation.

3.   FINDINGS AND ANALYSIS

Although this study is limited to images tagged with both *reading* and *book*, many other keywords related to the topic are assigned as tags on Flickr. Table 1 lists some of them and the number of records with those tags (as of 01/24/08), ranked by most to least common. The singular form *book* is the most commonly used tag, but it is not clear that every image tagged with the term is using that keyword to mean the printed codex. What is clear is that some photographs tagged with the term book do not depict a book at all but merely evoke the idea of a book, such as the image of a young man looking down [2] or of a solitary bookmark [5]. Not surprisingly, more specific tags, such as *novel* and *hardcover* are used less frequently than broader tags.

Table 1. Reading-related keywords as Flickr tags

Keyword	Occurrences
Book	199,416
Books	137,162
Reading	108,553
Read	13,755
Novel	5,842
Reader	3,806
Paperback	2,999
Novels	1,713
Readers	1,597
Hardcover	814
Mybook	747
Reads	654
Mybooks	644
Hardback	479
Softcover	406
Chapbook	233
Chapbooks	22

Although the 100 photos included in this study are not necessarily tagged with the keywords shown in Table 1, they nevertheless are useful because they were tagged with two of the most popular ones: *book* and *reading*. The number of unique tags beyond *book* and *reading* assigned to these 100 photographs totaled 559. Of the 561 total tags assigned to the 100 photographs, only 80 were used more than once, as shown in Table 2.

The terms have not been grouped into categories, but some ways to do that are obvious. For example, it would make sense to combine the terms *me*, *self*, and *self-portrait* (which is a already a combination of *self-portrait* and *selfportrait*) into a single group

Table 2. Additional tags for photos tagged *book* and *reading*

Tag	Occurrences
Read	9
Books	7

Tag	Count
Me	7
self-portrait	6
Coffee	5
Girl	5
Library	5
People	5
Art	4
Café	4
Christmas	4
Glasses	4
portrait	4
Woman	4
2005	3
American tour	3
Author	3
baby	3
beautiful	3
Bed	3
Blue	3
bookstore	3
Bouchercon 2007	3
Country	3
crime writer	3
France	3
Glacier	3
Home	3
literature	3
Michael Jecks	3
novelist	3
Paris	3
Red	3
San Francisco	3
School	3
Signing	3
View	3
Writing	3
365 days	2
365days	2
Architecture	2
Beach	2
Black	2
Bookmark	2
Bw	2

Tag	Count
bwPingu	2
California	2
Cat	2
Days	2
Display	2
Dog	2
Doll	2
Eslite	2
Eslitebooks	2
Explore	2
Family	2
Felt	2
Holiday	2
Illustration	2
India	2
lady	2
Lesson	2
Librarian	2
Libro	2
Livro	2
Man	2
Mom	2
Nikon	2
Peets	2
Reader	2
Self	2
Shoes	2
Sitting	2
Statue	2
Story	2
Street	2
Student	2
Studying	2
Sunset	2
Taipei	2

totaling 15 occurrences in the 561 tags used in the 100 photos. But the tag *me*, tied for second place with 7 occurrences, is interesting in and of itself.

It's commonplace for library and information science (LIS) practitioners and researchers to assert that tags are akin to subject headings and indexing terms, but the tag *me* arose out of social tagging and not out of formal, expert controlled-vocabulary construction. For those of us with an LIS background, the tag *me* seems superfluous at best and downright nonsensical given its ambiguity and its seeming lack of utility for information retrieval. And, yet, it has its uses, however unexpected. One Flickr user has

written: "The 'me' tag is easily my favourite tag on Flickr, it shows the wide variety of different folks who post to Flickr, a wide variety of ages and genders, appearances and attitudes." [8] Tagging a photo *me* may serve as the photographer's way to take credit for their work without having to reveal their real name or other personal information.

Table 2 does not indicate what's most striking about the ways in which images related to reading are tagged because it does not list the 479 tags assigned to only one of the 100 photos in the sample set. These unique tags range alphabetically from *A train* to *zig*. Many of them are the first names of the individuals captured in the photographs. Others are the titles and authors of the books depicted. As with the tags in Table 2, such as *library* and *studying*, some of these single-use terms seem highly correlated to the reading of books. For example, the terms include *literary festival* and *author event*. Other terms, such as the active *sailing* and the passive *sleeping*, seem incompatible with the act of reading.

The tags for the sample of 100 images do not quite address Mitchell Stephens's assertion that it is rare to find people reading in public or private spaces. The sample set is small relative to the total number of images on Flickr. And people do not tag in a systematic manner requiring them to make sure every object shown in a photograph has a corresponding tag. But a search in all of Flickr combining the tag *book* with other tags representing a variety of settings did turn up some results worth considering, as seen in Table 3.

Beach emerged as the most frequent setting of the setting-related tags searched. It may be that people take books to the beach in greater numbers than to Starbucks. Perhaps they take newspapers to Starbucks instead. It could also be that people take books and digital cameras on the relatively rare and relaxed days when they visit the beach more often than they take both to Starbucks when they stop in on their way to work. In other words, each row in the table can only suggest some of the contexts in which books can be found. The table as a whole, however, provides us with a sense that some books coincide with some people's eating, drinking, loafing, and traveling.

And with their shooting and sharing of photographs.

Table 3. Photos with *book* tag and a contextual tag

Tags	Occurrences
beach	1,436
table	1,096
coffee	992
bed	929
park	788
train	594

kitchen	502
café	495
lunch	494
hotel	452
couch	439
bedroom	357
office	338
Starbucks	201
dinner	200
bus	176
pool	173
breakfast	170
metro	160
subway	159
airplane	158
waiting	117
coffeeshop	66

4. FURTHER RESEARCH

This preliminary study cannot offer definitive conclusions, but it can serve as the foundation for further research, especially because it can suggest additional questions to ask and methods to use.

Here are some research questions that have occurred to me and that I plan to pursue as a result of this early work.

- What demographics are represented in photos depicting people and books? What proportion show different age groups, genders, ethnicities, and nationalities? What are the methodological issues involved in trying to interpret demographics from images when the accompanying tags do not provide any demographic indications?

- Which books are shown in photographs tagged with terms related to books and reading? Which authors are represented, which specific book titles, and which categories of books are shown and in what proportion? What impact does a media event such as the release of a Harry Potter book have on the number and type of photos published?

- How do the titles and captions and comments supplement or subvert the tags assigned to photos? How does the photostream and/or themed set in which the photo appears alter the viewer's understanding of the photo?

- To what extent are photos of reading staged versus candid? To what extent is the book a prop? What is the function of the book as prop—for creating a particular

self-image or for product (or author or bookstore or library) promotion or to evoke the centuries-old symbol of literacy or revolution or erudition?

The last set of questions will require surveying and/or interviewing photographers. The remaining questions can be answered largely through the use of good data gathering and analytic methods.

Flickr is a popular and successful social networking site and its features serve its users well. But the researcher needs different kinds of features and functions. The large number of unique tags assigned to photos, the lack of a highly developed search engine with full Boolean operations and truncation devices, and the absence of a controlled vocabulary of indexing terms hamper the researcher's ability to retrieve a reliable and accurate set of results depicting reading. Consequently, the data-gathering and analysis methods used in subsequent work on this topic should include researcher-generated indexing terms for each image being studied. This approach would introduce much-needed consistency; for example, a photo of someone reading in the aisles at Borders and another of a reader sitting in a chair at Barnes & Noble would both be assigned a controlled-vocabulary term such as "bookstore." This approach would also allow not only for greater consistency but also for comprehensiveness, at least for the researcher's interests. For instance, a photo of a person sitting on the grass in a city park would probably never be tagged "public" but the researcher interested in making a distinction between reading in public and reading in private would find such a tag useful.

Finally, the researcher's work should be grounded not only in the literature of social tagging but in the theory of the social uses of photography and in work on the intersection of print and digital culture.

5. CONCLUSION

The practices of sharing digital images and providing collaborative tagging to describe images have created an intriguing body of work that can be mined for information related to many topics, not least of which is the topic of books and reading in the era of digital information. But neither images nor their labels offer unambiguous evidence for the persistence of the printed codex, its relative presence in people's lives, or the uses to which it is put. A preliminary look at a selection of digital photos tagged *book* and *reading* suggests that, with carefully crafted research methods, both image and word can be studied together to help us understand individual and social uses of reading, or perhaps more accurately, individual and social uses of representations of reading.

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