

Democratic Conceptualizations: User-Driven Metadata in Libraries

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During my career at the iSchool, I have become increasingly interested in user-centred design in libraries; specifically, the technologies in place to facilitate information-seeking and make navigating the library catalogue more intelligible to a generation familiar with, and entangled in, social media. As library professionals, we must meet patrons' demands, and, in a sense, speak the language that they use, as opposed to insisting that they embrace traditional methodologies stemming from library practices developed before the invention of the computer. As the idea of the library is evolving from that which was a quiet place of books with shushing-spinsters, to more of a media commons, and with traditional card catalogues transformed into Machine Readable Card Catalogue (MARC) records and uploaded into Open Public Access Catalogues (OPACs), the interface, too, needs to change. With the abundance of information being digitized and made accessible online, there needs to be a way to make it more intelligible to the average user. Information literacy cannot be assumed, and, therefore, accommodating and emulating the way people approach other forms of social media, would make the library seem more welcoming. As the library is becoming an increasingly social place, then it, too, must transform its image and platform to welcome today's tech-savvy, "born digital" generation's information-seeking behaviours. As formats are changing, so must the ways in which we think about these formats; and, as the collection has moved beyond books on a shelf to online databases, video games, material samples, online images, videos, etc., we must make the whole process more user-friendly and seek new ways for users to engage the collection in the same way they are accessing it: online. In this paper I argue that while formal cataloguing practices are still heavily used in libraries today, the shift toward social tagging allows for personalization in a digital world where information is becoming increasingly commoditised, and said practice echoes the information-seeking behaviours of users on the World Wide Web which is more

about browsing and serendipitous discovery than utilizing controlled vocabulary found in most taxonomies. Miming the way users search the Internet at large will make searching the library catalogue more intuitive to library amateurs. Furthermore, this paper explores the notion as to whether welcoming and implementing individual user-driven metadata applications in form social tagging might better capture the "aboutness" of library materials reflective of the mental model of a community of practice (i.e., library patrons/users) as opposed to the standards maintained by information professionals/gatekeepers (i.e. librarians). Prior to examining contemporary avenues and options in place to modernize libraries' cataloguing practices, tracing the history and approaches to cataloguing, specifically subject cataloging, is useful to understand how and why they need to be revamped to cater to today's information-seeker.

According to Hanson and Daily (2009), in the narrowest sense, the process of "cataloguing is the compilation of headings and bibliographic descriptions for use in the catalog[ue]" (p. 819). As Taylor and Jourdrej (2009) explain, "[c]ataloging is a subset of the larger field that is sometimes called bibliographic control or organization of information" (p. 789). Bibliographic control is "the skill or art [...] of organizing knowledge (information) for retrieval" (Svenonius, 1981, p. 88), and is a process that encompasses "the creation, storage, manipulation, and retrieval of bibliographic data" (Smiraglia, 1987, p. 15). Put simply, bibliographic control is the "process of describing information resources and providing name, title, and subject access to the descriptions, resulting in records that serve as surrogates for the actual items of recorded information" (Taylor and Jourdrej, 2009, p.798). Not too long ago, this bibliographic information was put on "three-by-five catalog[ue] cards, filed in alphabetical order in long wooden drawers" (Fritz and Fritz, 2003, p.4), allowing patrons to search library "collections by flipping through the cards,"(Fritz and Fritz, 2003, p. 4) and jolting down the call

number of a found item of interest. Today, many libraries have “switched to using computer catalog[ue]s to provide the bibliographic information” (Fritz and Fritz, 2003, p.4) and the purpose of that information, to fulfill the objectives outlined by Charles Ammi Cutter back in 1876: “to enable a person to find a book [or video, electronic resource, etc.] of which the author, the title, or the subject is known”; “to show what the library has by a given author, on a given subject, or in a given kind of literature”; and “to assist in the choice of a book [or sound recording, map, etc.] by its edition (bibliography) or by its character (literary or topical)” (Fritz and Fritz, 2003, p. 4). MARC is a “standard for entering bibliographic information into a computer record that can be used by a library automation system to provide a library catalogue” (Fritz and Fritz, 2003, p.xiii); moreover, it is a “communications tool designed for the creation and sharing of bibliographic information in a computerized or online environment” (Rubin, 2019, p.152). Included in this “bibliographic information, and, therefore, in MARC records are: descriptions of library materials; searchable headings, such as authors and subjects; and elements to organize collections, such as classification numbers” (Fritz and Fritz, 2003, p. xiii). It is important to note that “MARC provides the vehicle [...] to communicate bibliographic data electronically between libraries” (Fritz and Fritz, 2003, p. 8); it is a “standard for entering bibliographic information into a computer record” (Fritz and Fritz, 2003, p. 8).

Anglo American Cataloguing Rules 2 (AACR2) are the “universally agreed-upon rules for the content of the MARC records” (Fritz and Fritz, 2003, p. 8). As Michael Gorman (2004) stated in *The Concise AACR2*, a “bibliographic resource (often referred to as an “item”) is a manifestation of a work that forms the basis for a bibliographic description” (p. 5) and can be “a book or other printed document; a Website, database, or other electronic resource; a graphic such as a poster or art work; a video or film; a CD or other sound recording or any other means by

which recorded knowledge and information are communicated” (p.5). As such, AACR2 “contains instructions on how to make a description of such a resource that has been acquired by our library or to which your library gives access (as in the case of remote electronic resources)” (Gorman, 2004, p.5). In describing “library materials according to these rules, a basic principle is that you describe the actual bibliographic resource in the format acquired by your library or to which your library gives access” (Gorman, 2004, p.5), and that “description is displayed in a catalogue after having been retrieved by the use of one or more access points established for the item” (Gorman, 2004, p.5). On a basic level, AACR2 are rules on how to describe an item, whereas subject headings “use standardized lists of valid headings, referred to as controlled vocabularies and thesauri” (Fritz and Fritz, 2003, p.9) to make consistent terminology possible.

Subject cataloguing is the process of “determining what subject concepts are covered by the intellectual content of a work, and in the case of some creative works, the form or genre represented by the resource” (Taylor and Jourdney, 2009, p.802); these concepts are then translated into controlled vocabulary (i.e., subject access headings). In other words, the cataloguer seeks the “headings that best represent the subjects of the work in words and/or phrases prescribed in an authoritative list” (Ganendran and Farkas, 2007, p.7). Subject heading lists “control terms for both the information organizer (i.e., cataloguer or indexer) and the information-seeker (the patron)” (Rubin, 2010, p.134). Arranged alphabetically, types of subject headings include: single noun or verb, adjective with a noun, prepositional phrases, compound or conjunctive phrases, phrases or sentences, and can also include subheadings by time, geography, or format (Rubin, 2010, p.135). The aims of subject cataloguing are as follows: to “provide access by subject to all relevant materials”; to “provide subject access to materials through all suitable principles of subject organization (i.e., matter, process, application)”; to “bring together

all references to material on the same subject regardless of the different terminology, different subject approaches, and the changing nature of the material itself” ; to “show affiliations among subject fields” ; to “provide entry at any level of analysis”; to “provide entry through vocabulary common to any considerable group of users” ; to “provide a formal description of the subject content of the item in the most precise terms possible, whether this be a word, phrase, or class number etc.” ; and to “provide the means for the user to select from among all items in any particular category—e.g., most recent” (Ganendran and Farkas, 2007, p.7). However, as Mai (2005) highlights, “[i]t is often implicitly assumed that the document will present its subject matter to the indexer [or cataloguer] and that the indexer [or cataloguer] can establish the document’s subject matter by a simple analysis of the document” (p. 599). Building on this stance, Wilson (1968) points out that the “notion of the subject of a writing is indeterminate, in the following respect: there may be cases in which it is impossible in principle to decide which of two different and equally precise descriptions is a description of the subject of a writing, or if the writing has two subjects rather than one” (p. 89), and it is for this reason that “it is practically impossible to instruct indexers or catalogers [on] how to find subjects when they examine documents” (Bates, 1986, p.360). As such, this process of subject classification depends on the “interpretative choices” (Mai, 2005, p.604) the cataloguer makes, a process which Fish (1980) outlines in the following passage:

if meaning is embedded in the text, the reader’s responsibilities are limited to the job of getting it out; but if meaning develops, and if it develops in a dynamic relationship with the reader’s expectations, projections, conclusions, judgments, and assumptions, these activities (the things the reader does) are not merely instrumental, or mechanical, but essential, and the act of description must both begin and end with them. (p. 2–3)

Therefore, substituting reader for cataloguer, the cataloguer is merely selecting from a preapproved list of terms and guidelines, and the heading(s) they deem most appropriate based upon their understanding of the item in question. This subjective process of subject classification vis-à-vis assigning subject headings to items in the catalogue raises the question as to whether an individual's (i.e., cataloguer's) interpretation is the best way to represent and provide subject access. As such, why must this process be the sole responsibility of one individual, or group of likeminded individuals? Is the question, then, more about catering to the logic borne from the traditions established when libraries were private collections, accessible only to select individuals, thus placing the onus on the library patron to channel the logic behind why things are being catalogued the way they are?

As Hanson and Daily (2009) delineate, traditionally speaking, the keeper of books, now known as librarians, "sought to organize the materials in a manner suitable to his needs or those of his immediate associates, without particular regard for ease of accessibility" (p. 819); as such, this ultimately raises the question as to whether the practices that originated from this exclusive mentality must remain employed and utilized in libraries in the public domain. As De Rosa, Dempsey, and Wilson (2004) explain, the "library itself has long been a metaphor for order and rationality" (p.ix), and the "process of searching for information within a library is done within highly structured systems and information is exposed and knowledge gained as a result of successfully navigating these pre-existing structures" (p. ix). Following this logic, in order to find information within the catalogue, one must think like those that created it—they must think like librarians, and they must think in the terms selected by the librarians to describe content. As such, traditional catalogues allow for users only to navigate them in the ways in which they were originally designed to be used by librarians, forcing users to think in a very structured

manner/fashion which, for most, is foreign and unnatural. Drawing on Foucault's (1980) position that power and knowledge are inseparable, power and relationships are inevitably built into information technologies; moreover, technology can affect the distribution or control of knowledge and thus power. With these strict guidelines in place, libraries hold the power concerning how patrons access information, forcing patrons to abide by and respect their standards, and, thus, controlling how patrons access valuable information. Moreover, with the use of controlled vocabulary (i.e., subject headings), there is the insistence that there is only one way of looking at things; there is only one meaning to derive from a work, and such singularity is a violent and reductive act, forcing patrons to look at a work from only one perspective. If the library is truly meant to serve its users, then perhaps they need to rethink their structure, and give up control. This singularity not only does violence to the potential reader, misleading them into thinking that an item is only that which is listed from a selective, preapproved list, but also does an injustice to the item itself by limiting it to only a few select descriptive words.

Turning our view to the catalogue, as it shifted from the cards in shelves to an online platform, it is necessary to discuss the implications and prospective of said transition. Farkas (2007) notes that since the World Wide Web has gone "mainstream," it "has changed the way we look for information" (p. xxi); moreover, the "Web enhances many activities that predate the Web: it also enables many activities we could never have done before" (p. xxi). Similarly, Rubin (2010) discusses how the advent of technology has fundamentally changed the original conceptions of a library catalogue stating that the "term online catalogue is probably no longer accurate, for the catalogue has become a portal to a universe of information far beyond the walls of the library" (p.250). Rubin (2010) refers to today's library catalogue as the "next-generation catalogue," insofar as it has become a "one-stop shop for accessing the physical holdings of the

library, allowing a patron to access their availability and reserve them, and in some cases, triggering a delivery system” (p. 250), as well as linking the “user directly to the Web, to sites and databases with thousands of resources including periodicals with full text” (p. 250). As libraries are expanding their collection to include formats other than books and periodicals, this evolution in content should also evolve in content management. Moreover, in a report on online catalogues, OCLC (2009) found that “the principles of usability and user-centered design might be said to have displaced the traditional principles of information organization, at least as librarians have practiced them” (p. 59). On that note, De Rosa, Dempsey, and Wilson (2004) state that, compared to the library, the Web is “anarchy,” and describe it as “free-associating, unrestricted and disorderly” (p. xi); and when it comes to looking for information on the Web, “[s]earching is secondary to finding and the process by which things are found is unimportant” (p. xi); moreover, the “individual searches along without expert help and, not knowing what to be discovered, is satisfied” (p. ix). Therefore, libraries need to begin to emulate the information-seeking behaviors common to these popular sites, beginning with how users interact with, and devise their own way of navigating and organizing their lives online.

According to Kroski (2008), “[t]echnological advancements accompanying the new Web have brought along with them a movement toward organizing data in the public sphere” (p.53); “[c]onsequently, these innovations have brought about the pioneering development of discover systems” (p.53) i.e., social tagging. Social tagging, according to Vander Wal (2005) refers to the practice of publicly labeling or categorizing resources in a shared, on-line environment.; thus, the resulting assemblage of tags form a ‘folksonomy’: a conflation of the words ‘folk’ and ‘taxonomy’ used to refer to an informal, organic assemblage of related terminology. As Trant (2009) highlights, these tags, “[w]hen shared with others, or viewed in the context of what have

tagged, these collections of resource identifiers, tags and people begin to take on additional value through network effects” (p.1). Kroski (2008) also notes that social bookmarking Web sites focus on “managing and sharing information” (p.53) for as “users arrange, sort, and share their data in these social settings, they collectively create a repository of user-recommended resources and potentially likeminded people to be explored by the populace” (p.53). These “discovery networks emphasize browsing rather than searching in hopes that people will stumble upon serendipitous resources in the course of their journeys” (Kroski, 2008, p.53), a concept that Marlow et al. (2006), echo and expand upon in stating that searching tags can enable the discovery of relevant resources, and the social relationships that develop among taggers become a means of information discovery in and of themselves. As Trant (2009) delineates, “[u]ser-generated keywords—tags—have been suggested as a lightweight way of enhancing descriptions of on-line resources, and improving their access through broader indexing” (p.1). Therefore, the inclination towards organizing the Internet suggests that users want tools to help organize their online behaviour. That said, welcoming technologies that allow users to organize the library catalogue in way intelligible to them might encourage more interaction and involvement with the library, as opposed to settling for and attempting to decipher the classifications assigned strictly by cataloguers. As such, users should be responsible for content creation, not just cataloguers, thus opening it up to unconventional individual conceptions as opposed to insisting that all patrons be subjected to a predetermined subject classification schema. While some libraries employ local cataloguing practices (i.e., use terms reflective of their own collection, and local communities), why not go a step further and allow for users to catalogue (i.e., tag) the works as they see them?

As such, libraries should exploit Web 2.0 functionalities, technologies which O'Reilly (2005) calls the "architecture of participation" (p.7) insofar as users on the Web can engage with and create content online. According to Cahill (2010), the "whole ethos of Web 2.0 has evolved around the effectiveness of keywords, natural language and bottom-up folksonomical organization rather than formal hierarchies and classification schemata" (p.177). A clear advocate for Web 2.0, Cahill (2010) states that "by incorporating the ability for users to tag content – for example, individual books or blog posts – you enable them to build a classification system using the kind of terminology that makes sense to them" (p.177); moreover, by making the "aggregated tags available to other users, you're creating a system of serendipitous discovery where users can browse tags to find content related to topics they're interested in" (Cahill, 2010, p.177), much like how they search for information on the World Wide Web. In other words, in terms of organizing and finding information, the "key with user-generated content is discovery rather than formal classification" (p.177). Continuously, Cahill (2010) argues that informal folksonomies are not the "highly controlled hierarchical classifications [...] taught in library school" (p. 177); rather, they represent an "enormous enhancement of the user experience" (p. 177). As Farkas (2007) states, folksonomies are created by "everyday people," so they "reflect the language that people actually use to refer to concepts[...] [and] the terms are more likely to reflect the language the author [i.e., tagger/patron] used in his or her own world" (p. 135). While controlled vocabulary (i.e., subject headings) were created to "disambiguate polysemes (words with multiple potential meanings) and gather similar terms" (Farkas, 2007, p.135), "folksonomies reflect the terms people actually think of when they are tagging the object" (p.135). According to Spiteri (2012), "[w]hen users add metadata... to the existing catalogue records in the forms of tags, they are given the opportunity to express their understanding of, and

interaction with, the intellectual content of works in ways that express their own points of view, language, and culture” (p.211-212). Arguably, enabling users to assign tags is a far more democratic practice, soliciting patrons’ understandings and opinions as opposed to insisting institutional methods remain the same.

According to Cahill (2010), there is “no reason why folksonomies cannot exist alongside the more formal classification schemes” (p.177), for “[m]ore and more we’re seeing a crossover of traditional classification systems with these kinds of informational, user-created folksonomies” (p.177). For example, in the University of Toronto Catalogue, the novel by Rohinton Mistry, *A Fine Balance*, only has the following three Subject headings assigned: “Apartment houses in Indian Fiction,” “City and town life in Indian Fiction,” and “Indian History 1947—Fiction” (see Figure 1). Anyone who has read this novel will know that these descriptions do not come close to capturing such a powerful text. From these subject headings, one would never know that this book is about beggars, child mutilation and abuse, caste violence, arbitrary force, poverty, Indira Gandhi's government, corruption, tailors, family relationships, dignity, and humanity, to list a few. There is also no way that one would learn from this record that the novel was written by a Canadian, and was shortlisted for the Booker prize, featured in Oprah’s Book Club, or part of the 1001 Books You Must Read Before You Die list. Contrasting this record with Ann Arbor’s District Library¹ catalogue record, one can see under the “subjects” that roughly the same subject headings are listed; however, underneath are tags added by users: “skyline worldlit,” “1001 books,” “Oprah’s Book Club,” and “Historical fiction” (see Figure 2). Granted that the tags assigned are still rather limited, they do, however,

¹ Ann Arbor District Library uses BiblioCommons, an Integrated Library System (ILS) that supports social tagging. While older ILSs do not offer this option, Third Party software can be purchased enabling social tagging. As an aside, the aim of this paper is not to discuss the compatibilities of software, rather to explore how social tagging engages library users, building upon the static and sometimes overly general, formal subject headings assigned by cataloguers.

reflect what the library patrons deem to be relevant and useful for describing this work.

Moreover, it is interesting to note that the formal subject headings assigned in no way echo or reflect how the patrons view the item. To reiterate, as Farkas (2007) highlights, “these services give some patrons more information about library materials than is available from the traditional library catalogue, and let patrons offer useful insights to their community” (p.140). Perhaps even more illustrative is comparing University of Toronto’s Record for a better known work, Shakespeare’s *Romeo and Juliet*, to Ann Arbor District Library’s. The University of Toronto lists three subject headings: “Juliet (Fictitious character) Drama,” “Romeo (Fictitious character) Drama,” and “Vendetta Italy Verona Drama” (see Figure 3). Ann Arbor’s lists similar subject headings, with the addition of the following tags: “love at first sight,” “renaissance,” “the nurse,” “poison,” “prince escalus,” “friar (sic.) Laurence,” “romance,” “tybalt,” “tragedy,” “star-crossed lovers,” “what light through yonder window breaks,” “a rose by any other name,” “montagues,” “Verona,” “family feud,” “capulets,” “young love,” “queen mab,” “mercutio,” “wherefore art thou romeo,” “love,” “apothecary,” “benvolio,” “chance,” “Paris,” “fate,” “suicide,” and “romance” (see Figure 4). As Farkas (2007) notes, “[t]agging the catalogue is one way library users could offer feedback on the ‘aboutness’ of materials” (p.140). The user-generated content in form of tags unveils individual ways to conceptualize subject information, and, additionally, can be used as a form of reader’s advisory whereby patrons can click on any of the tags listed to view other items in the library catalogue that have been assigned the same tag.

As MARC records enable libraries to share records with one another, and AACR2 standards and subject headings ensure consistency between catalogue records that facilitate streamlined searching, the addition of social tagging enables users to share how they see the item as well; for in the end, it is the user for whom the catalogue is created and the collection

maintained. As librarians, our obligation is “not to choose the system that makes the most sense to us and force our users to learn it (which has tended to be our approach in the past) but to make sure our users have access to [a] system that makes the most sense for them, and enhance that where we can with our own knowledge and understanding” (Cahill, 2010, p.177). As such, libraries need to be aware of the “valuable information they can glean from patrons and their behaviour” (Farkas, 2007, p.147), particularly in the form of the tags that they assign to content in the catalogue. Moreover, libraries should “consider how they can capitalize on this new trend toward user-created metadata and content, and how social bookmarking can benefit librarians, libraries, and [library] patrons” (Farkas, 2007, p.147), for “collecting this sort of information can allow libraries to develop collaborating filtering systems to help some patrons make better decisions about what to borrow” (Farkas, 2007, p.147), thus informing, and ultimately, enhancing their services.

It is not argued that folksonomies will replace formal cataloguing or subject headings, because, as Sennett (1980) states, “[w]ithout ties of loyalty, authority, and fraternity, no society as a whole, and none of its institutions, could long function” (p.23). As Spiteri (2006) asserts, subject headings and controlled vocabulary “should continue to be used for searching purposes, and it could certainly be used to organize personal information spaces if the vocabulary meets the users’ needs, but folksonomies would allow users to complement [subject headings and controlled vocabulary] in their personal information spaces” (p. 76). Farkas (2007) explains that “[s]ome web pundits have declared the death of taxonomies; they argue that because tagging is easy to do and reflects the ways users perceive objects and phenomena, folksonomies are universally preferable” (p. 137). However, Farkas (2007) also notes that taxonomies (i.e., subject headings or controlled vocabulary) have one term that refers to each unique concept because

people “use different terms to refer to different concepts” (p.137), emphasizing that “synonym control” (i.e. bibliographic control) is “part of all taxonomies” (p.137). Farkas (2007) also asserts that folksonomies do not disambiguate between polysemous terms “by creating different categories for each meaning. Taxonomies are hierarchical, making it easier to understand the relationship between terms. In folksonomies, no explicit relationship exists between tags” (p.137). Therefore, social tagging will never entirely replace subject headings and controlled vocabulary; however, it is as short sighted to stand strong by traditional practice for tradition’s sake as it is foolish to attempt to disregard centuries of practice.

Perhaps, it is safe to say that, in today’s digital environment, subject headings determined by thesauri and subject lists in static catalogue records do not appeal to today’s users in the same fashion they might have to a generation unfamiliar with the Internet. As the Internet revolutionized information-seeking behaviours, the gatekeepers of that information (i.e., libraries, librarians, and library catalogues) must remain current with the times. As libraries have increasingly become social and creative settings, allowing users to create content by offering individual ways of organizing the collection through social tagging will help better inform the collective, and maintain relevance to today’s user who thinks in an abundance of keywords and Google search statements, as opposed to controlled vocabulary.

Appendix




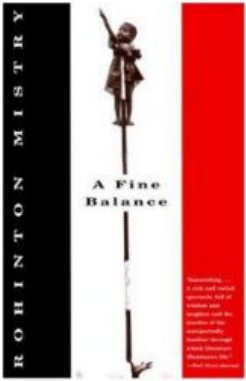
| | | | | |
|---|--|--|---|---------------------------|
| Title | A fine balance : a novel / by Rohinton Mistry. |  | | |
| Imprint | New York : Knopf : Distributed by Random House, 1996. 1st U.S. ed. 603 p. ; 25 cm. | | | |
| Language | English | | | |
| A Look Inside | Summaries First Chapter Full Text Reviews Reviews Awards | Book  | | |
| Holdings | Details | Subjects | A Look Inside  | MARC View |
| Find other items about the same subject: | | | | |
| | Subject Apartment houses India Fiction. | | | |
| | Subject City and town life India Fiction. | | | |
| | Geographic Term India History 1947- Fiction. | | | |

Figure 1 Screenshot of the University of Toronto's Catalogue Record for Rohinton Mistry's *A Fine Balance*



ROHINTON MISTRY
A Fine Balance

A fine balance

by [Mistry, Rohinton, 1952-.](#)

There are no copies available and 1 request on 2 copies

Where To Find It

Call number: [Fiction](#)

[Show All Copies \(2\)](#)

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(1 rating - [Login](#) to add yours)

Published: New York : Knopf, 1996.
Year Published: 1996
Edition: 1st American ed.
Description: 603 p.
Language: English
Format: Book

ISBN/Standard Number

140003065X (softcover)
0679776451 :
0679446087 :


Subjects

[Apartment houses -- Fiction. -- India](#)
[City and town life -- Fiction. -- India](#)
[India -- Fiction.](#)
[India -- Fiction. -- History -- 1947](#)

Tags

[skylines](#) [worldlit](#) [1001 books](#) [Oprah's Book Club](#) [Historical fiction](#)

[Login to add tags](#)



MISTRY



Contents Search  

Figure 2 Screenshot of Ann Arbor District Library's Catalogue Record for Rohinton Mistry's *A Fine Balance*

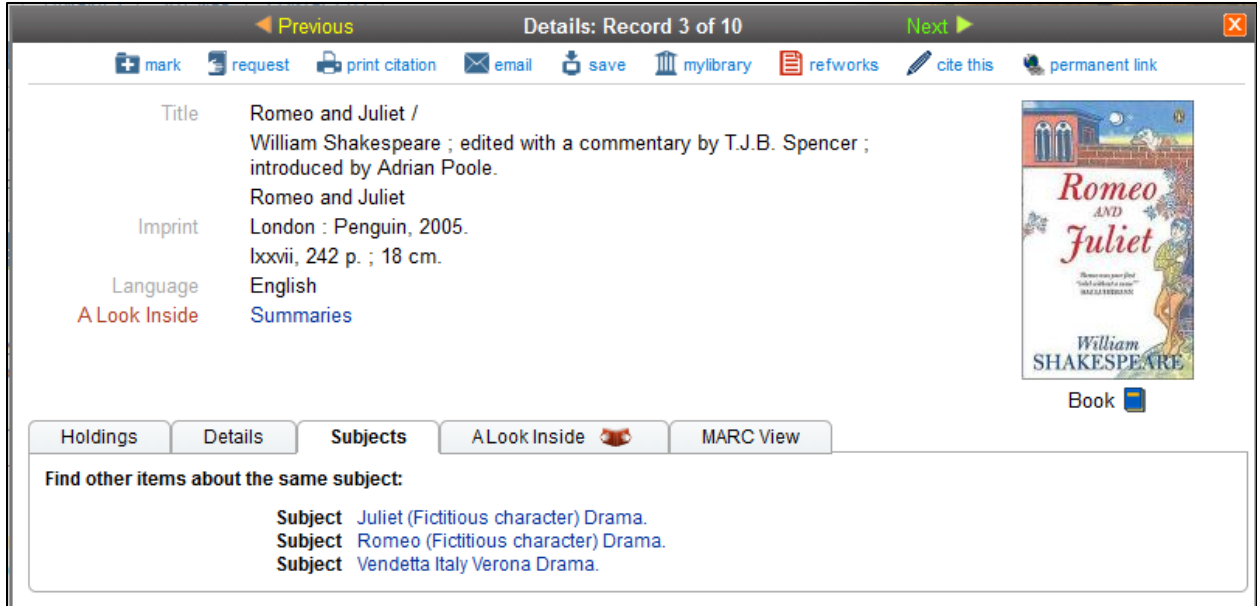


Figure 3 Screenshot of University of Toronto's catalogue record for Shakespeare's *Romeo and Juliet*

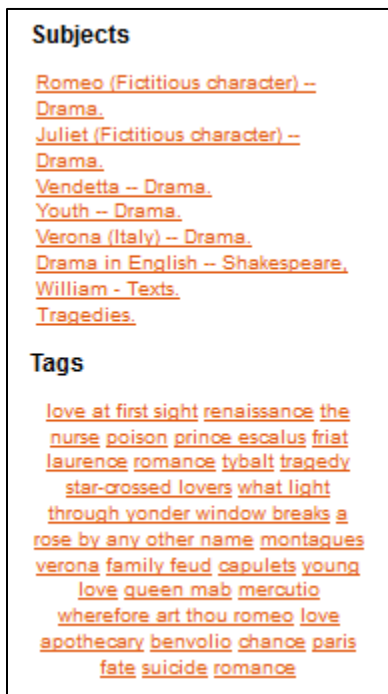


Figure 4 Screenshot of Ann Arbor District Library's catalogue record for Shakespeare's *Romeo and Juliet*

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