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Typology of creator objections to subject cataloguing of their works

Abstract

The Library of Congress Subject Headings is a standardized system for indicating the topics of works held in the library. Since LCSH is built using literary warrant, based on the terminology and proportions of published works, it is appropriate to assess it according to how accurately its terms match the works it is applied to. This creator-centric analysis focuses on areas in which LCSH is more likely to fail, given previous critiques of its biases and outdated language. In a pair of interview studies, creators shared their assessments of the subject cataloguing of their works. One study used works about Indigenous Peoples and the other used items from an LGBT2QIA+ community library. I analyzed the interview transcripts to identify different kinds of objections creators made to the subject cataloguing and how they made these objections. Creators objected to terms included in the records when the terms used were the wrong level of specificity, a poor match to the language used in their works and in their scholarly or creative fields, or misled the reader as to the content of their work. Creators objected to omissions from subject indexing when they expected particular terms to be used by their peers and readers, when they expected the genre or approach to be listed in the record, and when the record left out colonial actors or conflict. Applied to a system built on the principle of literary warrant, the objections from creators reveal major flaws in the term list and its application to published works. The types of errors noted suggest a need for better resourced cataloguing work, including professional development, more time to produce a record, support for nominating new terms, and capacity for local subject indexing and vocabulary management. Other types of errors reveal different understandings on the purpose and scope of subject indexing and imply areas for greater library outreach and transparency.

1. Introduction

Labelling items by subject connects audiences to works, particularly when we are discovering new areas and exploring beyond known-item searches. Studies by practitioners and scholars have repeatedly shown us that despite the availability of full-text searching, keywords, and end-user tagging, professional subject indexing still enhances discovery and helps library users reach relevant items they would not otherwise find (Gross et al., 2015).

Given the importance of subject indexing to discovery of new works, it is particularly harmful that its power is not evenly distributed. Patterns of inaccuracy, inexhaustivity, and bias appear to follow the imbalances of power elsewhere in society, so that the works that most benefit from these systems are those that benefit most from cisheteropatriarchy, colonialism, and racism (Berman, 1971; Olson & Schlegl, 2002).

When subject indexing, library workers most often use centralized controlled vocabularies such as the Library of Congress Subject Headings. These vocabularies, meant to cover the breadth of terminology variation across all of human knowledge and creativity, are powerful tools to connect works through topics, but their term choice and coverage reproduces biases from broader society. We know that many communities find the terminology designated to describe their identities and their practices to be discriminatory and are ill-served by their search tasks relying on the use of outdated slurs (Biswas, 2018; Broadley & Baron, 2019; Haworth Editorial Submission, 1985).

We do not know whether subject indexing using these tools is faithful to the works and discourses it provides access to. The principle of literary warrant states that the controlled vocabulary should reflect the term choice and coverage of the collection itself. Is discriminatory language we see applied to works a reflection of the content of

those works and the broader scholarly or creative discourse to which they are a part? Are they truly representing the items we provide access to through library services, or are they unfaithful both to the communities they reference and the items to which they are applied?

In a pair of related studies, we examined areas in which we could expect subject indexing to fail on the former point: subject indexing for Indigenous topics and for 2SLGBTQ+ (Two spirit, lesbian, gay, bisexual and pansexual, transgender and non-binary, and queer) identities. The flaws in the terminology available in LCSH to describe both these overlapping communities is well-documented (Adler, 2012; Billey, 2019; Bone & Lougheed, 2018; Colbert, 2017; Dudley, 2017; Edge, 2019; Greenblatt, 2011; Hajibayova & Buente, 2017; Howard & Knowlton, 2018; Johnson, 2008). Here, we extend that analysis with a creator-centric assessment, interviewing the creators of items indexed with these terms in order to evaluate their fit to the content of these items and to the contemporary discourses of which they are a part. By starting where these systems are likely to fail, we find the gaps in the typical invisibility of infrastructure, in which background systems that have sunk into our everyday lives become visible in moments of acute breakdown.

In this paper, I document the types of objections creators made to the subject indexing of their works and how they made these objections. We found a need for a multiplicity of representations in order to open catalogue records up to questions from positions outside cataloguing expertise. The objections themselves addressed terms and concepts included in the catalogue record, such as those that misrepresented the content of the item and that recognized that content but used inappropriate terminology, and terms and concepts missing from the catalogue record, such that key content was not captured in the item record and where familiar terminology and anticipated entry points for subject discovery would have been appropriate. I characterize these objections as spanning phenomena established in cataloguing discourse, both those understood as known weaknesses and those judged to be orthogonal to cataloguing practices, and phenomena unique to this analysis. Using the metaphor of light and colour, I illustrate how subject indexing increases the visibility of some concepts, leaves others obscured, and distorts those that fall on the margins.

To establish a shared understanding of subject indexing and its known weakness, the following literature review covers the function of subject indexing, varied methods for assessing subject indexing, and how scholars have previously categorized mistakes or flaws in subject indexing.

2. Literature Review

The literature review here focuses on subject indexing particular, including some works on broader cataloguing functions. I first explore the purpose and impact of subject headings and then established methods for assessing the accuracy or quality of subject cataloguing.

2.1 How does subject indexing matter?

The dominant justification for subject indexing and especially for programmatic, professional approaches is to enable end-user's item discovery (Bates, 1986; Taylor, 1995). The scholars and practitioners of information studies who publish on this

subtopic often have an aim to educate professionals and inform professional practice and the design of catalogue interfaces. In this view, subject indexing brings together similar items not otherwise discoverable through shared authorship or other properties like series. The importance of subject indexing to the discovery function of library catalogues is common to foundational texts on library science (Svenonius, 2000) as well as empirical studies of end-user behavior (Gross et al., 2015).

Beyond this primary purpose, subject indexing is increasingly used as a proxy for item or publication topic in distant reading and machine learning approaches to summarize, map, and assess scholarly publication (Deng & Xia, 2020; Dirrigl Jr & White, 2022; González-Teruel et al., 2015; Onyancha, 2018). In these works, large-scale analysis of digital catalogue records produces knowledge of collections and scholarly fields, such as summarizing an entire field by its keywords and bibliometric analysis.

Subject indexing's least obvious function is quite distant from the framework of instructional works and basic principles. It is possible to read subject indexing as ontological statements about the correctness of terminology and the reality of their referents. In this reading, inaccurate subject indexing is not only a barrier to effective and efficient end-user discovery but also does epistemological harm to the user and to the broader community by validating some knowledge and denying others and by enforcing use of ethically objectionable terminology (Broadley & Baron, 2019; Olson, 2001; Patin et al., 2021).

2.2 How is subject indexing assessed?

Works assessing subject indexing cover both the prevalence of particular types of problems as well as identifying how those errors occur. In this paper, I am primarily interested in the former, with an understanding that the systemic issues such as time pressures are familiar to most catalogue workers. Strong critiques of subject access have focused on the controlled vocabularies themselves, apart from their application to a given corpus. Olson and Schlegl summarized the scholarship on these problems more than 20 years ago, identifying the following types: treatment of the topic as an exception; ghettoization of the topic; omission of the topic; inappropriate structure of the standard; and biased terminology (Olson & Schlegl, 2002). Other relevant perspectives are found within works assessing cataloguing functions more broadly, with the 2017 special issue of *Cataloguing and Classification Quarterly* representing a key benchmark on catalogue assessment scholarship (Mugridge, 2017). Notably, the special issue did not include any creator-centric perspectives on cataloguing functions or assessments or the application of domain analysis.

Within that issue, Snow's article brings together variant definitions of "quality cataloguing" through the methods of measuring cataloguing quality (Snow, 2017). She takes a historical orientation, looking at the development of cataloguing as professional practice interwoven with cooperative cataloguing models and the growth of standardization. This article builds on Snow's 2011 dissertation in which she drew together cataloguers' perspectives to define quality cataloguing as encompassing: the technical details of bibliographic records, the impact on users, the adoption of standards, adherence to cataloguing processes, and competing definitions of accuracy and completeness (Snow, 2011). Together, Snow's works document how ideas of

"quality cataloguing" emerge and are learned through the cataloguing community of practice, which provides context for why cataloguers' assessments are distinct from those of end-users' and creators', findings that are echoed in a 2022 study of cataloguers in Hellenic libraries (Kyprianos et al.). Snow argues are for more research that illuminates users' needs, such as through domain analysis, and that assesses catalogue records through that lens.

Some works on catalogue quality illuminate the effect of flawed or low-quality cataloguing. Petrucciani states that catalogues are failing "to communicate *correct* and *clear* information to users" (2015, emphasis in original). Among the upstream problems Petrucciani identifies is a failure to recognize or to value the function of the record itself and to prioritize cataloguing standards over user experience. Using methods that bridge expert view with user experience, Hider and Tan identified four categories of "errors:" omission, misinformation, typographical, and format (Hider & Tan, 2008). More recently, Theimer reported on cataloguing assessment projects with an eye of how to prioritize and argue for this effort within library technical services (Theimer, 2022).

A number of works assess subject cataloguing specifically, experimenting with methods for producing judgments of inherently subjective assignments (Bodoff & Richter-Levin, 2020; Clark & Smith, 2022; Svenonius & McGarry, 1993). Particularly relevant to the current study is Koford's (2017) dialogue with an author on the subject headings for their work, focusing on how queerness and disability are (mis)represented in the catalogue. Gerhand, Su, and Rubens follow-up (Gerhard et al., 2017) to Olson's assessment of subject access to Women's Studies materials (Olson, 1991) identified the following problems:

1. Obsolete subject headings or subdivisions appeared in the cataloging record.
2. There was an absence of existing relevant subject headings or subdivisions in the cataloging record.
3. No relevant LC subject heading or subdivision was available.
4. Subject headings assigned in the cataloging record were too general.
5. Subject headings assigned in the cataloging record were too specific.

Like a number of the above works (Clark & Smith, 2022; Gerhard et al., 2017; Koford, 2017), our approach here is to start our assessment from where we are most likely to find failure. As a form of infrastructure for information discovery, the catalogue tends to be invisible as its use is naturalized as a part of the research process. Star explains that this invisibility is interrupted in moments of "breakdown" and that such moments can provide the basis for understanding the working and effects of the infrastructure (Star, 1999). In designing our studies, we suspected we would elicit more emphatic critiques if we began with those for which the system is less likely to work smoothly. In the following section, I introduce the two studies and the approach to synthesize analysis of objections across both.

3. Methods

Some of the creators in these studies were authors of monographs, editors of text collections, and others were artists and writers for graphic works; I use the word "creator" to refer to these participants throughout this paper.

3.1 Study 1: Subject indexing of Indigenous topics

Focusing on works relating to Indigenous communities and knowledge, we had an opportunity to create contrasting catalogue records for the same works using alternative controlled vocabularies. Most libraries in Canada and the United States subject index with use of LCSH and some of those augment records with other controlled vocabularies such as Canadian Subject Headings (CSH) or Medical Subject Headings (MeSH); a few libraries use Indigenous-centered vocabularies covering concepts otherwise found in LCSH. We identified over a thousand works published or re-published between 2015 and 2021 and catalogued with LCSH terms that have recommended alternatives within the Manitoba Archival Information Network's (MAIN) list of "Changes to the Library of Congress Subject Headings Related to Indigenous Peoples." Since 2015, MAIN has published a list of more than 1000 LCSH terms, including subdivision strings, along with recommended alternatives (Bone et al., 2015). The list also includes recommended deletions (LCSH to be removed without the need for a new alternative) and additions (recommended terms without corollaries in current LCSH). The list was last updated in 2017. Our timespan, covering 2015 until 2021, covered a period of expanding interest and attention to Indigenous issues in North America, following the publication of major reports of the Truth and Reconciliation Commission of Canada (TRC) in 2015. The TRC Calls to Action are relevant to library operations including subject cataloguing (Call to Action #69) and to the publication of new works of literature and scholarship on Indigenous topics (#65). More details about the creation of our initial list works is available in a previous publication (suppressed for peer review).

3.2 Study 2: Subject indexing of 2SLGBTQ+ topics

Our study on 2SLGBTQ+ items' subject indexing focused on a single library's collection. The partner library was a volunteer-run, donation-based institution which collects items about and serves the local 2SLGBTQ+ community. For this study, we began by selecting representative titles in the library's collection, seeking a diverse sample of works and their creators to identify a broad range of issues, relevant terms, and concerns. After creating summary statistics based on current bibliographic records, we identified a few underdeveloped sections of the collection and purchased recently published works to address these gaps and include their creators in the study. This study was smaller in scope than Study 1 and recruited fewer participants.

3.3 Recruitment

Having identified relevant works, we sought current contact information for creators and recruited them by email for a research interview discussing the cataloguing of their work. In the case of co-authorship, we contacted each creator separately; in one case we interviewed the co-authors in a shared session and otherwise conducted one interview with one co-author. We did not contact contributors of essays in collections; in the case of collections, we interviewed editors listed in the catalogue as the primary or secondary creators of the work. For Study 1, we contacted a total of 107 creators. Among those contacted, 38 agreed to be interviewed and completed the consent form; we interviewed 37 synchronously over phone or Zoom and 1 by email. For Study 2, we

contacted 32 creators; 12 replied, completed the consent form, and took part in Zoom interviews and follow-ups on catalogue revisions.

3.4 Interviews

The interviews were approximately 30 minutes in duration and we recorded the interviews with the participant's consent. The interviewers used a semi-structured interview protocol. The interviews began with general questions on the participant's familiarity with cataloguing processes and the use of subject headings or keywords in their own information seeking and scholarship. The main portion of the interview focused on excerpted subject indexing of the participants' published work. The interviews concluded with general questions about the phenomena, the participant's thoughts on the practice of subject cataloguing, and their positionality in relation to the topic of their work.

The approach to eliciting assessment of the catalogue record differed in each study. In Study 1, the interviewer and participant reviewed catalogue excerpts featuring contrasting subject headings for the participant's published work. Where available, the first record presented was the Library of Congress catalogue copy, the second the participant's immediate library (for example, the academic library at their university), and the third the record using additions and replacements consistent with the MAIN list and X̲wi7x̲wa Library (Doyle et al., 2015) subject cataloguing practices. In Study 2, each interview revolved around a shared excerpt of an item's catalogue record that clearly identified the subject headings present but did not include a contrasting record. Instead, after initial reflection on the existing catalogue record, the interviewer posed questions about representation of identities from the item and possibilities for representing aspects of the creator's identity in the record. Following the full set of interviews, the research team collaborated on creating revised catalogue records for the 12 items. These revisions were shared with participants; most participants approved of the changes with no further requests, some made further suggestions as to corrections, additions, and removals among the revised list of terms, and some did not respond.

For both studies, we prepared transcripts of each audio interview, sent the text transcription to the participant for verification or correction, and deleted the audio file once we arrived at an accurate transcription. We presented each participant with the typical or default option to be pseudonymous; for those that opted out and indicated their choice to be referred to in our study by their real names, we added their names back into the transcript at this stage. About half of participants in each study (n=20, n=6) chose for us to use their real names in our analysis and writing. In this paper, we refer to these participants using their full names; we refer to participants represented as pseudonyms by a first name only.

3.5 Analysis

We added a total of 48 transcripts and 48 catalogue record excerpts representing 50 participants to an NVivo project for computer-assisted qualitative analysis. We used the features of NVivo to label each interview file with the participant's stated discipline or professional specialization, their country of residence, and coded full interview texts through the process of open, axial, and selective coding. This paper's analysis took place after selective coding and is based on axial coding both for types of statements

the participants were making (e.g., “objections,” “inclusions,” “omissions”), the part of the interview in which the utterance occurred (e.g., “assessment of original cataloguing”), and the notation of specific named terms. The following analysis is limited to the participants’ comments on the original cataloguing (both studies) and the alternative cataloguing (Study 1 only). As a check on the exhaustivity and consistency of axial and selective coding, I confirmed that all statements labelled “objection” overlapped with at least one specific subject term label and that all types of objections were within “assessment of original cataloguing” or “assessment of alternate cataloguing.” Throughout this paper, I refer to existing subject terms using single quotes ‘’ and the participants’ remarks with double quotes “”.

4. Findings

In the following subsections I detail the types, prevalence, and interrelationships among creators’ objections to the subject indexing of their work. In the next section, Discussion, I bring these observations into dialogue with the wider cataloguing literature.

4.1 Original and alternative cataloguing

In both studies, participants reviewed at least one version of subject indexing for their work representing common or baseline approaches, such as from the Library of Congress catalogue. In Study 1, all interviews (n=36) included an objection within the assessment of this original cataloguing. In Study 2, most (n=7/12) interviews included an objection within the assessment of original cataloguing. Interviews for Study 1 also included reviews of alternative catalogue records taken from or generated through cataloguing for initiatives aligned with Indigenous representation. Half of the interviews (n=18/36) in Study 1 contained objections to the alternative catalogue record.

4.2 Inclusions and omissions

Creators made a number of critical statements regarding the catalogue record for their work, some of which were out of scope of this analysis, such as Xavier’s objection to the series numbering applied to their work and Bonnie’s frustration with limitations on representing co-authors. When the participants made critical statements regarding the subject indexing of their work, they did so by objecting to the inclusion of particular subject terms in the catalogue record, by objecting to omissions of particular terms or concepts from the catalogue record, or by pairing inclusion and omission objections together. For example, in saying “‘Pre-Columbian’ would be good. ‘Indigenous’. ‘American’. There are a number of them. I think just about anything is better than ‘Indian’” Laurel identified appropriate subject terms omitted from the record (e.g., ‘Pre-Columbian’) alongside a strong objection to a term included in the record (‘Indian’).

4.2.1 Inclusions and omissions across catalogue record types

In Study 1, every interview contained at least one omission objection and at least one inclusion objection. Within the assessment of original cataloguing, 31 had an inclusion objection and 30 had an omission objection. Within the assessment of

alternate cataloguing, 13 had an inclusion objection and 17 had an omission objection. Some of these objections overlapped with critiques of the original cataloguing, where the participant objected to something that was still present or absent in the alternative cataloging, and some were in contrast to the original cataloguing, where the creator objected to something added to or removed from the original cataloguing. In Study 2, of the 7 interviews containing an objection to the original cataloguing, 2 contained only objections to omission, 1 contained only an objection to inclusion, and 4 contained both omission and inclusion objections.

4.2.2 Paired objections

There are many instances of paired inclusion and omission objections, such as Rita stating that she would prefer the subject heading string had "'Indigenous literature' as the first term, without there being an 'American' or 'Canadian' before it." In these statements, participants objected to a term included in the catalogue excerpt while simultaneously identifying a term that should have been present. In most of the interviews in Study 1 (25/36) there are overlapping or paired instances of inclusion and omission objections, with 39 such overlaps across the 25 interviews. Of the 4 Study 2 interviews with both types of objections, there are 2 interviews each having 1 paired instance of inclusion and omission objections. When expanding the search to inclusion and omission objection that overlap OR directly follow one another, 26 Study 1 interviews and 3 Study 2 interviews contain paired objections.

There was less explicit pairing of objections to original and alternative catalogue excerpts. Two interviews from Study 1 contain an overlap wherein the participant makes an objection to one catalogue excerpt while also directly invoking the other.

4.3 Subtypes of objections

Within inclusion and omission objections, there are several identifiable subtypes of objections to subject indexing. In the following subsections, I detail each of these with example. This section ends with a diagram of the relations as a typology.

Specificity

Particularly among paired objections, creators noted terms that were the wrong level of specificity, where a given term was too specific and therefore implied that the more general concept was not present in the item or the term present was too abstract and therefore not an accurate representation of the specificity of the book. As an example of the former, Wendy Wickwire noted that the subdivision '19th century' obscured the 20th century coverage of the work. As an example of the latter, Felicia compared the preferred, omitted names of specific Indigenous languages such as Algonquin and the relatively meaningless terms like 'Native language.' Subject terms that were invoked as too specific were often related to geography and colonial borders. For example, naming concepts with the geographical subdivisions '–Canada' or '–United States' would sometimes miss a relevant area on the other side of the Canada-US border or would have created an overly long record by repeating each relevant concept with each country-level subdivision. Subject terms frequently invoked as too generic and requiring more specific versions were those referring to Indigenous Peoples. Participants repeatedly expressed preferences for more specific terminology,

such as the names of particular Indigenous Nations or Peoples. This type of specificity objection was particularly common in participants' discussion of the use of 'Indigenous Peoples' in the alternative catalogue records for Study 1; replacing the term 'Indians of North America', the term could become extremely abstract and unpinned from the geography of Turtle Island or the Americas and required the addition of more specific geographic terms or replacement with specific Nation names, such as Muscogee.

Odd terminology

Sometimes paired with omission objections, many inclusion objections focused on subject terms for which they recognized the relevance of the underlying concept (the referent) to their work, but for which the chosen subject term was unfamiliar, awkward, or misleading. Some participants attributed odd terms to old-fashioned or overly anthropological language in the controlled vocabulary, such as the subdivision '—Appreciation of' or the heading 'Triangles (Relationships)'. Other terms such as 'Psychic trauma' were deemed to be quite distinct from natural language for a common concept. A pattern emerged in which participants recognized a number of terms such as 'Artisans,' 'Antiquities,' 'Social life and customs' as reflecting familiar categorization and patterns of privilege common in society. Participants who made such objections noted that these terms were not those they used in their own work and furthermore that the terminology was known to be misleading and discriminatory in their disciplines and would not be acceptable in contemporary discourse in their field.

The most serious objections of this type were terms that not only struck the participants as "odd" ways of labelling a concept present in their work but that the term chosen would mislead readers as to the content of their work or mislead them as to the reality of a phenomenon more generally. Several participants made objections of this type in identifying a subject term that distorted a phenomenon through positive or neutral terminology, such as labelling a book about contentious land claims as being about '—Land tenure', Indigenous Peoples' mistreatment under colonial governments as '—Government relations', massive die-offs in a fish population as 'Fish spawning,' and race segregation in hospitals as 'Hospital bed capacity.'

Aside from these distortions, other misleading terms were completely untrue regarding the content of a book, such as the subject term 'Residential schools' applied to a book about on-reserve day schools and 'Figurines' for a book on sculpture. Some terms may have been relevant to the content of the book but were misleading and misaligned with the creators' own convictions and the argument of the book itself, such as the term 'Indians of North America' itself and the subject heading string 'Metis—Quebec.' In the case of 'Metis—Quebec,' Darryl Leroux speculated that the label, without the context of the book's analysis of false claims to a distinct Quebec Metis identity, would seem to state the legitimacy of such an identity.

Nuance

A common subtype of omission objections identified concepts central to the book's argument absent from subject cataloguing. Some of these terms may be neologisms, with the book and creator being among the first to explore a particular phenomenon or argue for a more nuanced model of a known pattern, such as the distinction between the common 'Cultural assimilation' and the proposed "cultural

dissolution." A book about transgender Indigenous People, labeled as 'Two Spirit people,' negates the care the creator took to emphasize that these are not fully congruous concepts. A book on the history of Indigenous relations with the United States colonial government being labeled 'Civil rights' occludes the creator's central point that sovereignty is distinct from that movement.

A related type of omission objection is the absence of terms that would be intuitive to search, especially among the communities centered in the books themselves. Creators expected to see terms like "queer" or "intergenerational" among the books' labels and were surprised that they were missed. Some of these referents were represented by non-preferred or odd terms in the record, such as 'Gays,' and creators remarked that the item might not be found through natural language searching by themselves or the people who contributed to the work as participants or peers.

Genre and discipline

A common omission objection made across the two studies arose from a lack of terms relating to the genre of the work or the discipline behind its production. With the subdivision '—History' commonly applied to works in the set (consistent with known biases toward viewing Indigenous Peoples of North America as historical to the exclusion of the present), the lack of other disciplines was more apparent to creators, who specifically noted missing concepts like archaeology and ecocriticism. In the discussion section I will return to this objection subtype and its relationship to contemporary cataloguing rules.

Colonial innocence

The final omission objection subtype noted by creators was the specific absence of terms referring to the agency, actions, and identity of colonial actors, especially when these were central to a book's argument. In cases where the book was concerned with the interplay between Indigenous Peoples and the governments of Britain, Canada, or the United States, only Indigenous Peoples were marked as subjects in the record. Even in a case where the examination was primarily of colonial government actions, of Canadian laws and Canadian politicians, the record indicated that the book was about Indigenous Peoples. Similarly, the referent Indigenous Peoples was frequently present in record headings while "white people" were not. Colonization and colonialism as processes and ideologies were also conspicuously absent.

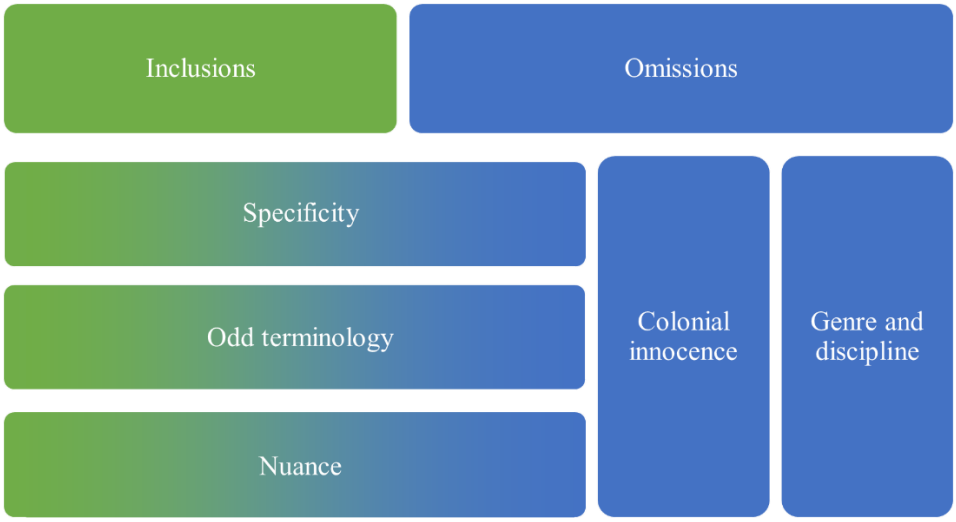

Figure 1 Typology of objections showing the overlap between subtypes of inclusion and omission objection types

5. Discussion

The creators' objections to subject cataloguing of their works have implications for communication and policy about cataloguing work, for reparative cataloguing, and for our understanding of how current cataloguing practices affect literature about historically and systematically marginalized peoples. Through this section, I take a step back to explain how creators' perspectives on subject cataloguing clarify and complicate our current understandings of what the catalogue does. First, I return to the way creators made their objections to the record, the timing of these statements as a way to understand how the catalogue record becomes amenable to critique from non-specialists.

5.1 How objections happen

The Findings section above began with a summary of the types and prevalence of objections made across the two studies, with Study 1 having 100% (n=36/36) and Study 2 having 58% (n=7/12) original cataloguing excerpts with objections of at least one type. The two studies differed in the shared topic of the works, with Study 1 focusing on Indigenous topics and Study 2 focusing on LGBTQ2IA+ identity. This difference may account for some of the difference in the proportion of objections, though long-standing and recent critiques show that both are poorly served by LCSH (Bone & Lougheed, 2018; Dudley, 2017; Edge, 2019; Howard & Knowlton, 2018; Watson, 2020). I propose that the more determinative factor was the form of the presentation of the cataloguing excerpts to the participants. In Study 1, participants received a document with at least two versions of the subject indexing of their work; in Study 2, participants received a document showing only the host library's subject indexing of their work and alternatives and additions were generated through the discussion. In light of participants' questions about the cataloguing process, their

expressions of surprise in response to explanations of copy cataloguing and centralized vocabularies, and even, anecdotally, concerns of a lack of qualifications to speak to the phenomenon in response to our recruitment emails, my hypothesis is that the catalogue record carries an air of authority or impenetrability that resists being read as an object of critique. In this view, the catalogue looks to the non-specialists as a road bridge looks to me: I trust that it was built correctly by virtue of its existing in a jurisdiction that regulates transportation infrastructure and by the buses, bicycles, and cars crossing it. I could guess at which elements distribute force and which are ornamental and I can tell you about how many times I've crossed it in the last month, but I would be at a loss to critique its engineering. However, I would have more to say if invited to compare it with another bridge elsewhere in the city; both were approved and both were used but each evokes different experiences of reliability, speed, and aesthetics. Without the expertise of knowing how they are put together and what constraints they operate under, the result appears inevitable and objective; *the possibility of it being otherwise* opens up a space for questions, even those that are not answered directly by the features of the second bridge.

Though I put this forward as speculation rather than a verified principle, I believe the comparison across the two studies suggests methodological considerations for other cataloguing studies. If we wish to make cataloguing accountable to non-specialists, our modes of inquiry must account for the seeming objectivity and fixity of the catalogue itself. This could mean approaches like Study 1 where we draw on a multiplicity of versions or by providing introductions to cataloguing procedure that foreground labour and the human behind the system. The latter approach draws on a further speculation on this theme: that recognizing the catalogue as a product of human labour makes it easier to expect bias, voice, and mistakes and to imagine ourselves in the place of the decision maker.

5.2 Creator and cataloguer perspectives

By putting the creators' objections into context with contemporary cataloguing policy, we can differentiate among objections exposing flaws in the subject cataloguing, objections illustrating known flaws in subject cataloguing, and objections indicating a conflict with subject cataloguing orthodoxy. In other words: some of the creators' objections will be very familiar to cataloguers; others may be easily dismissed as outside of the scope of subject cataloguing.

Subject indexing scope. Beginning with the latter category, creators' omission objections included a lack of headings for genre and discipline. Because this study was primarily concerned with subject headings and the referenced catalogue excerpts did not include the classification of the items, some omission objections may have been addressed by other elements of the record. In an analysis of Study 1 limited to historians, we found many creators introduced objections to classification or shelf context into the conversation (Watson & Bullard, 2022), in contrast to the majority of interviews here where creators were unfamiliar with the library's treatment of their published works. Library classification and shelf context can convey discipline or *is*-ness, complementary to the subject headings conveying *about*-ness, and arguably these omission objections are a misunderstanding or mismatch between the creators' expectations of subject cataloguing and the rules and objectives directing the

cataloguer's decisions. The current Library of Congress Subject Headings Manual (SHM) directs cataloguers to choose headings representing the topic of the work, with form or format relegated to the last of a few "additional aspects" of the work, and then only under very specific circumstances (H 180, p. 6). With the creation, expansion, and adoption of the Library of Congress Genre/Form Thesaurus (LCGFT) (Bitter & Tosaka, 2020), it will be easier to assess the extent to which particular genres and disciplines are represented in catalogue records. Notably, the current release of LCGFT does not include genres and disciplines participants expected to see in their records so that terms like "archaeology" and "ecocriticism" will only be applied to works *about* those topics (as LCSH) and not works that *exemplify* those approaches (as LCGFT). While it may be easy to dismiss this category of creator objections as arising from a misunderstanding of what subject indexing does, it does indicate the need for further work in assessing the divergence between specialist and non-specialist mental models of the catalogue record. Such work could determine how this divergence occurs and whether it is best repaired through catalogue literacy work or by rethinking current practice. If classification is meant to communicate discipline, the lack of shelf-browsing access to items in favour of keyword and indexing navigation in the OPAC may require rethinking the structure and boundaries of the catalogue record itself.

A second divergence between the perspectives of creators and subject indexing professionals occurs when considering the function of subject terms as truth claims. Here, I distinguish between creators who objected to whether the subjecting indexing was an accurate representation of their work and those who objected to the subject indexing as representative of reality. Darryl Leroux's concern regarding the implications of the subject string 'Metis—Quebec' exemplifies the latter; while it is accurate to say that the book is about claims to a Quebec-specific Metis identity, converting this phenomenon into such a subject string appears to assert its existence. LCSH sometimes identifies particular concepts as invented, as in 'Batman (Fictitious character),' but does not do so exhaustively, such that 'Martian' does not include this clarification. LCSH is much more likely to treat concepts under contention like Martians than like Batman. The outputs of this approach may seem odd or even misleading to users who expect library systems to be authoritative or to be accountable as truth claims.

5.2.1 Known flaws in subject cataloguing.

In contrast to objections that indicate a misalignment of mental models for the catalogue, a number of objections will be both familiar to and reported by cataloguers. Like the assessments of catalogue record quality cited in the literature review (e.g., Petrucciani, 2015), creators noted areas where cataloguing appeared rushed, based on a limited view of the item, and including outdated terminology. These frustrations are well-known to cataloguers. Creator objections converge with cataloguers' perspectives in that they find fault not with cataloguing's scope or aims but with the lack of capacity to do the job fully (Theimer, 2022). Objections of this type could be explained by under-resourced and overburdened technical services contexts in which cataloguers spend just a few minutes with a given item, by the lack of capacity of the profession to perform more robust revisions of controlled vocabularies, or by the lack of capacity for

local institutions to perform subject indexing reflecting local knowledge, such as using the specific and correct names of Indigenous groups.

While creators noticed the results in the catalogue record itself, they were largely uninformed on what factors lead to these patterns and limitations of controlled vocabulary and indexing work. Many of our interviews included spontaneous conversations on the processes of catalogue work, with creators asking questions on who did the work and where, and expressing genuine surprise that records at their local library were not necessarily produced nor the subject indexing revised by local staff. While this may indicate that there is yet more work to be done on the part of library workers and information studies scholars on educating the public on library labour (Belantara & Drabinski, 2022), these conversations also indicate the deep well of untapped support cataloguers could gain from research and creative writing faculty colleagues and the creators whose works they host in the library. Though creators were quite critical of the records themselves, most interviews ended with the participants expressing emphatic appreciation for cataloguing labour. These creators would be willing supporters and advocates for resourcing for local cataloguing work, especially if that would reduce reliance on centralized and standardized vocabularies.

5.2.2 Incompatible perspectives

A final contribution from the creators' objections is an illumination of the effect that centralized vocabularies such as LCSH have on the representation of marginalized topics. To explore this theme, I draw on a metaphor of light and colour.

Imagine subject indexing as a spotlight that shines on a work to make it more visible to the user. Like the bright spotlights used in theatre productions, this illumination makes a face recognizable at a distance but flattens out some details, transforming a specific individual into an archetype or an unfinished image in which we can project and recognize someone familiar (McCloud, 1993). This transformation is not evenly applied; the light, its tint, and all the techniques of the stage follow a tradition and science developed to produce an effect (Roth, 2009; Town, 2018).

Creators' objections reveal what subject indexing illuminates, distorts, and leaves invisible about their work. Like the spotlight on the stage, the effect is not an accident but a part of the science of indexing; to fully represent the work would be to create a surrogate as verbose and detailed as the work itself (Borges, 1998). Cataloguers and their standards aim to highlight the details that support search, discovery, and identification functions for their users, not to represent the work in all its nuance and specificity. However, creators' objections are not that the surrogate is a partial or simplified representation but that the work is distorted by this process. As with the analysis and critiques of how photography and lighting techniques developed for white skin fail Black actors and models (Hawley, 2024; Roth, 2009), the flaws of the technology are unevenly distributed, such that those subjects made marginal in larger society are distorted when illuminated by a seemingly neutral tool.

For creators in these studies, objections to odd terminology exemplify distortion-through-illumination. Though subject indexing generally works well enough to make visible the key elements of a work (Gross et al., 2015), the illumination casts some subjects in an odd light, making them unrecognizable, distasteful, or otherwise "wrong" to experts on those subjects. In this tinted light, "queer" becomes 'Sexual

minorities' or 'Gays,' "sovereignty" becomes 'Civil rights,' and "Indigenous literature" becomes 'Canadian literature—Indigenous authors.' The illumination makes the subject visible but through a colour lens inappropriate to the creators' vision.

In addition to distortion, a tinted lighting technique can also fail to illuminate some subjects—those that approach the colour of the tint itself. The omission objections around colonial innocence exemplify this phenomenon. Tools like LCSH are the products of colonial institutions and processes, cast a colonial tint in their illumination and, therefore, are particularly ill-suited to make visible colonialism itself. Like a bloodstain under a red light, the colonial actions and violence merge into the baseline and become less rather than more visible. Creators' repeated objections to the absence of subject indexing referring to colonial governments as actors, of colonialism as a process and ideology, and to the bloodless cast of terms like 'Land tenure' and '—Government relations' reveal how concepts that were central to their published work could not be seen in the illumination of LCSH. Cataloguers and library workers make attempts to ameliorate this effect, with the term 'Settler colonialism' appearing in LCSH beginning in April 2021.

6. Conclusion

The findings from this study, in conversation with ongoing analysis of controlled vocabulary systems, illuminates the interactions among cataloguing work, user expectations, and the scholarly and creative fields whose products the library provides access to. To close this paper, I provide a few further speculations on what this focus on creator perspectives implies for future work in this field.

First, the known and revealed flaws in subject indexing covered here would only be exacerbated through automated indexing. As training data, the history of subject indexing would produce machine learning models that replicate if not intensify the distortion effect discussed above. Furthermore, black box models and the removal of human judgement would further move the cataloguing process into an impenetrable position of "neutrality" and objectivity. While this study establishes promising methods for opening the black box of professional subject indexing, good relations between library operations and our communities requires more and not less transparency and accessibility to cataloguing processes.

Second, and related to resistance against the promised efficiencies of automated indexing, our experiences across these two studies suggest new tactics for resourcing local cataloguing. Local cataloguing, in which the libraries and library workers proximate to their user and creator communities make substantial enhancements and revisions in addition to copy cataloguing, may have remedied a number of the objections made by our participants. Institutions like Xwi7xwa Library here at the University of British Columbia show what such efforts can achieve but require considerable resource investments both in cataloguers' time and expertise and in infrastructural adjustments to MARC records and copy cataloguing environments. Each participant in Study 2 expressed appreciation for Out on the Shelves Library's attentiveness to their catalogue records and provided thoughtful input into how the record might be improved for general library collections as well as in the context of an LGBTQIA+ community collection.

Some of the participants in Study 1 chose to contact their local libraries (usually their academic library system) to request modifications to the catalogue records for their books. Easy fixes included swapping between less and more accurate LCSH or adding LCGFT not yet included. Where LCSH for the works' concepts do not (yet) exist, more effort is required on the part of catalogue workers to propose those additions. Whether or not participants indicated interest in or requested advising on how to make such requests to their local catalogue, nearly every interview ended with participants' enthusiastic support for local cataloguing work, though nearly every interview began with the participants' admitting little knowledge of how the library catalogue record comes to be. I suggest that the effort of reaching out to local authors—particularly faculty members of one's own institution—to check in on the accuracy of subject indexing is an effective way to enlist allies in struggles for greater support for technical services. Creators are well-prepared to recognize the alignment between local needs and local knowledge and academic creators are well-positioned to advocate for better resourcing for the library, both through ongoing relationships with liaison librarians and through collegial governance.

Finally, these studies, like a number of works in our field, are motivation to continue every means possible to counter the invisibility of colonial violence, white supremacy, and cisheterosexism of our library systems. I am especially encouraged by work on creating local controlled vocabularies accountable to affected user and creator communities. Efforts to revise "universal" systems such as LCSH have a wide effect on library records across the world. It remains an open question whether reparative work on these systems can ever overcome their founding colonial logics. That being said, the harm reduction of providing better terminology and making incremental alignment to current literary warrant is undeniable.

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