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Is libraries' use of social media ethical? A phenomenographic investigation of Twitter (X) use at the Bodleian Libraries

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Abstract

Purpose – Social media (SM) has been heavily criticised in recent years for its damaging effects on societies globally. Tasked with empowering those same societies, libraries' continued use of SM is considered ethically contentious. This study presents the findings of a University of Sheffield study that investigated the ethical tension between libraries and their use of SM by aiming to establish whether: (1) libraries' use of SM is ethically motivated; (2) ethically informed; (3) and compatible with codes of ethics in the Library and Information Science (LIS) sector.

Design/methodology/approach – A phenomenographic approach was employed to gather and analyse the data for this study, which is drawn from the transcripts of seven online interviews with Bodleian Libraries staff who used Twitter, now X, in a professional capacity.

Findings – Three categories of description were identified among participants: (1) Collectivist conception; (2) Settled conception; (3) Questioning conception. The categories are bound by a shared context of conceptualisation made up of a small set of internal and external influences discussed in the interviews which affected all participants to varying degrees.

Originality/value – The findings were used to support the following determinations: (1) Libraries' use of SM is ethically motivated. (2) Libraries' use of SM is ethically informed, in part. Due to lack of evidence, no determination was made about whether libraries' use of SM is compatible with codes of ethics in the LIS sector. Recommendations for LIS professions and professional bodies are offered based on these determinations.

Keywords Libraries, Librarianship, Ethics, Social media, Twitter, X, Phenomenography

Paper type Research paper

Introduction: the case against social media

In recent years, social media (SM) companies have come under scrutiny for their role in the propagation of misleading and harmful content on their platforms (Deibert, 2019); numerous allegations have been levelled at this novel communications ecosystem for facilitating online activity detrimental to the wellbeing of societies globally. In 2021, the President of the United States suggested that SM misinformation was "killing people" and criticised companies' inability to effectively suppress the spread of COVID-19 falsehoods (BBC News, 2021). Separately, a growing body of evidence indicates that platforms such as Twitter, now X[1], have been leveraged in the perpetration of human rights abuses, specifically against women and minorities (Amnesty International, 2018; Criss *et al.*, 2021).

Experts trace the problem to a flawed, for-profit business model – developed by Google but adopted by other SM companies – that seeks to monetise the attention and personal information of users, while attacking, ignoring or circumventing pertinent rights and laws in

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place to protect those same users (Zuboff, 2019). In response, academics, journalists, whistle-blowers and even royalty have sounded the alarm over SM's perceived pathologies (Marsh, 2021; Seymour, 2019; Vaidhyanathan, 2018; Wylie, 2019), while governments, NGOs and international institutions have taken steps to combat the multifaceted threat posed to democratic principles of truth, trust, accountability, representation and freedom online (The Economist, 2020; UNESCO, 2021; International Grand Committee on Disinformation, 2022).

Problem statement

Amid a chorus of disapproval, the question may be asked whether libraries' continued presence on these platforms is ethically justified, premised on the notion that a fundamental tension exists between the central tenets of library work on the one hand and libraries' use of SM on the other. By way of illustration, Table 1 juxtaposes libraries' key missions as summarised by Ovenden (2020a), Bodley's Librarian, with some of the challenges perpetuated by SM:

Libraries	Social media
1. Support the education of society as a whole and of specific communities within it 2. Provide a diversity of knowledge and ideas 3. Support the well-being of citizens and the principles of the open society through the preservation of key rights and through encouraging integrity in decision-making 4. Provide a fixed reference point, allowing truth and falsehood to be judged through transparency, verification, citation and reproducibility 5. Root societies in their cultural and historical identities through preserving the written record of those societies and cultures (adapted from Ovenden, 2020a, p. 225)	1. Enable the spread of misinformation and disinformation, which undermines the education of society 2. Hyper-personalise services, reinforcing biases and stoking divisiveness (Sunstein, 2018) 3. Implement addictive features causing excessive use, negatively affecting the memory, mood, sociability and attention of citizens (Sheldon, 2019) 4. Treat information as an ephemeral commodity. Continually refreshed feeds and disappearing content make it difficult to verify and reproduce information (Ovenden, 2020b). The decision taken by companies not to disclose their practices makes their operation opaque 5. Unilaterally preserve, promote or suppress the information they gather, justifying this with continually revised terms of service. This jeopardises the cultural and historical identities of societies (The Economist, 2020)

Source(s): Table by authors

Table 1. The missions of libraries and the challenges of social media compared

These contrasts suggest an ideological misalignment between libraries and SM, yet strikingly SM remains a popular way for libraries to disseminate information, market services and otherwise engage with their communities (Deodato, 2018).

SM and libraries' relationship with SM are problematised from this perspective as a means to justify the line of enquiry as outlined in the Aim. The authors recognise that this approach precludes a more complex assessment of the library-SM relationship through the omission of a fuller, more balanced accounting of SM's utility and it is acknowledged that the characterisations thus provided may be reasonably contested. Twitter's own publicity materials, for example, describe it instead as "committed to the open exchange of information" [2] with a stated purpose "to serve the public conversation" [3]. It is for this reason that while the study draws attention to some of the many serious allegations levelled

at SM it does not claim to endorse these allegations nor seek to suggest that a judgement of SM and SM use in libraries be formed solely on the basis of such allegations.

Aim

This article presents the findings of a University of Sheffield master's study which aimed to establish whether libraries' use of SM is ethically motivated, ethically informed, and compatible with codes of ethics in the Library and Information Science (LIS) sector.

To achieve this, the study examined staff use of Twitter in a professional capacity at the Bodleian Libraries – the UK's largest academic library system. This was considered an appropriate case study for multiple reasons. Firstly, Twitter continues to be one of the more popular SM tools used by libraries of different stripes globally (Library Journal, 2021; Rachman, 2023), including the Bodleian Libraries, while the Bodleian Libraries specifically – as one of six legal deposit libraries for the UK and Ireland – occupies an important position both in the UK's national- as well as academic-library landscape.

Further, as a premium member of CILIP's employer partner programme [4], the Bodleian Libraries maintain a formal relationship with the UK's main library and information association. Through this relationship, it is reasonable to expect that its workforce would be to some degree familiar with relevant, commonly used frameworks concerning the ethical use of SM in a professional capacity, namely CILIP's Ethical Framework [5] and the Professional Knowledge and Skills Base [6].

The literature review focuses on the centrality of ethics to libraries and librarianship; libraries' recent use of SM; and SM's reception in LIS literature. This contextualises discussion of the study's element of originality that is the analysis of transcripts gathered from semi-structured online interviews with Bodleian Libraries staff. A phenomenographic approach was applied to the transcripts to identify varying, collectively held conceptions of Twitter use, which are presented for discussion in an outcome space.

Twitter is a rapidly evolving area of research and it should be noted that the study's data was gathered from interviews that occurred between June and July, 2022. Consequently, the changed context in which these interviews took place – particularly in relation to Twitter's present-day brand, service and public reception – should be considered. Despite this qualification, this study retains its element of originality and value, with central themes, contentions and conclusions largely unaffected by more recent developments at the time of writing. The data gathered continues to provide a unique snapshot of conceptions of Twitter use held by an important demographic – one employed by an organisation that maintains a significant presence on the platform in 2024.

Literature review

A library

The definition of a library has evolved in step with its function. In the ancient world, the term was used interchangeably with "archive" to denote a repository of textual information (Haider *et al.*, 2023). However, recent trends such as the democratisation of information and the introduction of new information formats have complicated current understanding, with the *Oxford English Dictionary* today defining a library more loosely as a building and/or a collection of resources (OED Online, 2023). Abstract notions of the library as an institution, a symbolic cultural cornerstone, or simply a "third space" have also surfaced (Rubin and Rubin, 2020). Hampered by a shifting socio-political and informational landscape, Baker and Evans (2011) concede that an agreed definition for libraries as a physical space has remained elusive.

A library service

In his pioneering work, Glusko (2013) frames libraries as organising systems. Adopting a holistic approach, he asserts that libraries are engaged in four key activities – selecting, organising, storing and supporting resource-based interactions. Such systems cannot exist in a vacuum, however, and Manoff (2019, p. 1) reminds us that libraries and their activity-based services still "operate within a complex web of social, political, and economic forces." Lankes (2016) goes further, contending that for a library to exist at all its community must first mandate and support it, suggesting that the inception and survival of the service is entirely dependent on conducive external circumstances.

The support shown to the library is paid back in the benefits it provides (Tîrziman, 2018). From this, a symbiotic arrangement is discernible, premised on reciprocity and the understanding that the service, at its core, should seek to meet the needs of its community. This view harmonises with the definition of librarianship proffered by Shera and reaffirmed by Cossette:

> Librarianship is the art and science of acquisition, preservation, organization and retrieval of written and audio-visual records with the aim of assuring the maximum of information access for the human community. (Shera in Cossette, 2009, p. 33)

A library ethos

The distinct needs of disparate communities have led to the proliferation of different types of libraries with divergent remits and identities (Bobinski, 2007). However, a utilitarian, user-centric underpinning unites them in their work, with the foundations of this philosophy famously codified by Ranganathan (1931) in his five laws:

(1) Books are for use.

(2) Every reader his/her book.

(3) Every book his/her reader.

(4) Save the time of the reader.

(5) The library is a growing organism.

Though dated and not without their critics (Danton, 1934), the laws have had an enduring impact (Finks, 1992). Even today, they are continually reconsidered and adapted by theorists and practitioners around the world (Kaushik, 2021; McMenemy, 2007a), cementing Ranganathan's place as "the father of library science" (Jeevan in Gray, 2013).

An important moment in the laws' history came in 1995 when they were reworked by eminent librarian, Michael Gorman (1995, pp. 784–785). Though Gorman offered his revisions "in all humility", his "new laws" appear to represent a substantial departure from Ranganathan's. None of them correspond singularly to one of Ranganathan's, for example. Notable too is the relegation of books, readers, and the relationship between them in favour a more expansive set of values:

(1) Libraries serve humanity.

(2) Respect all forms by which knowledge is communicated.

(3) Use technology intelligently to enhance service.

(4) Protect free access to knowledge.

(5) Honor the past and create the future.

Nevertheless, Gorman makes clear his new laws are fundamentally a repackaging of the same semantic "truths" that underpin the originals, the difference being that they were "written in the context of the library of today [1995] and its likely futures" (p. 784).

Ranganathan's "truths" would remain central to Gorman's thinking over the next two decades – a period of profound change that altered the western world and its libraries. These developments are recounted in the opening chapters of his 2015 book, *Our Enduring Values Revisited Librarianship in an Ever-Changing World* (Gorman, 2015), where they serve as the primary justification for re-examining the new laws – since reframed as "values" (Gorman, 2000), and expanded to a list of eight:

(1) Stewardship

(2) Service

(3) Intellectual freedom

(4) Rationalism

(5) Literacy and learning

(6) Equity of access to recorded knowledge and information

(7) Privacy

(8) Democracy

Gorman (2015, pp. 35–37).

Gorman's decision to revisit his own ideas on libraries' collective values is helpful in charting the evolution of his thought, and though his values and their respective rationales have grown more complex over time, an elevated respect for Ranganathan's laws has remained. In *Our Enduring Values*, Gorman arrives at his list by synthesising the arguments of four of the past century's foremost theorists – Ranganathan, Rothstein, Shera and Finks – with Ranganathan positioned as "the greatest figure of librarianship in the twentieth century" (Gorman, 2015, p. 26). His values presented and Ranganathan's influence thus positioned, Gorman reasons:

> I am sure that the list of values that I offer is different from those that others might advance, but it is difficult to believe that these values (possibly with different wording) would not show up on any composite list. Gorman, (2015, p. 35)

Consequently, he asserts two things here. Firstly, that his values might plausibly be assumed to possess a degree of universality for libraries globally, and secondly that Ranganathan's thinking as codified in his five laws forms an integral part of those universal values.

A library profession

Although the essence of the five laws, particularly allusions to equity of access, can be traced back further to the introduction of public library services in Victorian Britain and even to the practices of medieval chained libraries (McMenemy, 2009; Summit, 2008), it is Ranganathan who is also credited with providing the conceptual basis from which librarianship has since been established as a profession (Haider, 2022). Proponents such as Rimland (2007, p. 24) refer to the laws as "timeless objectives" for librarians, while McMenemy equates them to an ethical backbone for librarianship:

> A simple translation of them for the modern era would be that we must encourage all potential users to access information; that regardless of creed or colour there is something a library has that will be of value to a customer; that we ensure that the way we organise and store the material is for the

> benefit of the user and not our own; and that we continue to add to the collections we make available to people. At the heart of Ranganathan's laws are the universal notions of equity of access to, and availability of, information for all. McMenemy (2007b, p. 16)

By likening the laws to a shared ethical framework, McMenemy's characterisation helps raise librarianship to the status of a profession; the existence of such a framework is commonly cited as a requirement for a profession to be duly regarded as such (Seminelli, 2016), and numerous library associations have consolidated their position by publishing codes of ethics. In 1939, the American Library Association adopted a code (ALA, 1939), and by the turn of the century Koehler and Pemberton (2000) were able to survey over 30 such codes published by associations around the globe, evidencing the enduring centrality of ethics in librarianship. Today, the International Federation of Library Associations and Institutions (IFLA) notes in its 2012 Code of Ethics that:

> Librarians all over the world are well aware of their profession's ethical implications. In more than 60 countries library associations have developed and approved a national code of ethics for librarians. IFLA (2012)

Social media

Gil de Zúñiga and Coddington (2013) characterise the field of SM research as relatively new and in a state of flux. Today, there is still limited agreement among academics about what SM is, where it has come from and how it should be studied. While some theorists link its genesis to the arrival of Web 2.0 capabilities (Kaplan and Haenlein, 2010), Healey (2020) traces its origins to the English coffee houses of the 18th century. Radin and Maxwell (2018) go as far back as 550 BCE, equating the introduction of the first postal service to a form of SM. Hartley (2018, p. 13) identifies the issue at hand by explaining that:

> "Social media" is a tautology. All media are social. All sociality is mediated. Pragmatically, the current arrangements known as "social media", which distinguish online media from other types of media entertainment and social networks from physical ones, are not geared to the long-term view.

In essence, Hartley reasons that use of the term "social media" today represents a convenient shorthand, referring collectively to companies and platforms that facilitate digital social interactivity. The Oxford Dictionary of Social Media (2016) makes a further distinction by referring separately to SM as the tool used (platforms) and/or the content shared (posts). Taking the two definitions together, SM can be studied as a communications ecosystem (Deibert, 2021). Commonalities between platforms include the curation of conversation through the implementation of platform-specific features, such as Twitter's 280-character limit, and the extraction and monetisation of users' data and attention – a process underpinning the development of what Zuboff (2019) coins "surveillance capitalism".

Social media, libraries and ethics

Since their arrival at the beginning of the 21st century, SM platforms have proven immensely popular, with a recent survey by Statista predicting over five billion active SM users in 2024 (Dixon, 2023). Awake to this high level of uptake, libraries have leveraged these services to interact with their users (Swanson, 2012; Mon, 2015). Twitter's microblogging capabilities in particular have helped libraries to share information with their patrons in a timely way (Shulman *et al.*, 2015). However, though libraries have become increasingly adept at discerning the benefits and functional limitations of SM by virtue of their continued engagement with different platforms (Verishagen, 2019), less attention seems to have been paid to the ethical implications of employing tools that prioritise profits over people.

Instead, a survey of the literature would suggest that LIS theorists and practitioners may have leap-frogged the question of *whether* libraries should use SM to ask instead *how* libraries should use SM. Humphreys (2019, pp. 3–4) classifies research on libraries' SM use as follows:

(1) Advice for libraries using SM ("how to")

(2) Measuring the success of SM ("appraisal")

(3) Case studies using SM ("what happens")

(4) Dialogues about SM and some limited criticism ("why bother?")

The "how to" category, writes Humphreys, represents "the largest genre of the literature", while the "why bother?" category – which encapsulates all pro/con assessments of SM use – is only "a small genre". Humphreys identifies just one study, by Wasike (2013), that concerns itself with the ethical implications of libraries' SM use. This is not to say that those writing on libraries have been asleep to the ethical conundrums posed by the introduction of digital technologies more generally. Individuals such as McMenemy (2016) and Zimmer (2013), both writing at a similar time to Wasike, have cautioned against their unconditional adoption in libraries by highlighting their potential to compromise patron privacy.

Consideration of the ethical implications of SM use has also been paid in certain schools of applied ethics. Relevant here are business ethics studies urging caution for organisations using SM in communications and marketing. White and Boatwright (2020), for example, argue that all organisations have a social responsibility to the communities in which they operate, and should they choose to align themselves with SM companies by embracing their platforms and terms of service, they implicate themselves with the potential fallout.

Griffin echoed these concerns in a 2021 interview: "When utilizing social media, non-profits need to recognize that even if they aren't the ones collecting user data, the platform is, and that should impact the way they make business decisions" (Griffin in Venzin, 2021, p. 1). These reservations highlight the precarious position libraries put themselves in when they generate content for, and attract an audience to, SM platforms, specifically that they may be putting themselves at odds with their own user-centric philosophy.

Methodology

Phenomenography

This inductive, single-method study employs a phenomenographic approach. Phenomenography is a research approach with epistemological roots in phenomenology – a philosophy typified by Husserl that centres human experience as the medium through which life's meaning and value is derived (Husserl, 2001). By extension, phenomenography also prioritises human experience, taking as its focus the finite conceptions of reality as collectively experienced by humanity and constituted during interactions with the world (Marton and Booth, 1997; Svensson, 1997). As a research approach, it is used to expose and interrelate these conceptions to reveal the different ways particular phenomena can be understood at a point in time.

Marton is credited with creating the approach after investigating the learning experiences of student cohorts with a team at the University of Gothenburg (Marton and Säljö, 1976). While interviewing the students about something they had learned, the researchers "repeatedly found that each phenomenon, concept or principle can be understood in a limited number of qualitatively different ways" (Marton, 1988, p. 143). This discovery sparked

Marton's phenomenographic enterprise, which by the turn of the century had matured into a recognisable rubric used predominantly within educational settings (Kandlbinder, 2014).

The applicability of phenomenography to this study. LIS practitioners were quick to identify phenomenography's usefulness in reifying conceptions of abstract topics in specialised contexts, having applied it since the late 1990s to examine understandings of Information Literacy (IL). Bruce's seminal paper (Bruce, 1999), for example, was noteworthy for breaking new ground in challenging established behaviourist and constructivist paradigms.

More recently, Mulatiningsih and Zuntriana (2018) have taken SM use in a LIS context as the focus of phenomenographic enquiry, while Phillips, Oyewole and Akinbo (2018) have considered librarians' conceptions of ethics through a phenomenographic lens. These precedents point to the viability of adopting the approach for a similar LIS-based study, such as this one.

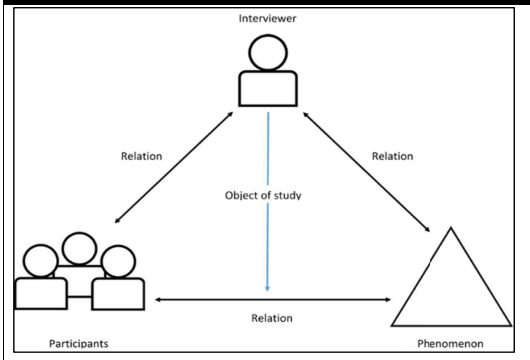
On a more fundamental level, a phenomenographic approach is deemed suitable as it provides an appropriate framework for answering the title question – "is libraries' use of SM ethical?" The complexities and subjectivities inherent in the question demand an approach that affords in-depth qualitative analysis of rich, relevant data drawn from individuals with experience of SM use in libraries. Semi-structured interviews – which deviate from rigid exchanges to explore responses more fully with probing follow-up questions –are the preferred method for collecting such data in phenomenography, with phenomenographers routinely relying on this type of interview to evidence the varying conceptions of the phenomena they seek to understand (Åkerlind, 2005). Unlike other research approaches that lend themselves to semi-structured interviews, the emphasis on identifying *varying* conceptions also encourages researchers to interview as diverse a sample of participants as possible (Bowden and Green, 2005). This allows for a more complex picture of the subject of investigation to emerge during analysis.

Operationalising phenomenography. In phenomenographic studies, interview transcripts are analysed thematically with the aim of identifying collectively held conceptions of a phenomenon. The focus of phenomenography, therefore, is neither the participants interviewed nor the phenomenon itself, but participants' conceptions of the phenomenon. Bowden and Green (2005, p. 13) provide a visualisation of this focus, and this study populates the components of their model as shown in Figure 1 to reveal four methodological implications.

Criticism of phenomenography. Phenomenography has been extensively critiqued since its inception (Tight, 2016). A full treatment of the issues raised lies outside of the scope of this study, but relevant (and contested) criticisms are synthesised here for their value in informing the data collection and analysis phases of the study, at which point they were considered alongside the implications of using phenomenography noted above. Collectively, the criticisms concern phenomenography's implementation – specifically that researchers routinely occupy an extractive position during data analysis by reducing participants to the data they share (Cousins, 2010) – the contention being that phenomenographers' preoccupation with finding conceptual variation at the collective level necessarily relegates participants from the position of co-creator and co-discoverer of knowledge. Participants' individuality is not always adequately considered throughout the research process (O'Farrill, 2010), and the researcher is given license to play with the data participants provide, accountable only in the sense that their research findings are judged to be persuasive (communicative validity) and impactful (pragmatic validity) (Hajar, 2021).

Together these arguments challenge established defences legitimising both the validity of phenomenographic research *and* the reliability of its findings. This is because the two aspects are unusually intertwined in phenomenography. Whereas validity usually relates to how well a study is conducted and reliability to how replicable the results are, phenomenography's logic causes this distinction to collapse. Its central premise that people conceive of phenomena

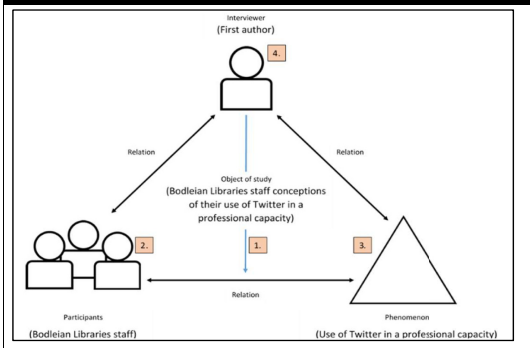
a. Bowden's relational model of phenomenographic enquiry (Bowden and Green, 2005, p.13)



b. Components of Bowden's model are populated as follows

1. **Interviewer:** First author.
2. **Participants:** Bodleian Libraries staff who use Twitter in a professional capacity as part of their role.
3. **Phenomenon:** Use of Twitter in a professional capacity.
4. **Object of study:** Bodleian Libraries staff conceptions of their use of Twitter in a professional capacity.

c. Four implications are identified



4. The interviewer is centred in the research approach through their involvement with three relational components – the object of study, the participants and the phenomenon (Bowden and Green, 2005; Marton and Booth, 1997). This necessitates the introduction of measures that insulate the study from interviewer bias. Common mitigations include:
   a. Introducing a collaborative dimension to the research design to moderate the interviewer's influence during data collection and analysis.
   b. "Bracketing" (suspending judgement) of the interviewer. This usually involves careful consideration of the approach taken to collect the data – especially the formulation of the interview's guiding questions – and using no evidence other than the interview data during data analysis.

2. Collectively participants should possess the requisite variety of conception and, individually, have direct experience of the phenomenon. Sampling should therefore be purposive, yet the selection of suitable participants prior to data collection compels an a priori decision.
   Marton and Booth (1997) address this by arguing that phenomenographic studies be judged on the quality of the categories of description produced, and solely in relation to the data gathered.
   This also means that phenomenographic outcomes can never be wholly generalisable, rather only to the extent that the data gathered from participants is perceived to represent conceptual variation in a wider population.

1. Researchers require a working definition of "conception" that can be applied during the analysis of the transcripts.
   This study uses Marton and Pong's (2005, p. 1) definition, which states that "conception", as a unit of description in phenomenography, "has two intertwined aspects: the referential aspect, which denotes the global meaning of the object conceptualized; and the structural aspect, which shows the specific combination of features that have been discerned and focused on".

3. A definition of the phenomenon should be articulated for participants, which creates a difficulty in this instance because Twitter use in any capacity is dependent and subjective – defining it would naturally preclude a full exploration of the varying interpretations that may exist.
   For this study, a definition of the phenomenon is not provided on the grounds that phenomenography's foundational premise is the examination of "how *different* ways of conceptualising or experiencing something evolve" [emphasis added] (Encyclopedia of Evaluation, 2005, p. 314). This creates a scenario in which a purposive sample must be identified without explaining to potential participants the nature of the phenomenon being investigated. A self-selecting screening questionnaire was introduced to achieve this.

Source(s): Figure adapted and expanded from Bowden & Green (2005)

Figure 1.
Bowden's relational model of phenomenographic enquiry, populated, and with implications identified

differently and that an individual can conceive of the same phenomena differently at different times makes it impossible to replicate the conditions of any phenomenographic study. As a result, phenomenographic reliability "is not concerned with the replicability of results, but with the employment of thorough and appropriate methodological procedures to achieve faithful interpretations of participants' experiences of a given phenomenon" (Hajar, 2021, p. 1433).

Here, a vulnerability emerges whereby validity and reliability are treated similarly, and assured only by methodological rigour. If such rigour is lacking, the research approach is undermined. Therefore, it is imperative that the "immunity" of the researcher, as described by Cibangu and Hepworth (2016), be fully acknowledged and accounted for. Alongside the use of traditional interview-bracketing techniques and the implementation of collaborative research design elements, the researcher(s) should demonstrate "interpretive awareness" by meeting the following requirements – criteria which are sustained throughout this study:

(1) The researcher's own background and understanding of the phenomenon under investigation should be identified;

(2) The characteristics of the research participants and the design of the interview questions should be clearly stated and justified;

(3) The stages organized for collecting data should be transparent;

(4) The data analysis methods should be conducted with an open mind, not by imposing an existing structure;

(5) The procedures for arriving at categories of description should be completely explained and illustrated with quotes; and

(6) The results should be presented in a manner that allows for scrutiny.

(Cope in Hajar, 2021, p. 1433).

Data collection

Ethical issues. This research was deemed low-risk, with no vulnerable participants nor sensitive topics of investigation identified. Ethical approval for the study, justified as a task in the public interest, was granted by the University of Sheffield, and informed consent was obtained from all participants. Data was processed using agreed services, namely Google Forms and Microsoft Teams. No concerns or requests for deletion of data were raised.

Questionnaire. An initial screening question – "do you use Twitter as part of your role(s) with the Bodleian Libraries?" – elicited 21 responses, of which thirteen answered "yes" and subsequently consented to an interview.

To keep the sample size manageable with respect to time and other methodological constraints typical of a master's study, semi-structured interviews were conducted with only seven of the thirteen eligible questionnaire respondents. It is usual for between ten and 30 eligible participants to be selected for interview during phenomenographic studies (Stenfors-Hayes *et al.*, 2013), though valid studies can and have been conducted with fewer participants (Travers, 2019, pp. 271–272; Wheeler and McKinney, 2015). As Mears (2012, p. 173) notes, in qualitative research there are "no iron-clad rules of what constitutes sufficient data", with the requirement only that the researcher(s) collect enough data to represent the experience being investigated (p. 171).

As diverse a sample as possible was selected on the basis of the answers given in the questionnaire, which elicited responses on job title, workplace, frequency of Twitter use in

a professional capacity, and the number of Twitter profiles used in a professional capacity.

No two individuals invited to interview occupied the same role, nor worked in the same team or location as one another. The demographics of the interview sample are shown below. For anonymisation, participant names have been substituted with an identifier (P1 etc.). Job title and workplace are substituted for a simple definition of seniority based on job description and pay increment (Junior, Middle and Senior):

(1) P1 – Middle - Multiple times/week - 1 profile

(2) P2 – Senior – Daily – 2 profiles

(3) P3 – Senior – Multiple times/week – 1 profile

(4) P4 – Senior – Monthly – 1 profile

(5) P5 – Junior – Multiple times/week – 2 profiles

(6) P6 – Senior – Weekly – 1 profile

(7) P7 – Senior – Daily – 1 profile

Interviews. Each interview lasted an average of 22 minutes, with a total of two hours 37 minutes of recorded exchanges transcribed for analysis. The opening question, guiding questions and research themes for the interviews were as follows. At no point did the lead author raise unprompted the topic of ethics during the interviews, nor in the initial screening questionnaire.

Opening question.

(1) Before the interview, you said that you use Twitter [regularity] as part of your role as [role]. Could you expand on this use please?

Guiding questions.

(1) Why do you use Twitter?

(2) Does anything influence your use of Twitter?

(3) Is anything explicitly or implicitly expected of you when you use Twitter?

(4) Do you refer to any professional guidelines, principles, frameworks or codes in your use of Twitter?

(5) Have you reflected on your use of Twitter in a professional capacity before?

Themes of relevance. The central theme is the varying ways Bodleian Libraries staff conceptualise their use of Twitter in a professional capacity. Sub-themes are:

(1) What is motivating use of Twitter?

(2) What is informing use of Twitter?

(3) Does the described use of Twitter accord with codes of ethics in the LIS sector?

Data analysis. To analyse the data, the first author moved through a series of analytical phases outlined in Figure 2, synthesised from Marton (1988), Marton and Säljö (1997), and Åkerlind (2005).

Phases were not completed sequentially nor once only necessarily, yet the intention was to move through them to reach a satisfactory position of clarity and completeness. Throughout the process, transcripts were considered collectively with their content considered

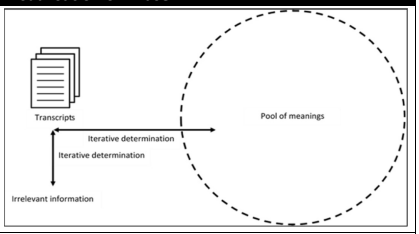
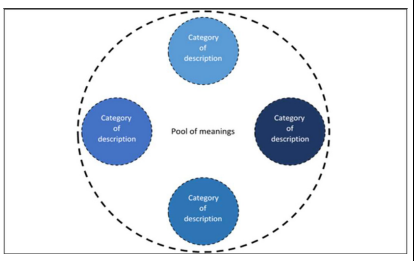
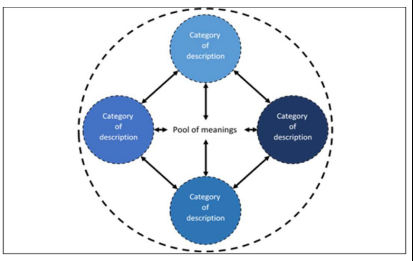
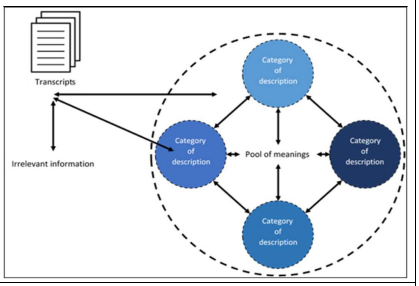
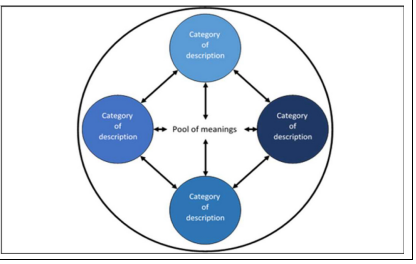
Phase	Visualisation of Phase
1. Content is considered for inclusion in a "pool of meanings" according to a theme, or themes, of relevance. Determinations of relevance are continually revisited. Neither determinations nor the pool of meanings are fixed at this stage.	
2. Within the pool of meanings discrete features of content in the form of quotes are explored, leading to the formation of early categories of description. These are held to be the different conceptions participants convey collectively in the transcripts. Categories at this stage are non-definitive and partially defined. A single participant may exhibit adherence to more than one category at once. A category can be formed from only one participant's data.	
3. Concurrently, an internal logic is sought that binds the categories together in a comprehensive and coherent structure. Again, the process is iterative. Sense checking and targeted criticism of the logic may lead to the refining or rejecting of categories and their relationships.	
4. This process is not limited in scope to the pool of meanings – transcripts are also revisited. The content's relevance, its inclusion in the pool of meanings, its adherence to a category of description and its influence on other categories are repeatedly reappraised.	
5. Efflorescence is an assumed eventuality, with the approach yielding a final version of the categories and their relationship(s). These are presented in an outcome space for discussion.	

Figure 2.
Phases of phenomenographic analysis

contextually. One transcript was not analysed in isolation to validate a final category, nor was a quote removed from the semantic context in which it was originally conveyed. That is, the wider meaning attached to a quote – as inferred from other passages of the transcript – was prioritised and preserved as the process developed.

In the first instance, interview transcripts were cleaned, and read collectively and repeatedly so that a familiarity with the data could be established and themes across transcripts discerned. During this process the transcripts were coded according to Bryman's four step process:

(1) Familiarize yourself with your data.

(2) Re-read your data and write memos.

(3) Review your codes.

(4) Consider more general theoretical ideas in relation to codes and data.

Clarke *et al.* (2021, pp. 534–5).

A finalised list of codes cohered around a set of questions that was used to iteratively interrogate the data:

(1) How is Twitter being used? [Code family "Use"]

(2) What rigid, explicit rules are governing use? (Are there any hard controls on use?) [Code family "Framework"]

(3) What acknowledged parameters are guiding use? (Are there any soft controls on use?) [Code family "Conditions of use"]

(4) What unacknowledged influences could be guiding use? (Are there any subconscious controls on use?) [Code family "Influence"]

(5) What evidence is there of individual critical thinking? [Code family "Reflection"]

In conjunction with this set of codes, visualisations of transcript data produced using linguistic analysis software, Voyant Tools [7], helped to identify syntactic and semantic patterns that underpinned the formulation of the pool of meanings and latterly the categories of description. A final set of categories is provided below.

Findings

Categories of description

Three categories were identified. Each category consists of a referent (the category's global meaning); a structure (specific identifiers used to demonstrate adherence to the category); and evidence in the form of quotes or lengthier interview exchanges. All included evidence has been parsed to exclude or redact personally identifiable information. Generic information given in square brackets indicates a redaction (a personal address would be redacted to "[address]", for example). Specific or sensitive topics not relevant to the focus of enquiry have also been redacted. Participant pronouns have been changed to they/theirs. Significant gaps between quotes or exchanges in the same interview are indicated with a line breaks. Disfluency and filler words have been edited down for clarity and brevity.

The evidence selected for the categories is not exhaustive and has been included for its ability to support a category's integrity in the simplest and clearest terms. This is not to suggest that the participants who supplied the evidence strictly and exclusively adhered to a particular conception. Nor is it to suggest that the evidence used for a particular category is evidence of adherence to that category only. There are numerous instances across the

transcripts where individuals demonstrated adherence to more than one category of description and more than one category of description at once. While such occurrences may appear incongruous, they serve to reflect the complexities of ideation and, more practically, the inconsistencies that naturally arise within interviews.

Approximately 6,000 words of additional transcript evidence was drawn upon to substantiate the categories as presented. For brevity, this additional evidence has not been transposed in its entirety here, but further extracts from one interview supporting one category are appendicised for illustrative purposes (App. 1).

Category one: collectivist conception. Referent. Local, organisational and/or institutional agendas are foregrounded with Twitter use conceptualised with respect to collective considerations. "Local" is defined as the individual's immediate team, while "organisation" refers to the Bodleian Libraries. The University of Oxford is the "institution".

The extent to which individuality is acknowledged and expressed can vary, but it nonetheless remains subordinate to collective priorities. Twitter use may be more imposed than inspired in this sense, and individual responsibility and sense of ownership may diminish as a result.

It is important to note that this conception transcends the type of Twitter account being referred to with personal, as opposed to shared, account holders also indicating adherence to this conception, albeit less often and more obliquely through self-imposed behaviours.

Structure. Structural aspects of this conception include:

(1) Use of first-person plural pronouns and possessives, such as "we", "our" and "us".

(2) Twitter use situated in relation to local, organisational or institutional frameworks and/or framed as the meeting of local, organisational or institutional requirements or expectations.

(3) Assertion that Twitter use should be understood and/or appraised collectively.

Evidence: P1 (uses a shared account). When asked about their use of Twitter as described in their questionnaire response, P1 links this to a local communications plan that needs to be followed, with their use also dependent on the staffing arrangements at their library:

> P1:
>
> We have a communications plan. So we do have a sort of structure as to who does what in the library in terms of sort of getting information across to readers. So my. It's sort of changed who does what recently in terms of over the pandemic and in terms of we did have two [team members] and now we have one. So gradually I've sort of taken on more of a sort of social media.

The interviewee was later asked to clarify their use of "we" to determine whether they were using it in the "royal" sense or if they were referring to themselves as part of a group:

> Interviewer:
>
> And when you say "we" was this your idea, was it another person's idea?
>
> P1:
>
> So the original communications plan was. There was a bit of a working group within the library. This was a few years ago. They just wanted to make sure there was a clear path so everybody knew what they were meant to be doing and so information didn't get missed. So that was sort of set up as part of it and then everyone sort of has their roles . . . I think it was just a combined sort of decision that we wanted to keep things fresh in the library and really promote what we were doing, but also try and help readers.

P1 also sought to prioritise guidance from the organisation in their use of Twitter.

Interviewer:

Are there any other guidelines or principles or codes or anything that are guiding your use that are perhaps outside of the local library?

P1:

I guess I'll try and follow the Bodleian Libraries communication plan and you know, the guidance they've given in terms of what you should and shouldn't be doing. So, you know, trying to be friendly but still being professional . . . So yeah, so definitely the Bod Libraries communication plan, sort of is in the back of my mind.

P1:

You know we've had the odd, can't think what the sort of topic was, but we've had the odd thing that sort of had comments and I guess it's not being drawn into that, into replying, and checking with Bod Comms, you know, what's the correct route to take out of it.

Towards the end of the interview, the individual was asked whether they had reflected on their use of Twitter in a professional capacity before. They perceived this to be a collective endeavour.

Interviewer:

That brings me onto my last two questions. So my penultimate one is whether you have reflected at all on your use of Twitter in a professional capacity?

P1:

A little bit. I find sometimes with work there's not a lot of time for reflection. It's sort of like you constantly duh duh duh duh. And sort of, going on, it almost needs a sort of a point, a sort of a group of people at work to say, "oh, let's have a think about how we've used", sort of. And we have done this every so often, but then it's sort of taking things forward. So we'll sort of get together and think about what we've been doing and what we might like to do.

The individual occupies a semi-passive position which sees them deferring at points to the received wisdom of their local library team and the organisation's Communications Department. Their use of the first-person plural is telling in that it hints at the individual's level of perceived agency in this process. While they acquiesce to a collective direction of travel, they see themselves as co-pilot rather than passenger on the journey they describe.

Category two: settled conception. Referent. Twitter is conceptualised as a fixture, a fait accompli. Usage is reflective of this understanding and can be characterised as static, formulaic, repetitive or routine, with emphasis placed on consistency and continuity. Explanations for current arrangements often draw on precedents or historical decisions, which are relayed uncritically: Twitter is used because it was, and will be used because it is.

Structure. Structural aspects of this conception include:

(1) Certainty of use, indicated through conclusive language, such as "must", "need to" and "have to".

(2) Evidence of habitual usage: present use of Twitter is contextualised with past use. Future use is encouraged.

(3) Assumption that Twitter has an inherent utility.

(4) Twitter is used to inform and/or justify use of Twitter in respect to algorithms and account metrics.

Evidence: P5 (uses shared accounts). At the beginning of their interview, when asked to expand on their usage of Twitter, P5 occupies the Settled conception by underscoring their adherence to a routine.

P5:

I'm involved in running both the [name 1] account and the [name 2] account. The [name 1] account is more sporadic, I chip in as part of multiple members of the team, there's less of a schedule. So I use that as and when it's fit and for me to do so when I have information to share or find something unique, whereas the [name 2] Twitter account is much more scheduled. There's a rotating editorial rota, three weeks. I'm on once every three weeks and I run it for the whole week and I tweet three original tweets and up to two sharing links to either jobs or to blog posts that are shared by other [contributors]. So I use it across two accounts . . .

Later, they stress the importance of continuing to use Twitter to justify a presence on the platform. In this respect future Twitter use is assured, predicated on current use.

P5:

I do think you have to post a certain amount of content in order to keep the account going, in order to keep it valid, in order to make it worthwhile. So I do think there's a certain amount of expectation on yourself just to keep things moving so you don't lose that kind of momentum you build on social media.

They also note their decision to prioritise feedback from Twitter in their continued use of the platform:

P5:

I'm very aware of maintaining a style but also keeping it fresh. So I think there's a certain amount of. You have to play the game with the algorithm you have to give it what it wants, so you have to maintain something that's a consistent style with the account . . . I think it's worth noting that the more you get into analytics, the more you alter what you post based on them, because I didn't engage in analytics too heavily before taking on the [name 2] account and it becomes. You become very aware once you start doing that that there's certain things perform better. Certain things like photographs perform way better across social media. If you include a photo in any tweet and also the threads perform way better and that alters the kind of content that you produce in a very obvious way . . .

Category three: questioning conception. Referent. Twitter is conceptualised as something to be used conditionally, critically and/or experimentally. Agency is expressed through personal reflection on current use and recognised, purposeful changes in behaviour. Hypothetical scenarios and alternatives to Twitter are proposed.

Structure. Structural aspects of this conception include:

(1) Hesitation and qualified language, such as "I feel" and "I think". Presence of conditional clauses.

(2) Twitter use occurs in a state of uncertainty or transience.

(3) Twitter is critiqued.

Evidence: P2 (uses a personal account and a shared account). P2 explains that their reason for using Twitter in a personal professional capacity is the unparalleled network of support it facilitates:

P2:

There is a sort of mutual support structure among all the different [department] librarians and all their different flavours: [name 1], [name 2], [name 3]. They all have different names, but they all kind

of mean the same thing. They will talk to each other on Twitter, so occasionally you'll get somebody, say, "I call out to the Twitter hive mind. Does anybody know the answer to this particular policy thing?" . . . And then somebody from [university 1], one of the [university 1] librarians will turn around . . . and say "I know the answer to that. I've got an answer. Here's the document you need."

. . . They don't necessarily tell you when they drop the policy as well. But if they do, they don't tell me. I never find out. It might go upstairs somewhere, they might inform the university as a whole, but it doesn't trickle down very quickly. Whereas on Twitter it would be like someone says, "did you notice that [development]?" and you can kind of hear every single [department] person's head turn as one towards this website and be like "no, I did not. Hang on I'll go over there and have a look." And that's been happening.

. . . So this is what I use my personal Twitter account for quite a bit. It's quite important to my job.

Later in the interview, the participant reveals that they chose a postgraduate dissertation topic based on the concerns they had around using Twitter on behalf of a library, subsequently choosing to use the shared account they manage only in a way they believe will deliver a return on investment.

P2:

The reason that I did my master's dissertation subject on what I did, was that I was asked to create a social media account for a [sector] library and I then responded with "but what do I talk about for a [sector] library?" Because there are oodles of problems there, shall we say. And so I went around and interviewed different types of libraries, asking them what they were doing with their social media, just to see. And there is a difference. And so when I started in this one, I said to them that I'm going to be using it for this sort of thing because I don't want to waste staff time and energy and output on something that isn't then going to deliver something to the service.

They re-emphasise the importance of this approach at later points in the interview noting the factors informing future decisions on usage, namely the sustainability of maintaining a Twitter presence and the continuing presence of their target audience on the platform. P2 also notes that their usage of Twitter represents only a facet of their experimental approach to marketing and communications.

P2:

. . . and the thing about that is it's not necessarily the formula for success, which is why you need to reflect on whether you're wasting staff time . . . I think one of the core problems with a lot of this social media is sustainability and whether it's worth the staff time to do what they're doing, and that's why we do reflect on it . . . And one of the things we have to do quite a lot in the marketing and comms aspect of this type of job is throw things into the ether and hope something sticks . . . And also some of the things about reflection on whether the account's worthwhile anymore significantly changes when you're looking at the different . . . At the moment it seems to be on the terms of the amount of communication you get from elsewhere from some places, it's a reasonable use of time, so we're still using it.

. . . Otherwise you are just to tweeting into the void and you are wasting your time and you're wasting staff time. And if you're not getting it, it's just like the endless wheel of a machine where someone walks over, pushes the wheel and they don't actually know what the wheel's doing. So yeah, that's very much. I really want to make sure that when you're, because when you're doing marketing, you have to think of your audience.

Outcome space. An outcome space, framing the categories of description, was created after careful consideration of the raw transcript data and the pool of meanings as it had been thematically coded.

Ancillary SM documentation provided by the Bodleian Libraries and the University of Oxford was reviewed only to gain a fuller understanding of the answers given in the transcripts.

The outcome space (Figure 3) contends that the logical relationship linking the categories of description together is a shared context of conceptualisation, which sees participants draw upon the same set of internal and external influences, albeit to varying degrees.

Internal influences. Originate from the participant, they are:

(1) Notions of professionalism made up of:

- Self-censorship: avoidance of political, controversial, offensive, personal or irrelevant content.
- Ethics: individual sense of right and wrong underpinning behaviour.
- Perceived responsibilities concerning themselves and others.

(2) Knowledge of Twitter, SM and technology, including experiences and opinions.

(3) Knowledge of their community – who they are and how they are best served.

External influences.

(1) Local, organisational and institutional policies and guidance for SM, usually explicit.

(2) Workplace expectations and culture, usually implicit.

(3) Influence of peers and peer organisations. Includes colleagues within the Bodleian Libraries and colleagues at other organisations and institutions.

(4) Job description.

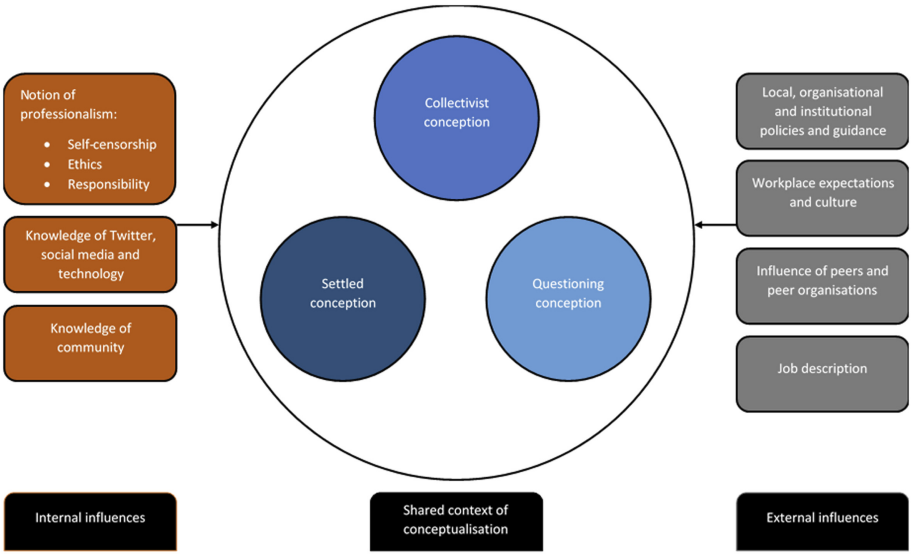


Figure 3.
Visualisation of outcome space

Discussion

Is libraries' use of social media ethically informed?

Partially, in that Twitter and Twitter use as conveyed in the transcripts is not antithetical to LIS' ethical legacy as established in the literature review, but instead consistent with said legacy in some respects. Taking Ranganathan (1931) as a touchstone, there are echoes of his laws inherent in the decision to proactively engage with communities on SM (save the time of the reader); experiment with and expand usage of new technologies generally (the library is a growing organism); and use Twitter conditionally and inclusively (every reader his/her book. Every book his/her reader), which would suggest a shared but unclear adherence to ethical thinking.

To elaborate, Twitter was repeatedly talked about as a means for exchanging, that is transmitting and or receiving, library related information. If Ranganathan's second law is syntactically reworked to accommodate this characterisation (read "every reader his/her avenue to transmit/receive library related information" instead), it reveals consistencies between the law's precepts and reasoning, and the way the interviewees said they used the platform. For example, Twitter is leveraged to create an additional way for library related information to circulate; for Ranganathan (1931, p. 280), "a good general library might be regarded as a grouping of such [avenues of communication], properly coordinated so as to strengthen and amplify each other without wasteful overlapping." In selecting books for readers, or in this case avenues of communication, Ranganathan explains this can only be done by "knowing the readers and understanding and anticipating their needs" (p. 281). Accordingly, some interviewees' stated rationale for using Twitter was that it was felt to be/or to have been popular among, and/or useful to, their communities. This condition of use foregrounds the importance of "knowing readers" and demonstrates an attempt to understand and/or anticipate their needs when maintaining a curated presence on the platform.

If the same reworking is extended to Ranganathan's third law – that being 'every avenue to transmit/receive library related information his/her reader' – a further consistency is apparent. Seen by interviewees as a means of exchanging library related information, Twitter is made an additional channel of access to the Bodleian Libraries whereby it forms a mode of presentation, outreach, publicity and "extension work" (pp. 299–334). In other words, for interviewees Twitter is/should be used as a tool to improve connections with the library, helping it to further its wider aim of educating that is the third law. Similarly, creating and maintaining a library orientated presence on Twitter may also represent a logical extension of the guiding force behind the fourth law, to save the time of the reader. In explaining this law, Ranganathan advocates for an open library system over a closed one – one where the library's offering is readily available to users for perusal rather than restricted – because he favours the reduction of obstacles to access, which in turn saves the time of stakeholders. Introducing a library presence to an SM platform where its communities are known or thought to reside goes a step further in this regard in that it represents an attempt by library representatives to "go to" their communities and so alleviate communities' requirement to 'go to' the library.

Lastly, Twitter's adoption by library representatives as conceived by interviewees can also be seen as a legitimate form of library "growth". Though an anachronistic interpretation of the fifth law, Ranganathan (1931, p. 414) does provide scope for such a reading in that he ponders:

> What further stages of evolution are in store for this growing organism – the library – we can only wait and see. Who knows . . . that a day may not come when the dissemination of knowledge, which is the vital function of libraries, will be realised by libraries even by means other than those of the printed book?'

His musing can reasonably be interpreted as an invitation to explore and experiment with new ways of disseminating knowledge, which here would include the thoughtful, conditional use of Twitter as described.

Though participants did not surface these connections to Ranganathan themselves, that their conceptions of Twitter and Twitter use are reconcilable with some of his precepts – key principles on which modern day library ethics are founded – suggests that Twitter use in this instance is to some degree ethically informed rather than coincidentally consistent with established ethical thinking, as would be the alternative claim. P4 in particular provided a number of compelling utterances to support this notion on an individual basis, particularly in relation to the concerns they raise about SM and their desire to pursue ethical publishing models (see App. 1). Importantly though, a more conclusive determination cannot be reached on the basis that there is insufficient evidence in the transcripts to demonstrate explicitly that participants drew upon any particular aspects of LIS' ethical legacy collectively to inform their conceptions of Twitter and Twitter use.

Based on the outcome space, interviewees seem to depend mainly on more personal, amorphous combinations of internal influences to inform their use of Twitter and there is little in the way of overt ethical steer externally. Instead, local, organisational and institutional guidance for SM use is described as aspirational and procedural, with a focus on mitigating reputational damage. Job descriptions may incorporate SM use with limited justification. The presence of peers and peer organisations on SM lend legitimacy to the platforms and encourage take up by staff through enhancement of the network effect, and a workplace culture conducive to SM use provides a further nudge without an adequate ethical costing of the implications.

Is libraries' use of social media ethically motivated?

Regarding Twitter use, it is encouraging to find that library staff are ethically motivated in their decision to use SM. They are inspired by the presence of individuals and communities they seek to serve and collaborate with, using Twitter to transmit, gather or exchange information so as to instruct, interest or otherwise support said individuals and communities and carry out their professional responsibilities – points one and two of Ovenden's (2020a, p. 225) five aims of libraries. This motivation was evident in the formulation of all three categories of description but is perhaps most noticeable in the hypotheticals volunteered by participants occupying the Questioning conception, who repeatedly emphasise their willingness to stop using Twitter should their community move on or no longer be seen to benefit from staff's presence on the platform. In this respect, participants' conceptualisations share a degree of passivity or reactivity in that they describe being guided by, rather than guiding, their communities as regards the adoption and use of SM. This is indicative of adherence to the value of "service" as defined by Gorman (2015, p. 36) in that the value's associated responsibilities for libraries are shaped by interests external to the library:

(1) ensuring that all our policies and procedures are animated by the ethic of service to individuals, communities, society, and posterity.

(2) evaluating all our policies and procedures, using service as a criterion.

In light of this finding, comment might be made on the tension between the enduring values of "service" and "stewardship" and whether an appropriate balance between the two is being struck as regards libraries use of SM. For while libraries in their adherence to "service" pledge an ongoing commitment to their communities, their adherence to "stewardship" sees them at the same time requiring to make commitments to themselves in that the responsibilities associated with this latter value are more self-contained and self-directed:

(1) preserving the human record to ensure that future generations know what we know.

(2) caring for and nurturing education for librarianship so that we pass on our best values and practices.

(3) being professional, good stewards of our libraries so that we earn the respect of our communities.

Gorman (2015, p. 35).

Ranganathan (1931, pp. 334–335) hits upon this tension when expounding upon the third law, every book his/her reader. In his closing remarks on a chapter in which he champions patron-driven book selection, he cautions:

> It can be easily seen that one of the means of fulfilling the demands of the Third Law is to give full weight to the tastes and requirements of the *clientele* [service] . . . But it should not be inferred from this that the library should slavishly follow the demands of readers and that it has no responsibility in steadily and consciously directing the reading tastes of its *clientele* [stewardship].

Despite identifying the need to strike a balance between service and stewardship early on, LIS' ethical canon does not conclusively reconcile the interests of libraries and their users in complex modern-day instances where they might diverge, instances that have the potential to strain the external and internal commitments an ethical library must meet simultaneously.

Given the accusations floated in the problem statement and the conceptualisations thus presented, SM use could plausibly represent such a wedge issue for libraries. This compels the question: does the community focused argument for the adoption and use of SM – which this study determines to be the main ethical motivator of SM use by libraries – also serve as a sufficient justification to reason libraries' use of SM is ethical as concerns its commitment to stewardship? By extension, even though libraries use of SM as conceived is ethically motivated, does that alone make SM's use by libraries ethical? These unanswered questions inspire further investigation in this area.

Is libraries' use of social media compatible with LIS codes of ethics?

On the basis of this study, the answer is undetermined. Despite prompting, participants seldom conceptualised their use of Twitter in relation to their wider profession or the LIS sector in general, rather only to the extent that they engaged with peers at other institutions and organisations on Twitter, and/or used it in a previous professional capacity outside of the Bodleian Libraries. Regional, national and international LIS collectives were not discussed. As noted above, the lead author was unable to draw upon sufficient evidence to suggest a collective adherence to any particular aspect of LIS' ethical legacy, including codes of ethics, only partially determining that Twitter use in this context was, more generally, ethically informed to some degree. To suppose whether library staff's use of Twitter as relayed in the transcripts is compatible with specific ethical codes that were not referred to would be speculative, with further discussion representing a departure from the phenomenographic rubric detailed in the methodology.

This finding remains noteworthy in two respects. Firstly, it defies the lead author's expectations; despite all interviewees being employees of a CILIP employer partner, no reference to a LIS code of ethics, including CILIP's, was identified in the transcripts. Secondly, a valid explanation for this absence could not be provided in a manner consistent with phenomenography, highlighting a limitation of the research approach.

This is to say that in instances where phenomenographers are presented with an absence of transcript evidence with which to provide a valid answer to a research question, it becomes both impossible to answer said research question and impossible to explain why beyond referring back to the same lack of evidence. Given that both the determination of evidential

absence and the explanation for that absence must both be drawn exclusively from the same source, the interview transcripts, phenomenography eats its own tail in such scenarios, leading the authors of this study to conclude only that: (1) the study failed to determine an answer to this research question because of a lack of relevant transcript evidence and; (2) the reason for said lack of evidence is frustratingly undetermined.

Conclusion

In conclusion, this study has identified three categories of description, each describing how individuals conceptualise their use of Twitter in professional capacity as part of their role with the Bodleian Libraries:

(1) The Collectivist conception

(2) The Settled conception

(3) The Questioning conception

Participants evidenced adherence to more than one conception and more than one conception at once during the interviews. It should therefore be reiterated that while phenomenography *does* seek to identify the finite number of shared ways of conceiving of phenomena, it *does not* seek to suggest that individuals' understanding is bound to any one conception and is thereby fixed and one-dimensional.

The categories are relationally linked by virtue of being bound in a shared context of conceptualisation, which is based on a set of internal and external influences. Both the categories and their shared context have been used to answer the research questions.

Examination of the categories and the associated conceptions of participants as they relate to the research indicates that:

(1) Libraries' use of SM is ethically motivated.

(2) Libraries' use of SM is ethically informed to a degree.

Whether libraries' use of SM is compatible with codes of ethics in the LIS sector is undetermined. Questions are raised as to whether libraries' use of SM can be considered wholly ethical in light of the findings and a limitation of the phenomenographic research approach is identified.

Recommendations

The following recommendations are made to the LIS professions:

(1) To be proactive in addressing the emergent ethical dilemmas inherent in embracing new and complex technologies by strategically increasing their absorptive capacity and engaging in environmental scanning. LIS' shared ethical legacy and existing codes of ethics can prove instructional in informing relevant decisions and retaining a coherent identity amid changing and challenging circumstances.

(2) To critically reconsider their current operations in response to changing contexts and where possible overtly state and justify the ethical rationale for the approach(es) taken. This step will further empower staff to meet the ethical obligations of the LIS professions.

A further recommendation is made to LIS professional bodies:

(1) To seek to work with industry business partners to better embed existing ethical frameworks.

Finally, further research is required to re-orientate LIS literature concerning the use of SM in libraries. A decade has elapsed since Wasike (2013) expressed reservations about its use and recommended that librarians remain alert to the ethical issues it poses. Yet, as Humphreys' 2019 literature review reveals, there has been little published since which challenges the dominant fascination with SM's functional potential. Debate on this topic is overdue, and further exploration of the ethical implications of SM use in libraries is encouraged.

Notes

1. "Twitter" is used throughout to refer to the platform now known as "X".
2. https://transparency.twitter.com/en/about.html
3. https://help.twitter.com/en/rules-and-policies/x-rules
4. https://www.cilip.org.uk/page/EmployerPartner
5. https://www.cilip.org.uk/page/ethics
6. https://cdn.ymaws.com/www.cilip.org.uk/resource/resmgr/cilip/membership/benefits/pksb/pksb_intro_overview_v5.pdf
7. https://voyant-tools.org/

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Appendix

Example of additional evidence for categories of description

Category three: Questioning conception

P4 (uses a personal account). P4 remains critical of Twitter and SM generally throughout their interview, oscillating between the Questioning conception and the Collectivist conception – occupying both at the same time at points – as they critique Twitter as an individual, but do so frequently in reference to how the platform fails to support local and organisational priorities.

P4 also demonstrates the influence of the network effect, revealing at the end of one exchange that the only reason they continue to use Twitter is because colleagues do so. Similarly, they would prefer to pursue more ethical and independent publishing models, citing the successful blogs of peer institutions as a justification for such a move.

As with other participants, the need to serve a community of users in some way is cited as a condition of use.

P4:

I think . . . at this point it's sort of a sense that, "well, I have this account so I'll post some things on it every now and again", but . . . it's not something that . . . I guess I feel that Twitter's sort of somewhat past its best before date for me.

P4:

And Twitter has become again. Especially since 2016, you know it used to be that I can pretty much go on Twitter and actually finds some really interesting things myself for studying [items]. Now you go on Twitter and it's 75% just political stuff and it's really negative and so it's not actually a platform that I that I personally enjoy using either.

P4:

I don't feel that we're reaching our target audiences through Twitter any longer. But there are other considerations I mentioned. I don't . . . It's ceased to be, for me, it ceased to be a positive platform. I mean, you can perhaps question whether it ever was one. But certainly it isn't for me now from what I've seen and I think I've also become much more critical of centralised social media platforms.

Interviewer

Ok, why might that be?

P4:

. . . Well, I mean for one thing I think . . . There's other people who can, you know, critique this much better . . . I sent you, for example . . . I think I also sent you my e-mail. There's this article in *The Atlantic* by this computer science professor at Georgetown. I think his name is [unintelligible].

Interviewer:

Ok.

P4:

And he's basically critiquing Facebook and Twitter and Instagram as being, you know, basically hugely destructive for democracies and essentially is making the case that these companies are, you know, these companies are out to monetise attention . . . They're there to sell advertising and they're not really out to make it easier . . . for example, for a cultural heritage institution to reach more diverse audiences. That's just not the function of the platform.

Interviewer:

And in knowing that now, do you think that will change how you use Twitter in the future? It sounds like it's already had an effect on the frequency of your usage.

P4:

Right? You know, I just. I mean, ideally I'd like to just delete my account. Honestly.

Interviewer:

Ok.

P4:

. . . I don't know why I hold on to it at this point, it's just because it's there basically.

Interviewer:

Ok.

P4:

So it's . . . You know, every now and again it's. You know, it's useful to find something, and basically I still have it, I suppose because some other colleagues are still using it.

P4:

I feel that a lot of our use of social media platforms was done quite uncritically and you know . . . I think that it's also been done at a great cost to our capacity to actually act independently if that makes sense, because if you think about it, you know there's . . . At one point in time, when I was working for [institution], I was probably spending a couple of hours per week, just running that Twitter account and the fact is that if – and that was being multiplied across, you know, multiple employees – and if I were spending that amount of time on independent publishing projects, public engagement projects within the institution that we had actually sat down and planned. Because a lot of that Twitter use was not actually, you know, just kind of happened. Nobody sort of sat down and said, "yeah, let's go and you know, we're going to get somebody to spend two hours a week on Twitter" ever. You know? More than that. But if we had actually sat down and thought, you know. We could have come up with, that same amount of time, we could have come up with a really innovative and independent publishing project that would have been much more directed, will produce much more remarkable results, I think, and would've had a much better chance of actually meeting those target audiences that we have developed, that we have identified and not just the people who, you know, that they've ended up on Twitter.

P4:

So for example, you know if you look at [institution 1]. If you look at I don't know [institution 2] and [institution 3] for that matter where they have really great independent blog posts on their web page . . . with really good, approachable writing that often get into some really interesting sort of exposures of things in their collections . . .

In line with the above, P4 evidences continual and deep reflection on their own use of Twitter in relation to the local and organisational context, supposing that Twitter may have been adopted for use experimentally and without due consideration of its business practices.

P4:

. . . There's a lot of attention paid to social media . . . I guess increasingly I think people were really interested in it at that point as what they saw as just an easy publishing platform. But I don't think that they put. I think that we just didn't. We sort of put more weight into the ease of use with . . . Not enough attention to the governance aspects and to the real, the actual motivations of the companies that are running these things. And so I think, I just really emphasise that I'm really interested in independent publishing, in modes of public engagement with research that really has defined audiences that that we can measure, that we control, and I think there's some really exciting work that we can do. And I think especially from the pandemic. Actually, when we all had to concentrate on all this online stuff I think that was the point for many of my colleagues, we sort of realised "wait a second . . . All this online stuff is sort of just like throwing spaghetti at a wall and seeing what sticks. And actually this is a really bad way of conducting public outreach with research."

P4 concludes their reflection by looking towards the future, re-emphasising their commitment to fit-for-purpose, ethical publishing platforms.

P4:

But I think you know the future, certainly for us, is within independent and decentralised publishing platforms.

I think basically what I'm wanting to emphasise is simply. Twitter was a neat phase for us. It was a way of sort of learning to use digital tools within public engagement, but I think we have learned that wasn't quite all we thought it was and I think we now have. I think we can now identify better tools that are more ethical and better meet our needs.

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