

Capturing the Library:
Investigating Perceptions and Perspectives in Library Instagram
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Abstract

Libraries as institutions have undergone dramatic change over the last several decades, but misperceptions about their role in modern society persist. In the current day, librarians are actively involved in communication and advocacy efforts. Libraries have widely adopted social media to communicate with their publics. While library-specific research and practices have developed, the literature is often lacking in terms guidance and it is still unclear if present social media strategies are effective. There is also the question of how social media content is influencing broader perceptions of libraries.

In this context, I have taken a closer look at themes and processes in the Instagram communications of the University of Alberta Libraries (UAL). My rationale for looking at Instagram arises out of the increasing ubiquity of visual communication in social media. My study used a multi-phased mixed-methods approach and included a content analysis, photo elicitation interviews with students, and an exploratory comparison of Instagram metrics to the qualitative phases of the project. This multi-phased approach allowed for the investigation of content and messaging from several different perspectives.

The qualitative findings of the project reveal themes in the content, and provide insight into student perspectives of that content and their perceptions of libraries. The third phase findings showed that the same theme, *library as place*, was popular with interview participants and had higher “Likes” averages within Instagram. This suggests there is value to the metrics data on Instagram, however to fully understand why or how particular content is popular, it must be situated into themes that can be understood by all involved in the communication process.

Keywords: perceptions, perspectives, libraries, academic libraries, social media, Instagram, photography, metrics, visual communication.

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Introduction

On July 22, 2018 *Forbes.com* published a now-withdrawn article entitled “*Amazon Should Replace Local Libraries to Save Taxpayers Money*” (Mourdoukoutas, 2018). The article, written and then tweeted by Panos Mourdoukoutas, a professor and chair of the Long Island University Economics department, advocated for the elimination of public libraries in favour of Amazon bookstores. Considering the author’s academic credentials, the article was astonishingly unresearched, cited no statistics and made drastic assumptions about the services that libraries offered. According to Mourdoukoutas, “Technology has turned physical books into collector’s items, effectively eliminating the need for library borrowing services.” (para.7)

Within hours of tweeting, Mourdoukoutas’ Twitter account was submerged under waves of negative reaction from librarians and library supporters on social media. *Forbes* quickly removed the article, justifying its action by citing that the piece was “outside the author's area of expertise” (Ha, 2018). Issues of press freedom notwithstanding, many monitoring the outcry on Twitter commented at the swift and well-informed responses of librarians and their supporters to Mourdoukoutas’ critique of libraries. That precision and force comes with much practice. Librarians are all too accustomed to the rhetoric that “libraries are no longer necessary” (Bodnik, 2012; Rozsa, 2017; Siegler, 2013).

I read Mourdoukoutas’ article during the concluding phase of data analysis for this project, which looks at academic library content on Instagram, and how users perceive that content. Reading the article evoked familiar feelings of bewilderment and frustration, but also reinforced how the discussion of libraries and their role in modern society is very much a conversation that is happening on social media. Furthermore, it crystalized the necessity for research in that area.

As both a librarian and someone who believes strongly in the benefits that libraries provide for individuals and communities, I find it disconcerting how misconceptions about libraries continue to thrive. I experience these misconceptions regularly in face-to-face encounters I have with strangers, when I tell them I am a librarian. I also hear it in the voices of students who say “I had no idea” - their eyes open wide - when I show them something new at the library service desk. With the ubiquity of digital media, I hear the message echo regularly in the social media feeds that I follow.

Some in the librarian profession argue that librarians are taking these perceptions too personally, and even suggest that our defensive response to them is more harmful than helpful (Jennings, 2016). As a communicator and a librarian, I think that we should be engaging in these discussions. To my mind, evaluating and improving our communication strategies is vital. As libraries are institutions that rely on public funds to operate, public perceptions of their value are influential, and can strike beyond op-ed articles and tweets. For example, recently the Province of Saskatchewan proposed drastic 58% cuts to library funding in their annual budget; cuts that were later repealed after a public outcry forced the government to re-evaluate and admit they had not sufficiently investigated the impacts or consulted with the public (Langenegger, 2017, Martin, 2018). As Pagowsky and Rigby (2014) argue:

“Articulating the value of libraries and librarians is the zeitgeist of 21st century librarianship; one does not need to look far to find articles about the fading importance of libraries or about yet another library being closed due to the reprioritization in budgets.”
(p. 1-2)

The perception challenge for libraries amplified when the digital disruption of the Internet began to change how society communicates and consumes information. The ease with which the Internet promised to provide information fueled arguments that libraries were dated

institutions that would eventually fade away. Dramatic losses of brick and mortar establishments that distributed and sold content for the film and music industries, certainly supported these assertions (Boucher, 1999; Stetler, 2013; Preston, 2017; Jacobs, 2018). Projects like the Google Books digitization initiative took centre stage with lofty dreams of digitizing and making the entire human record searchable to everyone with a computer and an internet connection.

Librarians recognized that the internet presented many unknowns and challenges to their work, but they believed then, and still do now, that their work and mission go a great deal farther than simply providing access to books. Digital technology also brings many innovations to libraries. Public libraries added e-book lending alternatives and expanded educational programming to include technology training. As daily life became more integrated with digital technology, public libraries added public computers to offer internet access for those who could not afford it at home (Prentice 2011; Goulding, 2006). Academic libraries expanded to support research data management and digitization of local history. When academic publishing began to digitize, libraries became paid subscribers of online access to hundreds of thousands of digitized electronic journals, the communication lifeblood of academic scholarship (Budd, 2018). Modern Libraries are not mere storehouses of books; they are community centres where all social classes/members of the public can gain access to materials for little or no cost. Libraries are public digital content access points and they are staffed by librarians who work in technical and highly specialized roles.

Where then is the disconnect? Why after all this reinvention, do librarians still then have to advocate for our relevance? Many misperceptions of modern-day libraries rest in a lack of public awareness of the change libraries have undergone.

Library professionals must communicate with their publics - that much is certain. Libraries as organizations recognize the need to raise awareness of their continuing public role in a digital society where information is quickly and easily available. The importance of increasing communication competency in librarian ranks is something that has been the topic of the professional literature for decades (Partridge et al, 2010; Lukacevic and Balog, 2013; Dallis, 2017; Fraser-Arnott, 2017). Communication is, however, one in a myriad of issues that library leaders have to contend with. Functioning under strict budgets, it is challenging for libraries to allocate funds to dedicated communication staff. In addition, library communicators face the challenge of *how* to communicate the broad messages of library offerings to a diverse audience (Howley, 2015). Even with proper staffing and messaging, media communication campaigns can be costly. It is for these reasons that social media has become a primary channel for library communication.

Currently, it would be difficult to find a library that does not use at least one social media platform. The popularity of using social media as a primary communication channel in the library context is understandable. It is a freely available, seemingly easy-to-learn tool, which promises "...the ability to reach users wherever they are... especially those unable or uncomfortable visiting the physical library" (Deodato 2018, pg 17). But while libraries have embraced social media tools, its effectiveness is still very much a question. As noted by Joseph Deodato (2018) in his survey of academic libraries on social media, the primary aim of stimulating genuine engagement and thus greater familiarity with libraries is still a challenge, and social media assessment in library contexts still has much room for improvement.

"Although the literature is full of tips and advice on how to build a successful social media presence, much of it tends to be somewhat superficial. Librarians are advised to post frequently, create engaging content, encourage interaction, invite participation, etc. many of these platitudes are offered without clear explanation or guidance." (2018,

p.22)

As a communicator with nearly eight years of experience working as part of a team that manages social media for a large university library system, I agree with Deodato that much more needs to be done in terms of expanding library communication research, particularly with regards to social media. I have often wondered: What is meant by “engaging” content? How do our followers (and potential followers) perceive us? What is the real value of the metrics that platforms provide us as measures of our success? And, most importantly, what are we saying to our audience and what do *they* see in what we post? It is here, in the intersection between the library perception challenges and everyday realities of library social media communication, that I focus my project.

Social media is no longer just a novelty distraction, with 62% of Americans and 59% of Canadians reporting they get at least some of their news from social media (Shearer and Gottfried, 2017; Mitchell et al, 2018). While as a communication form, social media is an informal arena, it is important to recognize that every post, and every tweet, effectively contributes to how libraries are understood and perceived. Library communication practices have developed into a distinct subculture of contrivances such as unique hashtags, ‘shelfies’, etc. that are copied and shared from one library to another. I have often wondered whether these approaches work. The infusion of social media in everyday life has made it into a powerful tool, both for every day communication necessities and for bigger issues of public advocacy. I believe that to be successful we must be critical of our practices, the measures we use, and the ways we define our success.

The day-to-day work of social media management is a negotiation between messaging priorities, creativity and metrics. While we can point to clear successes, much of the work still

feels like guess-work. As I will demonstrate in my literature review, research about library use of social media communication is broad but lacking. When turning to professional communication literature, the focus is on “marketing” products and learning platform metrics to optimize your exposure. Another growing body of academic research in social media communication outright questions the validity of social media metrics (Gillespie, 2010; Baym, 2013; Gerlitz and Helmond, 2013).

“However magnificent it may seem to have so much data available and to be able to mobilize that material in different ways, the promises of big data are a mixture of real potential with uncritical faith in numbers and hype about what those numbers can explain.” (Baym 2013, para.25)

Metrics are also a strong driver of content creation and posts that get higher engagement numbers are regularly analyzed to try to determine what worked.

Images and visual communication are a particular quandary. As communication tools, images carry rich messages that can communicate across language barriers and cultural contexts. The crux of the visual message, however, is that meanings and messages are more subjective, and “hitting the right note” when communicating visually is elusive.

Visual communication is also on the rise in social media. A 2018 study (Smith and Anderson, 2018) shows increases in use of image-heavy platforms such as Instagram and Snapchat, particularly among the 18-24 year age group that is a primary audience for academic libraries. These statistics are closely matched in a Canadian study by Gruzd et al. (2017) that show 67% of the same 18-24 age group use the Instagram platform in Canada. The increasing popularity of these visual social media platforms, alongside the greater inclusion of images into more traditional textual platforms such as Twitter, sets the rationale to take a closer look at visual platforms like Instagram.

In this context, my research project draws on my interests as a librarian, communicator, photographer, and scholar. I wanted to explore some of the deeper questions that I have been asking myself about social media communication, in the library context. These questions include: What is the larger thematic message being shared in library social media content? How are the images that are shared being experienced and understood by the library audience? How much weight should be put into metrics and engagement statistics offered by platforms? Finally, what does this tell us about how we think about and conceptualize libraries in contemporary digital society?

In this capstone I have tried to capture both a big picture and a practical approach with my research by focusing on several primary questions: what types of visual content are academic libraries sharing on the platform Instagram; how that content is being interpreted by academic library users; how that content aligns with their perceptions of libraries; and finally how, if at all, do platform metrics connect with these user interpretations and perceptions. With this approach, I believe my research provides a practical assessment that will be useful to practitioners, and also provide further insight into the shifting perceptions of libraries.

Literature Review

For the purposes of this project I have distilled my questions about library perceptions, social media metrics, and visual communication into a cohesive research project that investigates library content and audience perceptions of that content on the visual social media platform Instagram. My research questions are:

RQ1: *What type of visual content are academic libraries sharing on Instagram?*

RQ2: *How do members of the user community relate to the images shared by libraries in Instagram?*

- a) *How do users experience this content?*
- b) *What meanings do the images convey to users?*
- c) *Does this content influence user perceptions of the library, and if so, how?*

RQ3: *Are there any correlations or relationships between content categories, the user experience with the content, and existing analytics that libraries use to measure social media impact?*

To investigate these questions, it is first essential to review the body of research that has been conducted on public perceptions of librarians and libraries. I will also survey research related to social media, both within a library context and outside it, with a particular focus on visual communication. It has been necessary to assume an interdisciplinary lens that combines literature from Library and Information Studies (LIS) and Communication Studies. For the purposes of scope, I focused on literature within a time frame of the last twenty years.

Studies into Public Perceptions of Libraries

A considerable body of research has been conducted on public perceptions of libraries and librarians. Vassilakaki and Moniarou-Papaconstantinou's (2014) systematic review of the prevailing images of information professionals serves as cornerstone in this area, spanning the years from 2000-2013. The study surveyed sixty papers, written in English, in library research

and trade publications over the thirteen years, separating the research into various categories, which then enabled them to paint a much broader picture about the perception challenges to the library profession. Below, I present a thematic analysis of studies from this systematic review, as well as from more currently conducted research.

Librarians' work and professionalism. There have been a number of studies that have looked at public perceptions of the skills and work of librarians. For example, Nilsen and McKechnie (2002) conducted interviews with 106 adults in two major Canadian public libraries where participants were asked questions related to library management and maintenance. Most respondents identified other entities they believed were responsible for vetting the library collection and only 34% identified library staff as potentially responsible for the task. The study revealed a gap in public perceptions of librarians' work and their intellectual capacity.

“The image of librarians held by the public is not positive. The public sees only what is open and obvious: library workers pushing book trucks, reshelving materials, stamping out books, and perhaps showing a user where something is located. These activities are not seen as particularly difficult” (p.318).

Similar studies were conducted by Petr and Aparac-Jelusic (2002) looked at how members of the public ranked librarians against other professions or in relation to different aspects of professional competency. The study found that 71% of respondents indicated librarians did not require professional training and also were rated low in terms of level of IT knowledge and usefulness to society. Harris, and Wilkinson, (2001) conducted eight short surveys delivered to 2000 students entering university at the start of the academic year, each of the surveys asked students to rank a particular aspect of 12 professions based on future job prospects. The findings indicated that most students perceived librarian work as the least prestigious. Fagan, (2008) and Bickley and Corral, (2011) also showed that most students

underestimate the educational requirements of librarian work, and many do not have a comprehensive understanding of what librarians do, or what their responsibilities are.

A 2014 study conducted by Datig sought to gain a greater understanding of students' experiences with libraries before coming to a post-secondary institution. It revealed that students still heavily connected 'the library' with books. A common view expressed by students was that the library was a place for academics, as an "...'aspirational' place, for both individuals and society as a whole" (p.355). Kalsi (2014) looked at college student's experiences of library professionals using observations and a one-hour focus group. While the observations revealed that most student-librarian interactions were polite and friendly, the focus group discussions revealed that students undervalued librarian skills, even so much as to equate them with clerks at a supermarket.

Based on these multiple studies "... it can be concluded that the wider public is still unaware of librarians' education, skills, responsibilities, and role in society. In addition, the public adopts a negative perception of librarians and fails to recognize their contribution to meeting users' information needs." (Vassilakaki and Moniarou-Papaconstantinou, 2014, p. 357)

Libraries and Librarians in Mass Media. Turning to the literature that explores perceptions of libraries and librarians within mass media, the findings are also disappointing. Vassilakaki and Moniarou-Papaconstantinou's (2014) survey identifies 31 studies that looked at film, television and literature content in relation to librarians. They identify predominant themes used to characterize librarians. These include, for example, 'the old maid' (Adams, 2000; Radford, 2003; Luthmann, 2007), 'the policeman' (Seale, 2008), or as a character of parody and comic relief (Tancheva, 2005; Luthmann, 2007). Based on these studies an overwhelming

majority of librarian depictions within media remain over-exaggerated or negative (2014, p. 358-359).

There were however, a few cases identified within the literature from 2000-2013 that did shine some favourable light onto the perceptions of librarians. Dilevco and Gottlieb (2004) looked at representations of librarians within *New York Times* obituaries from January 1, 1977, to December 31, 2002. They identified 123 obituaries of librarians, and the themes revealed painted a venerable image for librarians, that included expertise/scholarship, international outreach, consciousness-raising, and helpfulness. It should however be noted, that this positive image may be influenced by the nature of obituaries as a genre intended to highlight and showcase lifetime achievements.

Elaine Yontz (2003) looked at depictions of librarians in children's books from 1909 to 2002. She looked at 194 depictions of librarians and found they were portrayed as helpful, caring, service oriented, and as early adopters of technology. Yontz offered reasons behind these findings, suggesting many children's books may have been authored by children's librarians, or the book authors want to appeal to librarians, who purchase the books for library collections.

Galluzi's book *Libraries and Public Perception* (2014) presents extensive quantitative research done on how libraries have been depicted by the European media in France, Italy, Spain and the United Kingdom. She identifies several key factors that have affected the image of libraries in the social consciousness, including the digital revolution, economic crises, decline of the middle class, economic and social polarization, and finally the consequences of the knowledge economy on lifestyles and cultural consumption. The qualitative perspectives of her study consisted of a content analysis capturing prominent themes and discourses presented in

media publications. This study presents rich and extensive findings, that overall showed a disconnect between the public and how libraries can fit into the new knowledge economy.

Overall, studies relating to perceptions of librarians or libraries paint an image of disconnect in the public's perception and reality. While librarians work in highly technical and diverse areas that requiring graduate-level education, many people are not aware of this, and view librarians as clerks or custodians. The depiction of librarians in mass media often make librarians into 'police' caricatures, diminish their technical ability, and present them in clerical context. Vassilakaki and Moniarou-Papaconstantinou (2014) note that when approaching their overview, they anticipated that many of these stereotypes would have faded or even have been replaced by positive ones, especially with the modernization of library technology and changes to service models (p. 366). They go on to suggest "Information professionals ought to promote their presence... they need to use every available tool and marketing strategy to become visible to the public and formulate positive perceptions of their presence." (2014, p.367). The overwhelming evidence suggests that very little about public perception is changing, and although the investigations have been extensive, we must continue critically assessing the issue.

Social Media Research in the Library Context

Switching to a communication focus, when it comes to having an interest in understanding uses and impacts of social media tools, the library and information studies field is no exception. Much of the professional library literature consists of case studies that present how certain library systems approach their social media strategy or examine the results of strategic communication campaigns. There is also a growing body of research literature that looks at social media in the library context. Most library social media studies tend to straddle the desire to

understand social and collaborative impacts, or look at the quantitative aspects of communication, typically on one social platform.

Research into Twitter engagement on library accounts has either focused on quantitative research or content analysis. Del Bosque, Leif, and Skarl (2012) conducted a broad survey of 296 randomly selected American academic library Twitter accounts, to identify how academic libraries used Twitter. The study revealed that at the time of the study only 37% of academic libraries used Twitter and that they primarily tweeted about library resources, with other main communications being mainly library hours and events.

Stvilia and Gibradze (2014) conducted a quantitative study and content analysis of six academic libraries in the U.S. They used a method that incorporated Twitter metrics to evaluate the "usefulness" of each message. Al-Daihani and Al Awadhi (2015) conducted a statistical descriptive analysis of academic library Twitter accounts, measuring for frequency and types of types of content, what types of content and how they engaged with their users. The study showed that increased frequency in communication did not result in more followers. A content analysis by Al-Daihani and Abrahams (2016) identified the frequencies of single words and two and three-word pairings for academic libraries, and Neilson (2016) looked at the tweets of 10 Twitter accounts of health libraries.

An interesting article by Yep and Shulman (2014) presents a case study of a program called NODE XL that was used to visualize the audience network of the library's Twitter following. The article presented the value of conducting a network analysis to investigate the library's audience, and to identify 'node' organizations as potential partners for extending the library's communication reach.

Looking library research into other social media platforms, Michalis Gerolimos (2011) conducted an analysis of user comments and "Likes" found on the Facebook pages of 20 academic libraries. He examined a total of 3,513 posts, and analyzed them in various ways, including how many of the posts included user comments as well as how many had none. On average, 63.42% of the posts examined included no feedback and 90.83% had no comments. Gerolimos concluded that up to that point, Facebook was not a very useful tool for library outreach and efforts need to be made to expand audiences on the platform.

Harrison et al. (2018) took a phenomenological look at the posts of six American academic libraries' Facebook, Flickr, Google+, Instagram, Pinterest, Twitter, and YouTube accounts. The intent of the project was to reveal themes of content being shared. The study revealed several key themes, such as: collections; events; exhibits; facility; library community; sentiments; services; site management; and university community.

A smaller body of library social media literature looks at user preferences of which platforms the library should use a communication tool. A very recent example by Howard et al. (2018) focused on the preferences of social media communication channels of students at Purdue University. They used survey techniques to ask students about their library use, social media use, and what platforms they preferred the library use to communicate with them. Results showed that students currently use Facebook, YouTube, and Snapchat more than other social media types, and that they prefer libraries to use Facebook, Instagram, and Twitter, and not Snapchat.

Instagram is still a relatively new platform that libraries are exploring, and applied research on the platform within the field is thin. Many library trade publications and conference proceedings contain papers and presentations on how particular libraries have adopted Instagram, or why libraries should be on the platform (Abbott et al., 2013; Anderson, 2016; Salomon, 2013).

Lauren Wallis (2014) presents a unique information literacy and library orientation activity she conducted using Instagram with her first-year English students at the University of Montevallo in the Fall of 2013, but this used Instagram more as an educational device rather than as a communication tool.

To summarize, much existing library social media literature fits into the case study category, with the research articles focusing primarily on either evaluating engagement numbers or categorizing content. While studies of this nature provide some valuable insight into what is happening in the communication between libraries and their publics, these studies are exploratory in nature, and only provide a partial understanding of this topic. Content analyses may identify the subjects of library communication, but when conducted on their own, omit the audience's perspective. The studies that look at social media engagement often provide insight into what is (or is not) happening in the social media environment. But again, without audience perspectives, they do not offer tangible strategies that library communicators can draw on in their professional practice. To delve deeper into this area, I turn to social media literature in general, focusing on visual communication in the social media context.

Social Media Research, Focusing in the Visual Message

Research into the effects and impacts of social media on society has literally exploded, and indeed created an entirely new field of communication research. Although it has only been a part of the communication landscape for roughly a decade, the body of research being conducted on social media, whether from a corporate marketing perspective or in measuring social impacts, is such that multi-volume books could be written about it. To maintain manageability and focus

for the purpose of this literature review, I have limited my analysis to studies that focus on visual content, and I only present a sampling of the research being conducted.

Highfield and Leaver point to the increasing importance of visual communication within everyday life and argue that "the ubiquity of the visual within everyday social media content and practices has led to (and been encouraged by) new technological capabilities and platform affordances, and that this is a critical part of online communication." (2016, p.49) These are echoed by Prøitz (2017), who says "...the rise of communication through images has powered the growth of visual rather than textual consumption of information..." (pg.549) and that "When particular images and emotions become connected, particular narratives, stories and images accumulate power through articulation and repetition." (p.551).

Prøitz's research is an excellent example of visual communication research that looks at the large impacts of images on social media. The study investigated young people's reactions to the viral image of Alan Kurdi, a four-year-old refugee that washed up on a beach in Bodrum, Turkey. The image of the young child lying as if just asleep on the beach, was tweeted 30,000 times within a 12-hour period, and was seen by 20 million people worldwide (p.549). The photo stimulated an influx of charitable giving towards refugee charities, alongside a great deal of online discussion. Though interviews with young adult participants, the findings showed the ability of images to have dramatic and widespread effect on people. Prøitz identifies how images connect with emotion, and how in viewing powerful and evocative images there is an urge to construct narratives, to contextualize, and to make greater sense of what is being seen.

The social aspects of digital photo sharing already apparent in a study by Van House et al. (2005) that looked at camera phone usage before Instagram existed. They studied 60 participants using camera phones that transmitted the images to a website where the images

could be viewed and analyzed. The analysis of the photo content showed practices of photo-taking and sharing, social uses such as maintaining relationships, for purposes of personal or group memory, and self-expression. Other articles and studies (Berry, 2017; Frosh, 2003; Gye, 2007) highlight findings of the ever-increasing use of images within daily communication practice. The "selfie", or the act of taking photos of oneself while engaging in some form of activity, and then sharing it on social media, has become as Berry points out "one of the most studied manifestations of digital culture" (p.47).

Looking at Instagram in particular, Abidin (2014) outlines an ethnographic study of how lifestyle bloggers in Singapore use Instagram to promote themselves, and the findings reveal a growing complexity to promotion on social media, where individuals are adopting personal branding techniques for the intent of both social and financial gain. Ford and Jakobsson's thesis *Instagram Perceptions and Coherent Impressions* (2017) explores how individuals perceive a personal brand online in social media, compared to how it is perceived offline in real life. They showed that "the perception of a personal brand is influenced by what is visually perceived in the shared pictures, yet also by incorporating personal experiences..."(p.61). Research in branding, and identity in social media is prolific as it translates into clear benefits for companies seeking to improve their influence.

Similar findings are reflected in research about organizations. Russman and Svensson (2016) propose a method for studying organizations on Instagram, and present a framework that studied political parties' Instagram accounts in the Swedish 2014 election campaign. Their method looks at content that was intended: to influence perception; to provide perspective; to broadcast; and to mobilize. McNely (2012) looked into Instagram content of organizations to identify how they are using image-intensive social platforms, such as Instagram in shaping their

"image-power. "According to McNely: "Managing an organization's Facebook page, Twitter profile, and YouTube channel—among many other options—is no longer a peripheral practice in a strategic communication plan; instead, it is central to fostering both internal identity and external image Image-intensive applications" (p.1). Visone (2015) investigated how Instagram has impacted the world fine art market. "One of the impacts Instagram has had in the art world, is the ability of reaching wider audiences, thanks to its limitless exposure and democratization of the art scene. These impacts allow new individuals to act as active players in the art world, exposing new artists, and creating new spaces for dialogue." (p.6) Woodford et al. (2017) summarized approaches that are being used to studying social media audiences. They focus on the development of engagement metrics ("Likes", favourites etc.) as well as the mapping of geographic and other demographic aspects of what can be termed the "social media audience".

Stuart et al. (2017) conducted a study into the Instagram content of UK Universities, which sought to broadly categorize content shared by universities on Instagram. They then proceeded to study whether types of content contribute to "successful" accounts and campaigns, with success being defined by numbers of followers as well as numbers of "Likes" and interactions stimulated by content. The study also conducted several quantitative examinations of the data in correlation to numbers of photos posted, number of accounts followed and number of followers.

Taking a step back and looking at the literature on social media communication, both within the library context and beyond, there is a noticeable tendency in the library world to lean towards research methods that gather quantitative information or evaluate content thematically, as library professionals perceive it. These approaches, while they provide useful information,

only answer part of the communication question. Conversely, communication studies into social media much more frequently investigate social nuances or perceptions of particular user groups. Communication scholars are interested in developing new research frameworks, and in understanding the interplay between messaging and metrics. In examining how both fields approach communication questions, it became clear to me that with so many factors and actors at play, it is necessary to approach research on social media from a multi-phased design to fully capture the range of dynamics and nuances at play.

In this capstone, my focus on visual content, and Instagram in particular, aims to address a gap in existing research that specifically looks at the perception and use of images in library social media. It is also motivated by the increasing visual element in social media communication, and the elusiveness of understanding user perceptions of visual messages. According to Instagram, 800 million users use the platform, 500 million of which are active daily (Instagram, 2017a; Instagram, 2017b). Through their social media practices, libraries are engaging in visual communication, and therefore new assessment strategies must be explored. Photography and images are, however, complex in the ways they convey meaning. By using these visual elements as research objects, there is an added layer of complication that must be considered and addressed. The final section of my literature review considers research on visual communication, specifically in the area of photography.

Photography and Meaning

In his essay *On the Invention of Photographic Meaning*, Allan Sekula suggests that “All photographic communication seems to take place within the conditions of a kind of binary folklore. That is, there is a ‘symbolist’ folk-myth and a ‘realist’ folk-myth.” (1982, p.108).

Sekula's main thesis analyzes the elusive place of photography within the context of human communication. His article surveys how photography has, from its inception, walked a line between being heralded as an empirical product of technology, or admired as a subjective artifact belonging to the arts, depending on one's philosophical standpoint.

As Instagram is a photography based social media platform, it is essential to discuss issues related to the nature of photographs and how to approach their use in research, both as a subject, and as a research tool. Tinkler in her book *Using Photographs in Social and Historical Research (2014)* raises a number of considerations that should be addressed when undertaking research with images. The first consideration returns to the debate addressed by Sekula, that a researcher must decide their stance in relation to the question: *what is a photograph?* The positivist or naïve realist accepts photography as evidence of truth and that the camera never lies. "Put simply, the photograph is seen as a representation of nature itself, an unmediated copy of the real world. The medium itself is considered transparent" (Sekula, 1982, p.86). Roland Barthes, who addressed photography in his 1980 seminal work *Camera Lucida* (2000 re-print) took the stance that photos are both representations of reality and texts. Barthes accepts that while photographs are "constructions" created by the photographer, they still provide "evidential force" that subjects did exist. The anti-realist position as highlighted by John Tagg (2009), takes the view of photography as wholly constructed. Tagg asserts that photos are actually texts created by the photographer and bear no reflection of reality at all. This historical and philosophical debate may seem inconsequential, but as a researcher it is important to consider which way one approaches photography and photographic meaning, as it can influence the outcome of your investigations.

My stance and method in regard to photography aligns with Barthes, in that it is my belief that photographs can have both denotative (empirical) as well as connotative (constructed) aspects. For me, the act of taking photos involves choices that the photographer makes regarding what to include or not include. The choice of angle, perspective, and modifications made with filters all influence the overall message of a photo. My investigations are motivated by a desire to understand the messages in photography that libraries share on social media. That includes the role that both library staff and members of the audience play in crafting/interpreting those messages.

My literature review has argued that a disconnect exists between the role that modern libraries play in society, and public perceptions of that role. Libraries have taken up social media tools as one of their primary ways of communicating with the public. These tools have the potential to impact public perception of libraries. However, while existing literature about social media use in the library context provides some insights, it takes the approach of just analyzing the messages, rather than investigating communication as a social process that must be examined from several perspectives. It has become clearer to me, through both my professional practice and when surveying the literature, that investigating social media communication requires such a multi-phased approach. In the next chapter, I will describe this methodology, which I used to conduct my capstone research.

Methodology - A Full Picture Approach

Before I begin outlining the step-by-step methods used in my project, it is necessary to first address the larger picture of the project research design. As noted in my literature review, in past research about social media content in the context of libraries, most studies either focus on uncovering types of content, understanding engagement to that content, or trying to unravel how social media metrics are related to content and users. It has been my observation that while useful, these studies ultimately address only parts of how communication take place in this context. Therefore, I approached my research using a multi-methods approach, focusing on the visual social media platform Instagram. In the next section, I describe the three phases of my study.

Framework for Investigating Visual Communication on Social Media

Research into visual social media has shown that the content shared on platforms such as Instagram can stimulate affective responses, and that the messages an image conveys often traverses the surface value of what is visibly seen. If library communicators are to continue tackling issues of library perception on social media, considerations must look beyond the surfaces of content and quantitative measures of engagement. It is not enough to look at what is being shared on social media, or how much that content is shared, but also how it is interpreted and perceived by those with whom it is communicated. Understanding how library communication is shared through platforms like Instagram is elusive, and as Maria Schreiber describes in her 2017 article *Showing/Sharing: Analysing Visual Communication from a Praxeological Perspective*, research into visual communication requires a multi-phase approach to understand the full spectrum of its influence.

“The increasing importance of visual media in digital communication seems unquestioned, yet we rarely take a closer look at how visual communication is actually practised on a micro-level in decentralized, interpersonal communication on social media. How do users “audience” pictures?” (2017, p.39)

Schreiber describes how traditional visual analysis of images can reveal unnoticed aspects of communication (p.38), but also that the practices, or ‘actions’ of sharing photos are intrinsically connected to the viewing of photos and making meaning of them.

“...the analysis of a visual itself cannot show or explain how a visual element is relevant in an actor’s life world or how it is perceived by other users.... visual analysis has to be combined with additional data, such as interviews or ethnographic accounts to analyze the relevance, meaning and communicative context of visual elements. (2017, p.38)

Schreiber proposes a framework that uses a triangulation of practices, pictures, and platforms as a way to fully capture the complexities of visual communication in social media. She emphasizes that “... visual media which are embedded in communicative practices... have to take into account social media platforms, which are understood as active participants with specific possibilities and constraints” (p.39). Baym (2013) also speaks to how the “...commodification of affect through "Likes", follows and so on accrues to the platforms themselves, making platform designers powerful actors behind the kinds of data available online and the kinds of practices that motivate the creation of those data in the first place.” (para.31).

The development of my project coincided with the publication of Schreiber's framework. Her framework fits with my belief that describing content or counting metrics is not enough in understanding the full scope of the communication events happening within the Instagram environment. My study therefore aligns with Schreiber's principles and proposed multi-phase methodology. To find answers to my research questions, I decided to adopt a three-phased approach to my investigation. Following Schreiber’s framework, I organized my research design in the following way:

Phase one is a content analysis of what images are being shared (practices); **Phase two** consists of interviews with users to understand how those images are understood (pictures); and **Phase three** looks at how Instagram metrics relate to the themes that emerge from the first two phases (platforms).

I agree with Schreiber that to understand what is happening in any given communication event, we must look at both the communicator, the receiver, and the medium, and the constraints and affordances that these elements place on the communication process. As she notes: “It is crucial to relate the findings back to each other and to analyze how these layers constitute, push, and facilitate each other—or not, as the case may be.” (2017, p.41). Ideally, this type of investigation should be done across a number of library accounts, to gain a broad picture of the themes at play. However, to keep the project scope manageable, I focused on just one academic library system with one Instagram account, The University of Alberta Libraries (UAL). This site was chosen primarily due to my familiarity with the social media work at UAL, and my access to Instagram social media metrics data. The research questions guiding this study are:

RQ1: What type of visual content is the University of Alberta Libraries sharing on Instagram?

RQ2: How do members of the University of Alberta Library user community relate to the images shared by libraries in Instagram?

- d) How do users experience this content?*
- e) What meanings do the images convey to users?*
- f) Does this content influence user perceptions of the library, how?*

RQ3: Are there any correlations or relationships between content categories, the user experience with the content, and existing analytics the University of Alberta Libraries uses to measure social media impact?

Investigating these questions required looking at both qualitative and quantitative data, therefore calling for the adoption of a mixed-method design. Cresswell and Clark (2018) offer a definition of mixed method research as that which “... involves the collection of both qualitative

(open-ended) and quantitative (closed-ended) data in response to research questions or hypotheses,” and that it involves rigorous data collection, analysis and interpretation, and a distinct design that allows for the integration of data sets (2018, p. 215). The rationale for choosing a mixed-method approach for this study was driven by my desire to evaluate communication processes from a number of perspectives. The aim is to look at linkages between messages being “sent” by library communicators, and how those messages are ‘received’ by their Instagram audience. To understand this process, both the affective and quantifiable evidence should be considered and examined for trends or patterns. Additionally, if current Instagram content creation is influenced by quantitative metrics, investigating the relationship of metrics to qualitative findings would be a valuable step in understanding if current processes are well founded, or if they need to be reconsidered. While this kind of quantitative research is valuable, it does have limitations with regards to the impact and influence of findings.

“When researchers study a few individuals qualitatively, the ability to generalize the results to many is lost. When researchers quantitatively examine many individuals, the understanding of any one individual is diminished. Hence, the limitations of one method can be offset by the strengths of the other, and the combination of quantitative and qualitative data provides a more complete understand of the research problem than either approach by itself.” (Cresswell and Clark, 2018, p. 8).

Thus, quantitative data such as the number of Instagram “Likes”, “Comments” and “Saves” that a photo receives reveals very little to library communicators about qualitative issues, such as the messages it conveyed, or why a photo moves a user to interact with it. Instagram metrics also do not explain the long-term impacts of messages or how they influence broader perceptions of the people who experience them.

To address the limitations of this quantitative data, I decided to also conduct qualitative research in this study. This approach is informed by research in the area of qualitative

visual communication, and involves both the interpretation of images for the purposes of content analysis but also the use of photos in the interview process.

Photo elicitation interview (PEI) is a research method that was born out of anthropological research. PEIs have been used across a broad spectrum of research, including fields such as anthropology, history, sociology and psychology, to name a few. John Collier first described PEI in his book *Visual Anthropology: photography as a research method* in 1967. There are three primary ways that a PEI can be conducted, the difference hinging primarily on the source of the photographs being used. The most common PEI method, is when research participants are given cameras and asked to take photos, which then become the subject of the subsequent interview. In other cases, the researcher takes on the role of photographer, and presents their images to interview participants. Finally, the less common PEI alternative is when the researcher makes use of photos gathered from elsewhere, such as publications or historical archives.

Researchers have learned that photos can be a valuable tool in the research interview process, especially as a resource to help facilitate dialogue and build rapport with subjects. As objects that encapsulate visual, temporal, and contextual meanings, photos bring aspects of tactile and sensory elements into the interview unlike any other medium. Photo elicitation can ease power dynamics between interviewer and interviewee, stimulate dialogue, and open new avenues of exploration in the interview process (Pink, 2013; Rose, 2016; Tinker, 2014).

A consideration raised by a number of researchers in writing about PEI (Pink, 2013; Rose, 2016; Tinker, 2014) is that researchers must remember the temporality and materiality of photographs. Temporality touches upon how the time when a photograph is taken, later influences its meaning and subsequent interpretation. In terms of temporality, the researcher

must understand that "...Photos exist in time; they are produced, circulated and engaged with in particular historical contexts. These historical contexts are critical to interpreting photos..."

(Tinkler, 2014. p. 12). A good example of the temporal effect on photography, would be to consider a pre-2001 image of the New York City skyline. Discussing the photo in an interview prior to 2001, would likely evoke different meanings than in one held after the September 11th terrorist attacks on the iconic World Trade Centre towers.

The materiality of photographs is the final consideration that Tinkler (2014) makes in relation to conducting photographic research. As Tinkler emphasizes, the way in which a photo is experienced can be as important as what it is about. Until the rise of digital photography, the physicality (shape, age, condition) of a photograph played an integral part in the construction of its meaning. In the context of this study, I would argue that the impact of materiality is critical to consider when investigating digital photographs. The first impulse when designing a photo-elicitation interview would be to have photos printed, to make them larger and easier to engage with. Resisting the impulse is key, for to print Instagram photos would mean a change in their materiality, thereby altering the ways that participants experience and ultimately understand them. For the purposes of this study, photos needed to remain digital, and were experienced within the Instagram platform which is their natural 'habitat'.

Understanding the nature of the medium you are researching is an important step in research design. In this section I have considered my own alignment to photographic meaning, with reference to literature. Therefore, the temporality and materiality of photos are important issues to note into the overall design of the study. I now turn to a discussion of my approach to data collection.

Based on the relatively siloed nature of the qualitative and quantitative data I am working with – Images from Instagram, Interview participant feedback, and analytic data – a *fixed* and *convergent* design is the best research design to adopt in this study. The term ‘fixed’ refers to the approach defined by Cresswell and Cresswell (2018) that involves a process whereby a clear definition of all the data being gathered is defined at the start of the study, with a clear plan as to how it will be merged in the final analysis. “Convergent” design refers to the mixed method process in which:

“the researcher collects both quantitative data and qualitative data about the topic of interest. These two types of data collection are concurrent but typically separate - that is, one does not depend on the results of the other... the researcher analyzes the two data sets separately and independently from each other using quantitative and qualitative analytic procedures. Once the two sets of initial results are in hand, the researcher reaches the point of interface and works to merge the results of the two data sets in the third step.” (Cresswell and Cresswell, 2018, p.69)

My study research design is a fixed and convergent model. As described in more detail below, the data I collected (images, user feedback and analytics) are clearly identifiable and separated into three distinct phases of research. My approach to this research has been led by a constructivist epistemology, a position that views knowledge as something that is influenced through context and experience, and is thus subjectively constructed. Full details of the methods of each phase is outlined in greater detail in the following *Methods* section, and is summarized in Figure 1.

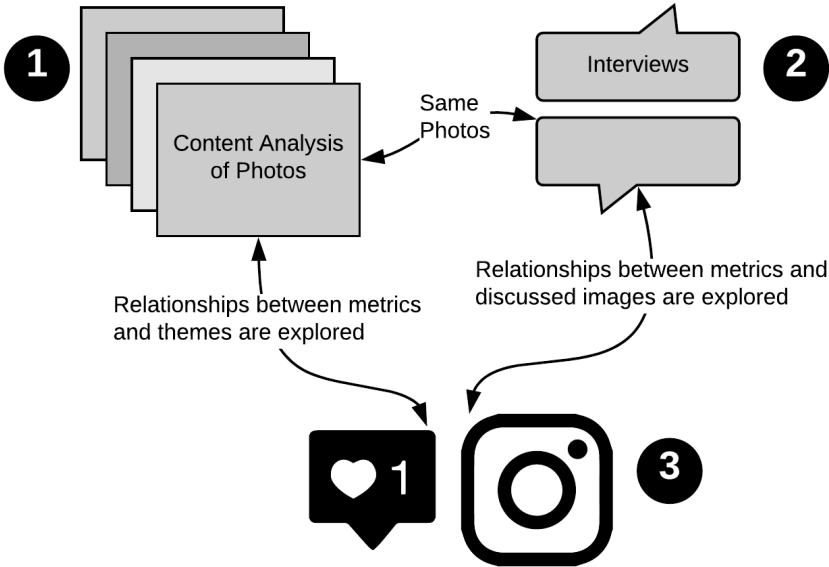


Figure 1- Fixed and Convergent Mixed Method Analysis

Methods

This section describes the precise methods I used to obtain my findings. In the interests of maintaining scope, and easily accessing a sample of library images and their Instagram metrics data, one site of analysis was chosen for the study. Specifically, my site of analysis is the University of Alberta Libraries.

Site of Analysis: University of Alberta Libraries.

The University of Alberta Libraries (UAL) is one of the largest research libraries in Canada with a collection size of 5.2 million titles, over 8.7 volumes, and access to more than 120,000 electronic scholarly journals (University of Alberta Libraries, 2018). The UAL system has 9 branch libraries and serves a campus community that includes approximately 38,000 students and 15,000 staff of 18 faculties and 5 campuses (UALberta Fast Facts, 2018). UAL is a leader in terms of digitization initiatives, research data management, as well as in teaching and support of the information profession through student internships.

In terms of social media UAL was an early adopter. The library's Twitter account was started in 2009 when most social media was still in its infancy. The adoption of social media at UAL was very organic, as staff in individual branches experimented with platforms and techniques. This approach worked well in the earlier days of social media when no one was really sure whether it was a passing trend or something more sustaining. Nearly a decade later, managing a collective and focused voice with so many branch libraries having accounts on multiple platforms became challenging. Over the course of this project, starting in the early summer of 2018, UAL has been in transition to focus its communication through three central

platforms: Facebook, Twitter and Instagram. These ‘system-wide’ accounts are all identified under the handle of @uofalibraries.

Central social media communication at UAL is managed by a team of four staff which includes; public services support staff, and the libraries Strategic Communication Manager. This social media team plans and creates content, manages engagements through these channels, gathers and analyzes metrics information, and engages in strategic communication planning. As representation from all library branches is not possible on the central social media team, dedicated staff in the UAL branches also provide branch-level content to the central social media team to share.

The focus of this study is the UAL Instagram account, which was started in April of 2015. In August of 2018 the account had shared 950 images, and had a following of over 1350 users. According to Instagram Insights, the @uofalibraries account’s follower base is located primarily within Canada, United States, Australia, India and Iran. In terms of demographics, the @uofalibraries followers are predominantly 18-24 (34%) and 25-34 (40%) with 68% women and 32% men. Overall, the UAL central social media accounts experience continued and steady growth in their follower base.

Grounded Theory

Data collection and analysis for both the content analysis and interview phases of the study were guided by grounded theory; data-gathering and analysis occurred simultaneously so that the interpretation of data guided the inquiry process. Grounded Theory, as developed by Glaser and Strauss (1967), is a method that has been widely adopted as a way offering “system strategies for qualitative research practice.” (Charmaz, 2006). Grounded theory provides a systematic process with the intent to develop theory. It emphasizes simultaneous data collection

and analysis, the construction of analytic codes and categories from data, and a constantly comparative method which advances theory development during each step of analysis. Grounded theory also stresses sampling for theory construction, not for reliability. (Charmaz, 2006, p. 5-6).

I selected grounded theory as a method, as I felt the rigorous iterative techniques were well suited for my first two research questions. The aim of my study was to reveal themes or theories about what types of visual content is being shared by UAL on Instagram, and how members of the audience see that content, and how does it fit and influence their own theories of the library.

Phase One: Content analysis of UAL Instagram content.

As already indicated in the methodology design, the first phase of the project involved conducting a content analysis of visual content shared by UAL on the @uofalibraries Instagram profile. Images were gathered using an “Instagram Scraper” python code program (Arcega, 2018). The scraper uses the Instagram API to gather a specified number of images, videos, or stories, from a specified Instagram account or hashtag. The scrape for this project was conducted on May 1, 2018, and to ensure there would be a sufficient number of photos for an open-ended analysis, the scrape consisted of roughly 600 images and videos. There were no specific inclusion criteria for the sample of scraped images, except that videos were removed to focus solely on still images. The Instagram Scraper tool used to download the sample applied long and complex filenames to the images, therefore to prep the sample for analysis, the images were run through a batch renaming sequence using Adobe Photoshop, which labeled the images into “Photo 1, Photo 2” etc. in chronological order. This renaming sequence enabled each photo to be

accounted for in all phases of the project. Once I renamed images, I added them to nVivo 12 for Mac for coding.

I carefully considered how to approach the coding process. As has already been alluded to, visual meanings are inherently subjective and constructed with reference to personal contexts. Photographic theorist Roland Barthes wrote on describing and identifying meanings within photographs in *Image, Music, Text* (1977). According to Barthes, "... the description of a photograph is literally impossible: *to describe* consists precisely in joining to the denoted message a relay or second-order message derived from a code which that of language." (p.18) Barthes suggests that the act of describing an image inherently translates the image with an added layer of connotation and subjectivity. This proved to be a significant challenge in determining a systematic framework for 'describing' what types of image UAL shares on Instagram.

To bring consistency to the coding process, I initially developed a "descriptive" matrix, in which I analyzed what types of objects and actions an image depicted, and coded the data I collected using these descriptions. However, I quickly learned that this approach was not working. After an initial phase of coding (50 images), my analysis revealed no clear categories or themes, even when categories of images were apparent to me in viewing the sample. This highlights the sheer complexity of researching visual communication. In essence, all components in an image work together within its unique context to create the image's message. My original coding processes separated objects, people, places and words from their context in the form of codes, and in so doing, lost their significance. The codes were a collection of unrelatable words. After some consideration, I changed my coding matrix. Instead of trying to avoid my own subjectivity in the coding process, I accepted it and focused on formulating a coding process that

would reveal both the thematic nature of the images, while also providing consistency to my process.

All UAL Instagram images are shared on the platform with the intent of sending a message to UAL followers. In keeping with this thinking, I adopted an approach to coding these images that considered the primary purpose or message being shared in each image at the time it was posted. While it is conceivable that these Instagram posts could include several messages, I decided to code each image according to the singular **most prominent “intended message or purpose”** that I thought was being conveyed. In the few (<10) occasions where the intended message was not readily ascertained from the image, I used the image’s caption on Instagram as a guide. The rationale for using captions in these cases, is that it would be standard practice to provide additional context to a post in the caption, and it would also be a natural inclination of a person viewing the image, within the Instagram platform, to look to the caption for more understanding.

This ‘subjective’ coding matrix works in line with Schreiber (2018) and her framework, which emphasizes the need to investigate the practices of those who share visual content in social media. Adopting this type of coding matrix enabled me to identify and categorize images thematically. Several years of experience working as part of the UAL social media team helped with this process. I applied this subjective coding method through several cycles of coding and analysis, until saturation was reached at 200 images, and no new codes were being discovered. The final sample for the content analysis represented photos posted by UAL from January 20, 2016 to October 14, 2016.

Phase Two: Semi structured interviews.

The second phase of the project involved conducting semi-structured interviews with library patrons. I used a photo elicitation technique, presenting images from the sample analyzed in Phase I and then asking participants questions about them. I uploaded the 200 images I collected to a private Instagram account, and presented them to participants during the interview process. The goal was to learn what these interview participants thought about the images posted, and whether or not their perceptions fit with my own understanding of the meanings expressed in UAL's visual communications.

The UAL social media strategy lists students, faculty, UAL staff, media/journalists, and the library community as the potential audience for social media content. Students are clearly the main audience of the UAlberta Libraries Instagram and therefore, to manage the project scope, students were the focus of the study. Inclusion criteria for student participants required they be current University of Alberta students who have some experience using Instagram. Recruitment efforts were intentionally made *outside* the library buildings using both posters distributed on campus, and via social media. This was done to enlist participants whose familiarity with the library varied. Participants were offered coffee cards of \$20 value to encourage participation. The interview phase of the study received research ethics approval by the University of Alberta Research Ethics Office.

I conducted interviews on campus in a library group study room setting. Using a semi-structured interview process, the intent of the interview phase was to identify themes and topics of focus from the audience's perspective, gain insight into the library user experience in connection to the photographic content, and to stimulate discussion about participants' perceptions of the library. As already mentioned, the interviews used photo elicitation techniques

to stimulate discussion about the images. Participants were asked a few preliminary questions regarding their library use and Instagram use and were then allowed some time (5-10 min) to engage with the images on a tablet device. I told students they could “Like” any images they wished, and while viewing the images, they should identify a few (1-2) images to discuss in more detail. This interview protocol is included in Appendix II.

I then recorded and transcribed interviews for coding. As determined by grounded theory, transcripts were analyzed simultaneously while interviews were being conducted. New considerations that emerged in earlier interviews were adjusted for in later interviews. For example, while conducting interviews I observed that one participant would swipe past book images while another paused and considered them. Curious about this behaviour, I added a question to the protocol: how do you feel about the book images? As per grounded theory methods, I continued data collection and analysis iteratively until no new codes were being identified. Saturation was reached in this phase of the study after eleven interviews.

Phase Three: convergent analysis of qualitative findings with quantitative analytics

At the conclusion of phases 1 and 2 the study had two rich qualitative data sets that describe types or categories of UAL Instagram content, as well as clearer information about user experience and understanding of that content. The findings of these first phases provide useful information that can be analyzed to better understand their content creation processes, and to inform future social media communication processes. The final convergence of qualitative and quantitative data involved the harvesting of Instagram metrics for the 200-image sample, and then exploring how those metrics distributed across themes that had emerged in the initial two phases of the study. This exploratory approach looked to see if particular categories or themes from the first two phases of the study demonstrated any patterns, when compared to the data

analytics provided by the Instagram platform. Essentially, I wanted to see how my own perceptions (Phase I content analysis) and the perceptions of the people I interviewed (Phase II interviews) either resonated or diverged with the analytics made available through the UAL Instagram Account (Phase III consideration of ‘likes’, ‘shares’, and so on). Before the full methods of phase III can be described, it is necessary to explain the nuances of Instagram metrics or ‘analytics’, and what they mean.

Social Media Metrics and Instagram

It is important to take a closer and more critical look at what is meant by social media metrics, and specifically how Instagram, as a social media platform, provides ways for use to measure how content is shared and engaged with. Nancy Baym provides a critical analysis of social media metrics in her article *Data Not Seen: The use and shortcoming of social media metrics* (2013). She explains social media metrics as a form of audience measures that are a way of “commodify affect”. Baym also stresses that while these measures appear to be clear and quantifiable gauges for how much a post was approved, it is fundamentally important to remember that these measures “are skewed by algorithms that foreground some messages and users over others through recommendations or automated feed editing.” (2013, para. 36).

To be clear, the definition of an algorithm is a “procedure or set of rules used in calculation and problem-solving... a precisely defined set of mathematical or logical operations,” (algorithm n., 2018). Within the social media context, algorithms are the processes set by platforms that determine what content is seen in an individual ‘feed’ of information. Social media platforms that present some type of ‘news feed’ use algorithms to make decisions for users on what content to show them. These algorithms take into consideration a great many factors to determine ranking, including how many followers an account has, how much

engagement a post gets, and so on. Essentially any measure collected by Instagram is going to “reflect opaque algorithmic decision making, as much as they reflect expressions of interest” by individual users (Baym, 2013, para. 36).

In many ways, social media communication work is a balancing act that must consider algorithmic decision making as well as finding ways to create the kind of content that will stimulate audience engagement. One cannot put sole value into the operations of algorithms alone, for they are skewed representations of audience engagement, and yet one cannot ignore them, since they ultimately decide the reach of any given message.

Detailed metrics are one way to try and gauge the success or failure of social media posts. However, metrics are relatively new to the Instagram platform. Metrics about individual photos only became available to business accounts in early 2016 (See Table 1). As seen in Table 1, the first tier of Instagram metrics are “**Posts**” and include “Likes”, “Comments” and “Saves” measures. **Actions** are an additional, higher level indications of user interactions that occur when users decide to visit an account profile, follow an account, or click the link provided in the account profile. **Discovery** measures are the final broader influences, that include measures like “reach”, or “impressions”, which are the number of times your post is seen.

Given the scope and focus of this capstone, I wanted to focus on metrics that would be most closely associated with user action. To me, metrics such as “Profile Visits”, “Follows” and “Website Clicks” demonstrate user interest. However, we must acknowledge the limitations of these metrics, recognizing that there are a great many factors that can influence these actions. For example, profile visits can be influenced by someone just adding accounts on topics that interest them, not because one photo moved them to do so. Measures such as “Reach’ and “Impressions”

Posts	
Likes	The number of times your image as 'liked' by other users
Comments	Counts the number of comments related to a single post, include one's own.
Saves	A feature that allows users to bookmark favourite images into a folder for later viewing.
Actions	
Profile visits	The number of times your profile was viewed in relation to that image.
Follows	The number of accounts that started following you in relation to that image.
Website Clicks	The number of times your website link (if one is listed) was clicked, in relation to that photo
Discovery	
Reach	The number of unique accounts that have seen any of your posts
Impressions	The number of times your post has been seen.

Table 1- Types of Instagram Metrics (About Instagram Insights, 2018)

numbers are heavily influenced by algorithmic factors, and again do not get to the most basic moment of the communication event as “Likes” and “Comments” do. (Carbone, 2018; About Instagram Insights, 2018). As well, “Reach” and “Impression” data was only available back to Spring of 2016 (Timeline of Instagram, 2018) when Instagram introduced these measures, and were only available for Instagram accounts that were converted into ‘business profiles’. Given this condition there would have been gaps in the “Reach” and “Impression” data for part of the sample.

Taking into consideration all these factors, I decided to focus the third phase of this project only on the "Likes", "Comments" and "Saves" that images received. While there are *no*

measures on Instagram that are completely free from algorithmic effect, "Likes" etc. are the most obvious measures of interest and engagement from an audience perspective.

In phase III of this project I manually recorded the “Likes”, “Comments”, and “Saves” of the entire 200 image sample set from Instagram identified in my coding of the phase I content analysis. This information was then downloaded from nVivo 12 into an Excel spreadsheet where I calculated averages for the entire sample. I calculated similar averages for prominent themes that emerged in the content analysis, and then compared these two sets of values.

In terms of my comparison between the phase III metrics and the phase II interview data, I conducted a comparison between the photos identified (“Liked”) by participants in the photo elicitation activity with the metric averages of the entire phase III sample. I also analyzed the most popular images identified by the participants, and what thematic categories they belonged to in the phase I content analysis. Overall, the phase III analysis was an exploration of all the available information on the content and topics in question. I recognize that this was not comparing ‘apples to apples’, given the different sample sizes, types of data, and so on. However, I felt this was a useful exercise since it enabled me to look at the themes and trends from various perspectives, and to see if there were any noticeable patterns.

Ethical Considerations

As with all research, it is important to consider how an investigation might impact participants, and ensure that the data being gathered is mindful of proper ethical practices. As this study made use of photographs, it was important to consider how proper ethics would be considered in conducting the study and whether the use of the intended photographs would pose any risks. Literature addressing the use of photographs in research (Pink, 2013; Rose, 2016; Tinker, 2014) highlights how images can address emotional and / or sensitive topic matter, and

also pose some concerns for privacy, especially if the images used depict people. Many of these considerations relate to photovoice or photo elicitation methods that ask *participants* to take photos or provide photos. In studies where participants are producers it is essential to address any harm participants might encounter in taking images, and to ensure they have obtained permission to capture the likenesses of others. There is also the consideration to be made, that if photos used in the interview process will be sensitive in nature, that the investigator has considered and is prepared for the emotional impacts viewing the photographs may have on participants.

This study is free of concerns regarding privacy and permissions, as all the images were obtained from a publicly viewable social media account. Photos posted to all the UAL accounts are vetted by staff prior to posting, and permission to post the likenesses of people within in the content is always obtained in writing. In terms of the impact viewing the sampled images would have on participants, the intended sample did not include any photos of a sensitive in nature, nor did they depict content that is overtly disturbing. Nevertheless, precautions were taken to ensure that participants did not experience harm or detrimental effects due to viewing the photographs within the interview setting. As per normal ethical procedures, all participants within the interview process were made aware of the nature of the study and were permitted to withdraw participation at any time.

Limitations

Along with issues noted in the above methodological discussion, there are a few additional limitations that require noting in terms of the qualitative elements of this study. As this research was conducted as a capstone project, for completion of my MA in Communications and Technology, there was only one coder of both the image content, and the interview transcripts. Care was taken to ensure that both images and interview content were coded in a systematic way.

However, it is important to stress that findings are unique to my context, and reflective of only myself as coder.

Another limitation relates to Instagram as a platform. This study aimed to look solely at visual communication, and therefore only images were uploaded into the locked Instagram account for the photo elicitation process during the phase II interviews. It became apparent to me during the interview process that a certain degree of the meaning in Instagram is constructed between the interplay of photo and caption. I believe the findings of the interviews are still valuable insight into student's perceptions UAL Instagram and libraries, but it must be noted that the lack of captions in the interview process may have shifted meanings in some situations.

While efforts were made to recruit interview participants that had varying degrees of familiarity with the library, in the end the participant pool for the interview phase of the project proved to be predominantly heavy to moderate library users. As frequent library users, the findings reflect only part of the UAL audience, the part that is likely already receiving UAL communication in some form. It would have been useful to gain insights from users that do not know about or use the UAL services.

I acknowledged earlier in this study, that the full audience for UAL social media reaches beyond students to include university faculty and staff, other libraries, community organizations, and news and media outlets. However, only students, as the primary audience, were interviewed in the study. This limitation was required to keep the scope of the project focused. These other audience groups may have demonstrated very different attitudes and ideas about the content. While this is a limitation for this study, it does highlight a potential avenue for further research on this topic.

The final limitation of the study is its focus on one library system and one Instagram account. This restriction was necessary for reasons of scope. While the findings of my study are unique to the UAL context, I believe much of insight gained from my investigations are still worthwhile considering in a broader context.

Investigating library Instagram content, and how it is perceived by its student audience within the University of Alberta Libraries context, required a multi-phased approach. This big-picture methodology enables us to see not only what thematic types of content UAL is sharing, but different perspectives and data on those themes. The results of these investigations can be found in the next chapter.

Analysis and Findings

Turning to the analysis and findings of the study, following the mixed-method analysis described above, I will present each phase of the project individually, in the order I conducted them.

Phase I: Content Analysis

As described in my methods chapter, the first phase of the study involved a content analysis of images that were scraped using a python code Instagram Scraper (Arcega, 2018) and renamed. I then uploaded the files into nVivo 12 for mac where they were coded using a coding matrix that captured the singular most prominent “intended message or purpose” that was being conveyed in the image. The results of this coding process revealed three prominent themes within the Instagram content: Community, Library Services and Library as Place. The full breakdown of these themes in terms of size and smaller codes can be seen in Appendix I.

The themes identified sub-categories that tell us about the types of images being shared by library staff in the process of Instagram social media communication for the library.

According to my analysis, the top-level theme “Library as Community” accounted for just over half (53%) of the sample and included sub-categories of images that addressed events, library history, activities within the library, posts about holidays, images that highlight local history or focused on university spirit.

The next most prominent theme for photo content, “Library Services”, accounted for 28% of the sample. This theme included posts that showcased library collections, provided announcements of services, workshops etc., images that reminded followers of library hours, showcased librarians, or pointed to the library website in some fashion. Only two images in the entire sample showed librarians engaged in modern-day library work.

The final thematic category I identified, “Library as Place” accounted for 21% of the sample and consisted of images of either library spaces or the exteriors of buildings. The overall findings demonstrate that in terms of content, UAL shares predominantly images with a community focus. I choose the term ‘community’ to describe this theme as the images it contained focused on human activity within the library, or connected the library to the rest of society through history, holidays and seasons.

Phase II: Interviews

Phase two of the study involved conducting semi-structured interviews that made use of photo-elicitation techniques. A total number of eleven students were recruited for interviews. The participant pool consisted of nine undergraduate students, one after-degree student, and one graduate student.

A number of the questions in the interview protocol were designed to reveal basic information about the participant’s familiarity with the library, its services, as well as their typical uses of Instagram. Based on the responses to the first two questions in the interview protocol (see Appendix II) six of the students fell into what would be considered “heavy” library users. These participants were able to identify multiple services they had used over their time as a student, and indicated they frequently visited the library or used library services. Four of the participants fell into a category of “moderate” library users that either used the library primarily for studying or had made occasional use of the collection. Only one user fell into the light user category, claiming only to use library printers. Six of the eleven participants identified the library as a place they studied during the school term, while another two participants stated that they preferred not to, or did not study in the library. One participant suggested she sometimes

watched movies in the library but did not study there. Overall, most participants demonstrated a basic familiarity with library services, some with more knowledge than others.

In terms of Instagram use and practices, eight out of eleven participants claimed they used Instagram to primarily follow their friends and a few businesses and organizations. Only one participant suggested they used Instagram mostly for information about local events and businesses instead of following friends. In terms of following organizations and accounts affiliated with the university, six participants suggested they followed organizations related to school and their studies. Only three participants spoke of following Instagram influencers that focused either on fitness or fashion.

When it came to the types of Instagram content they preferred, four participants claimed they regularly watched Instagram stories as well as viewing the still images and videos in the feed, although one of these participants only preferred the stories of friends. Two participants claimed they did not enjoy stories as much as the images they viewed in the feed. While participant pool was relatively small for this study, having some knowledge about familiarity with libraries and Instagram use was useful to at least gain a glimpse of the primary audience's inclinations in these areas.

The primary, and more illustrative focus of the interviews, were the discussions held around the photographs elicited via the locked Instagram account. As often happens with photo-elicitation research techniques, the discussions resulting from this activity were rich and diverse. Participants brought their own unique experiences and history into the discussion of their viewing experience. It was also apparent that the use of images triggered emotion and memory far more readily than verbal interviews did. The content of the interviews, when thematically

coded, revealed a number of clear trends in terms of student perceptions about libraries, and their perceptions of the photos they viewed. The interviews also produced a great deal of data that required careful coding and analysis. My analysis of the interview data revealed two top level themes: **“Capturing the Library.”** and **“Photo Talk”**.

One of the first noticeable aspects of conducting photo elicitation interviews, is that they generate a great deal of data, much of which can be random opinions and one-off ideas that can make identifying larger themes difficult. Much of participant feedback that related to tastes, preferences, and aesthetics were coded into a category I called “Photo Talk”. These included commentary on whether participants enjoyed photo collages, or disliked or enjoyed images with quotes or messages etc. “Photo Talk” also included participant thoughts on the aesthetics of photographs, a theme that came up in almost all interviews. While the information provided by participants on their preferences and tastes were insightful, this information was not the main focus of my research questions. I therefore choose not to elaborate the findings of the “Photo Talk” theme in detail.

By far the most significant top-level theme within the phase II interviews was the one I have identified as **“Capturing the Library”**. When students began to describe and discuss the images they viewed on the iPad, the lines between their social media experience, and real-life experiences blurred. Many talked openly about their experiences and perceptions of libraries, as they identified the most significant images and explained their interest in them. This theme is broken down into several categories that in many ways mirror the findings of the phase I content analysis; **Library as Community, Library as Place, Library Services** and final smaller theme, **Change in Libraries**. I will detail each of these subcategories individually.

Library as Community. The community aspect of the library was of the key themes within the discussion of the sampled images. At least eight participants mentioned the significance of libraries in terms of gathering places where they studied, met friends and attended events. For example:

“I think libraries are very much a hub of community, so the ones that have kind of that in it, like the post it notes, and people and the dogs, and even books, but I also think libraries are a big part of the campus, like mental health strategy.” (Interview 4)

“I see like the library as community because a lot of people find that as social hub where people hang out and as I said, do homework, spend time with friends, you know catch up on the internet...” (Interview 9)

Studying was a significant category in the discussions, and many of the students identified photos that showed students studying as some of their favourites and / or as images they related most to the library:

“I do really think that the ones...that show, the study spaces are something that I associate with the library, because I often come to either Rutherford here or Cameron to study so I think a majority of the time I spend in the library is studying, which this does show.” (Interview 10)

“There was one where a bunch of people were sitting in Rutherford, it’s like a scene I’ve seen myself just a bunch of kids with their heads down, studying.... I feel like, that was really relatable, that’s something you see every day in the library during finals and midterms.” (Interview 3)

“I really like the pictures of like the students studying, cause that is very much, like this is my experience of the library.” (Interview 6)

Students identified studying in the library as a social experience that they did with their friends, and being in the library was tied to friendships and human connections:

“...it’s got the people, the people whether it be staff students volunteers right, it’s got a message to convey across, and it’s also got a call out to the community, it’s prompting the community to take action and do this right. So this, kind of like template put together, is

what I would see as ideal, that I would like to see a library do more of, so that people can see that libraries are more than just a pile of books on the shelf.” (Interview 11)

“...every time I'm in the library it's so busy...like it's a hub of activity... so I definitely think one of the ones with people, like maybe a selfie of a group studying or something like that.”

(Interview 4)

In looking at the photos and describing what is appealing, a participant said:

“...there's a lot of pictures of people sitting in the library doing their work or like just having spending some quality study time with friends and that's sort of like the thing I would do too. Like just sitting there do my homework or something different, spending time with them, you know catching up on each other's lives, I think it's pretty accurate in terms of what I see...” (Interview 9)

Other community themed discussions in relation to the images related to events students were familiar with at the library. At least five students named library events by name that they were aware of and pictures of events were discussed a number of times.:

“I love the kind of photos that are really event kinda based like...generic based event photos, it's like "everyone get together, hold this banner take a photo" and it's like that's great that conveys uh community working across, that goes "we're a community, united together, for this great cause, I hope you will stand with us” (Interview 11)

In discussing UAL Instagram photos, student participants showed a clear connection to the library as a part of their school community. Most participants saw the library as a study space and place to connect with their friends, and they chose photos based on those experiences.

Library as Place. The library buildings themselves were a surprising focus in many of the interviews. Students appreciated the images that capture library spaces in unique ways. Participants spoke of library spaces in connection with history, and in connection to their

experiences, in studying and social contexts. The term “architectural” was used by six participants.

“I liked the pictures of the more scenic shots of the library, where they have like pictures of like the windows and the seating, I thought it was really pretty, I think the libraries that we have at the U of A are really nice, so I like seeing those kinds of pictures.” (Interview 10)

“I found myself liking most of the ones without people in it, but the focus was on the books, it was like on the buildings, and the structures and the way the light came in through the windows...” (Interview 8)

In discussing the building and library space photos, students recognized that the pristine, often empty shots were perhaps not as authentic to what those spaces look like during term, but that it was part of the novelty of the image:

“I like this one specifically [Rutherford Reading Room] because I know there is another one, the same shot but with people in here and I did not like that one as much.” (Interview 2)

“the empty photos that is nice to see... when I'm looking at photos like that on my own I'm like that might be a good study space like I would love to go there, and I know it's not going to be as perfect as it is in the image” (Interview 2)

Another participant rationalized her connection to the images of library spaces, because she had experienced her own trials and academic growth in those spaces:

“I guess it's for myself like even the pictures where it's just the spaces, like those are really meaningful to me because I spend like long nights in the library... So I guess for a second person it might not hold as much meaning as it does to me but ... that's why I appreciate those photos.” (Interview 8)

The importance of libraries as a space emerged very clearly in the interview discussions as nearly all participants (10) found connection with the physical spaces of the library and appreciated them as a place.

Library Services. Another subcategory that emerged in the phase II interviews, was the theme that spoke to the idea of the library as a tool or service. While this theme did not dominate discussions like the library community or library spaces, a number of participants noted the services and resources that libraries offered.

“Well first off of course it's a place where we get knowledge ...you know if we're looking for something we're not sure where to get this knowledge, maybe our professors might not have the clearest sense or so we go to the library, pick up a book and it turn it helps us more in what we're studying or researching...” (Interview 9)

Six participants spoke of using e-resources, and recognized that the library offered more than just print materials.

“I mean with internet today there's so many things you can do and the library, especially the university library they have like so many different applications and so like whatnot, they allow us to do things that we can't, might not be able to afford on our own computers.” (Interview 9)

“...for me in my use of it, it's like the library is a tool... I need this place for like research, and for information...” (Interview 11).

In terms of librarians, only two participants spoke about librarians as a service or ‘tool’ that they might utilize. Despite only a few mentions of librarians, what the participants said about them was very favourable, describing librarians as helpful mentors. One participant spoke very highly of librarians linking them to the academic success of fellow students, and identified them as a service that supports mental health:

“I've heard so many stories like that, where it's like the librarians are the first point of contact for people ... they struggled in their first year and then they went to the library and got research help, so for them that was a big turning point in their university career... I think just being an accessible service is also something that helps with that mental health.” (Interview 4)

Another participant suggested we showcase librarians and what they do:

“taking a picture of like one the librarians, maybe the professional kind of photos that you see of professors like: this is like so-and-so, you can contact them to like this one piece of information” (Interview 6)

The question of books, the more traditional service found in libraries, did come up a number of times during the interviews. I added a question regarding book images to the interview protocol after observing the first few participants, noticing students interacted with book images differently. I felt this information and discussion might provide insight. Overall the use of books as library service was mixed between participants. Some students (3) whose programs were majored in sciences indicated that they did not make use of books and therefore the book images held less significance to them.

“I actually had skipped past most of them except for one that I was really interested in was like the really old fashioned one, that talked about tortures or whatever [Laughs]” (Interview 11)

“I think less so the rows of books just because from my experience at least on campus is that I'll go to the Cameron Library or I'll come to Rutherford Library and rather than seeing the stacks of books which you still obviously see but it's more the tables with students studying at the tables with their technology.” (Interview 1)

“...some of them just look really old... I don't think that they're resources I would necessarily use just because, also in my field, it's not something that I would normally go to...” (Interview 10).

Other participants spoke affectionately about books, indicating they enjoyed seeing and learning about new books in the collections. In terms of book recommendations there were mixed opinions:

“the ones where like where there are students holding like a certain autobiography or book, I think that's... I liked it because you know.... sometimes you don't know what kinds of books are around this library, but you can like know about this book is in this library, find it here, it promotes it.” (Interview 5)

“I am not a fan of getting recommendations, just because I don't need them, I am someone who will ever take out a recommendation because I already have a list that is far too long that I try to work through myself, so it's just not relevant to me.” (Interview 7)

Discussions about the service offerings that the library provided were not the prominent themes in the discussions, but students did demonstrate an awareness that they existed, and some of them spoke of having used them. Only a few mentions of librarians as a service were noted, but fortunately these few times librarians were described as helpful to students. Students were prompted for their thoughts about book images and their discussions about books as a library service were mixed.

Change in Libraries, Books and Technology. A final and more subtle theme that I identified in the interviews was the topic of change within libraries. Change was not an actual theme, but rather a connection I identified between a few of the codes in the data. These codes include talk of historical images, books and technology within the photos and library context. I mention these discussions here due to their relevance to my research questions.

Participants enjoyed the historical images that were part of the sample purely by chance. They enjoyed viewing and analyzing the archival images to see how the libraries had changed over the centuries.

“I really enjoy like the ones.... that make you think about things like what this place used to be, how it all came together, and here we are now right ... who are we to the future” (Interview 11)

“And there are ones that are just old images, and I feel like those were the ones like usually liked the most because it looked like something, like if I were to go down and look at a comment it would look you would be telling like a fun fact or a story about it like something that happened in this building like 50 years ago.” (Interview 3)

In discussing books, a majority (9) of participants indicated that while much had changed in libraries because of technology, they still felt books were important and valuable.

“...while our times moved into a new digital age and everything, I think the library always holds that foundation there, yes, we bring those computers there, we bring our

recording devices in and we incorporate into something that can't be replaced and that's the library itself, that atmosphere, what makes it the library.” (Interview 11)

In some cases, participants had mixed thoughts about book images. The participant in Interview 1 originally identified books as something they did not use or related to, but towards the end of the interview, when answering the question “What type of images should libraries share?” their previous stance changed somewhat:

“...it is still nice to include some pictures of books just because even though we are more based in technology I think books are still a very important part of libraries.”
(Interview 1)

One student even suggested that using books for important announcement messages would be helpful as it would immediately draw attention to the eye that this was a message from the library.

“I think that like especially if it's a message about, these are our hours, we open this day-like it's really helpful to have the books because then it immediately like you can just see, we have books, it's the library and these are the library hours, you don't have to think too much and read the whole thing.” (Interview 6)

In contrast to this, when asked what kinds of images represented the library to them, five students chose images that represented technology such as laptops.

“I think less so the rows of books just because from my experience at least on campus is that I'll go to the Cameron Library or I'll come to Rutherford Library and rather than seeing the stacks of books which you still obviously see but it's more the tables with students studying at the tables with their technology.” (Interview 1)

One student stressed the connection of computers to the library:

“I don't know, there's not one certain thing that represents the library, because there is many things, like a computer rooms I mean that's not what's typical libraries and what someone would think, people would just imagine books in a library, but you know like the computer rooms would show that there are also the other activities that happens in a library now.” (Interview 5)

Other technology related topics that came up while viewing the images with participants, included the libraries 3D printing services, and the technology lending program. Students recognized these things as valuable and modern services the library was providing. The perception of change within libraries was a less defined, more subtle thread that shifted in between the themes of greater importance. It was nonetheless clearly an aspect of libraries that students were aware of, and it was surprising how the students saw it as an issue as they viewed the images and discussed them in the interviews.

Summary of Phase II: Capturing the Library. To summarize the second phase of the study, the use of Instagram photos within the interview setting was very useful. As anticipated, it generated a great deal of information on student approaches to the images, the platform, and their perceptions of libraries. In terms of identifying key images that they felt represented the library, the majority of participants said community images and photos that showed library spaces and/or study spaces were what said ‘library’ to them. A few participants pointed to laptops and computers. In answering the question: *How relatable is the content to your experience?* Eight students used varying gauges to express the sample’s relatability, and of those eight, six indicated that 50% or more of the content felt relevant to their experiences in the library. Only 2 participants were more ambiguous in their responses, and indicated less than half (40/60) were relatable.

When I asked what kind of content the library should share, more than half of participants suggested architectural images, photos of library spaces, and particularly visuals related to studying.

“anything that has to represent the library today, something that jumps out is definitely anything that has like big overview shots of library tables, books, people [Laughs] that's

sort of like, put those pieces together and it really ignites, that's what like really jumps out as 'that's the library'" (Interview 11)

Just over half of participants indicated that the libraries should post images that reflect the community aspects of the library. Informational posts were noted as useful and worthwhile content for students.

As described in the methods section, participants were encouraged to engage with the sample in a locked Instagram account. They were told they could "Like" any of the images they wished as they viewed the images. The images chosen by students were recorded from the iPad following each interview, and noted in nVivo as cases files. During the interview phase, participants liked 146 of the photos at least once. A much smaller number of images (5% of the sample) were liked by at least half or more of the participants. These images can be seen in Appendix III. The top images predominantly focus on the library spaces and buildings. The second phase interviews were a very useful exercise in understanding how students at the University of Alberta experienced Instagram content, and it revealed a number of key themes that provide insight into student perceptions of libraries.

Phase III: Instagram Metrics

The final, Phase III phase of the study took an exploratory approach to examining Instagram metrics in comparison to my findings from Phase I and II. To start, I harvested Instagram metrics from the entirety of the 200-image sample. The metrics selected for focus in this study were "Likes" and "Comments". I chose these metrics because they are the most indicative of interest by those viewing the images within Instagram. Once metrics for the sample were harvested, I calculated the sample averages, along with the highest and lowest metric values. Table 2 shows the notable metric values of the entire sample.

	Likes	Comments
Average:	33	2
Highest	100	13
Lowest	7	0

Table 2 - metrics values for entire sample

The two images with the top "Likes" and "Comments" can be seen in Figures 2 and 3.



Figure 2 - Image 192 - Image with most "Likes" from sample on UAL Instagram

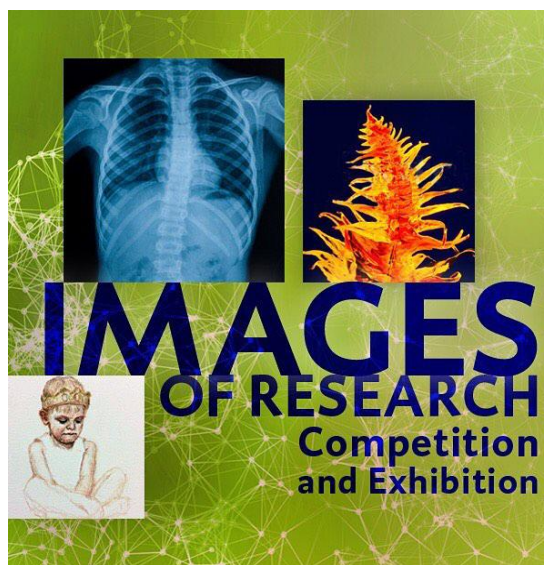


Figure 3 - Image 42 - Image with the most "Comments" from sample on UAL Instagram

Instagram Metrics to Phase I - Comparisons

With these average metric values determined (an average of 33 likes and 2 comments per Instagram post), I turned my focus to the themes revealed in the content analysis phase of the project. I calculated the averages of the number of "Likes" and "Comments" of each of the three key themes "Community", "Library Services", and "Library as Place". Table 3 presents the results of these averages, and compares them to that of the entire sample.

	Average Likes	Average Comments
Entire Sample	33	2
Community	32	2
Library Services	24	1
Library as Place	40	2

Table 3 - Average Likes and Comments Compared to phase I Themes

As the chart in Table 3 reveals, there is no real change in the average number of “Likes” and “Comments” for the “Community Theme” photos in relation to the entire sample. However, the average number of “Likes” for the “Library Services” images are noticeably lower than the general average, while “Library as Place” images average “Likes” are noticeably higher than the general average. This suggests images within the “Library as Place” theme to be more popular.

Instagram Metrics to Phase II - Comparisons

Next, I compared the images identified by the students during their photo elicitation interviews with the Instagram metrics. During the interviews, students selected 146 of the 200 photos sample set. I compared the average number of “Likes” and “Comments” of these images to the total averages noted above (33 likes and 2 comments). In this comparison the averages showed very little difference (see Table 4).

	Average Likes	Average Comments
Entire Sample	33	2
Images Selected in Interview	32	2

Table 4 - Comparison of “Likes” and “Comments” averages from Interview photos

With these results, I considered whether it would be better to focus on the most popular images identified in Phase II – that is, those that were selected by a number of participants. I learned that

a much smaller number of photos, 5% of the sample (or 12 images) were selected by five or more of the participant pool. These most popular images can be seen in Appendix III.

	Average Likes	Average Comments
Entire Sample	33	2
Images selected by 5 participants or more	48	1

Table 5 - Likes and "Comments" of top images from interviews compared with whole sample

Table 5 shows how the most popular images selected by interview participants also had a considerably higher average of “Likes” than the general sample. I decided to organize these images in terms of the themes I identified in the phase I content analysis.

Top Images Selected in Interview within Content Analysis Themes

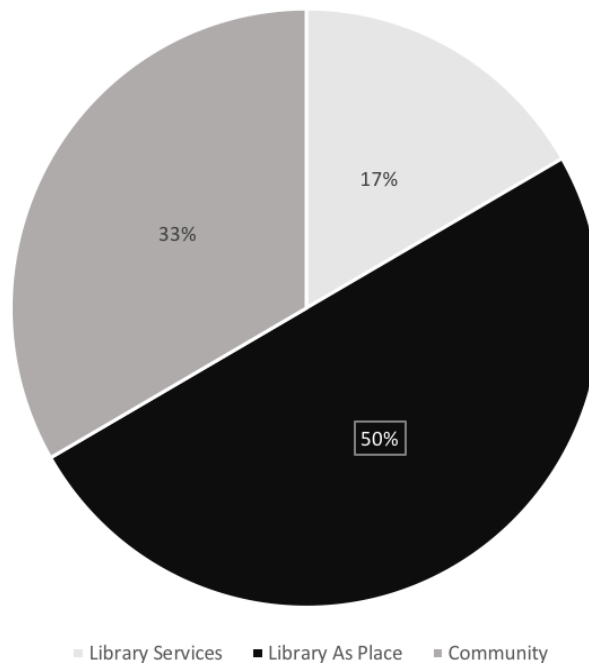


Figure 6 - - Images selected by 5 participants or more, broken down by phase I themes

This analysis revealed that of the top images selected by participants, 50% belonged to the “Library as Place” theme, 33% to the “Community” theme and 17% to the “Library

Services” theme (as seen in Figure 6). From this analysis, it would appear that according to all three phases of my research (content analysis, interviews and Instagram metrics), the most popular theme in visual communication about the UAL is “Library as Place”, with “Library as Community” also quite popular.

Concluding thoughts. My intentions with the phase III analysis was to explore possible trends in relation to the metrics, themes of content, and the perspectives of interview participants. It shows that the “Library as Place” theme images have significantly higher “Likes” within Instagram, and participants in the interviews selected “Library as Place” images most frequently. To me this suggests there is value to Instagram metrics, but in order to understand why and how content is popular, it must be situated within understandable themes that are confirmed by the audience. In other words, Instagram may tell us a photo is popular, but we cannot presume to know why or how without taking a multi-faceted approach to explain it.

Discussion and Conclusion

My interests in conducting communication research emerged at an intersection between long-held frustrations of the public perception challenges that libraries face and my daily work as a library communicator. With this study into the Instagram content of the University of Alberta Libraries, I aim to provide answers to questions about every day communication practice, as well as insight into broader issues about the perception of libraries. I have held to what Schreiber (2017) describes as the “manifold meanings and contexts” of social media communication, and my research has taken the approach that “Picture sharing has always been a means of collaborative meaning-making.” (p.40).

I believe over the course of this project I have demonstrated the complexity at work within the visual social media environment, as well as a need for research that takes multiple perspectives into consideration. Information professionals conducting research in admittedly still new and unfamiliar territory, have the inclination to gather quantifiable information, or to ask pointed questions that look at only part of the issues. If libraries are going to use social media as a primary communication tool, we need to assess and improve our strategies more fully, and need to look at our messaging from all perspectives. I believe that as communicators we do have some agency in this game.

“The creator and the receiver of images lie at the opposite ends of the communication process, but they are both lodged within the same fundamental system of perception. The main difference is that the creator reproduces or invents cultural forms, provides ‘ways of seeing the world...’ (Jamieson, 2007, pg.27)

Library communicators need to consider that what they share is creating the ‘way the library is seen’ and within everyday practice, it is worthwhile keeping bigger picture in mind.

In terms of what the findings say about perceptions of libraries, I think there is cause for optimism. While these findings are particular to this study and these contexts, the interview

discussions demonstrated that students' perception of the library was of a safe and welcoming place, a part of their university experience in terms of community and learning. Awareness of technological change as well as shifting purposes for the library were subtle but apparent.

Being aware of the more prominent themes, from the students' perspective, can help with strategic communications, and brings more understanding to library communication work. The various perspectives revealed in this study point to a need for greater awareness of the visual elements that library communicators share, and the need to understand that the audience sees libraries differently than we do. This project also opens up a number of directions for future research, the most obvious being a replication of these investigations on other social media platforms, or at different libraries, to reveal if similar themes emerge.

In their article *Library as Place*, Karen Brown and Mary Pat Fallon (2018) present how the change in libraries is reflected in the works of communication theorist Marshall McLuhan. McLuhan was interested in how the shift from print to digital media would come to change human life and perceptions. Brown and Fallon highlight a number of points within McLuhan's texts that demonstrate how the nature of communication inherently shapes the library. The typographic age, through its emphasis on individualism and linear processes made libraries into "secluded, dark spaces with endless rows of floor-to-ceiling shelving units", whereas in modern day they "have been replaced with well-lit, open spaces of mixed media and designs that seek to promote civic engagement and collaborative learning." (p.160). They demonstrate how "...contemporary library designs and uses of space (both physical and virtual) promote the "village" over the individual". (p.165)

I find these connections between McLuhan's work and the nature of modern libraries illuminating, given some of the prominent themes that emerged in this study. These connections also highlight to me how libraries have always been very much a part of the fabric of human communication, and that it is central to everything that librarians do. I believe it says that if librarians can master the tool that ultimately shapes libraries as institutions, and shapes their work, they can, in turn, shape the perceptions of that work and its significance in a modern digital society.

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Appendix I

A full breakdown of codes from the phase I content analysis.

Code Name	References
Community	102
Events	34
Library History	32
Activities	21
Seasons and Holidays	9
Local History	3
Feedback	1
History	1
University Spirit	1

Code Name	References
Library Services	56
Collections	28
Announcements	11
Hours	7
Printing - 3D Printing	6
Librarian Service	2
Library Website	2

Code Name	References
Library As Place	42
Library Spaces	39
Library Building	3

Appendix II

Interview Protocol

Since becoming a student how often do you use the library?

Describe how you use the library? What services have you used (even once)?

Describe how you engage with Instagram. To elaborate: Do you prefer stories to images? What kinds of accounts do you follow? What kinds of images do you typically “like”?

GIVE PARTICIPANT TABLET WITH IMAGES, AND EXPLAIN:

I’m going to give you some time to take a look at some images. These images have already been posted by the libraries, but these ones have been uploaded to a private Instagram account. Maybe take a few minutes to look at them and even favourite ones you like. Then we will discuss.

Of these images, which 2 images did you connect with most?

Let’s discuss why - why did you like/pick these images?

Which of these images do you feel accurately represents the library today?

Do you think these images accurately capture your experience with the library? You can use amounts to gauge and explain.

What kinds of images do you think capture the role/purpose/etc. of libraries today?

Appendix III

Photos “liked” by more than 5 participants in the phase II interviews.

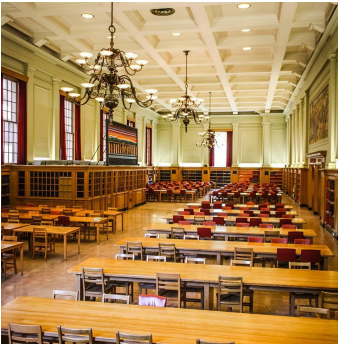


Photo 54 - 8 participants



Photo 187 - 7 participants

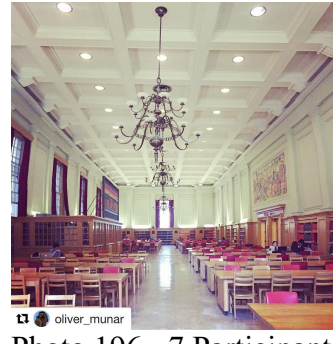


Photo 196 - 7 Participants



Photo 150 - 6 participants



Photo 187 - 6 participants



Photo 101 - 5 Participants



Photo 128 - 5 Participants



Photo 148 - 5 Participants



Photo 188 - 5 Participants

CAPTURING THE LIBRARY



onlinepseudonym

Photo 189 - 5 Participants



fin_nyfin

Photo 193 - 5 Participants



Photo 195 - 5 Participants