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10 Years of Excellence: Celebrating the Journal, Authors, Editors, and Readers

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Acknowledgements

Thank you to all 84 editors who have served on the Editorial Board of the Student Research Journal; our Faculty Advisor, Dr. Anthony Bernier; the 2020-2021 Managing Editor, Sarah Wilson; and my family, who encouraged me to pursue this position on the Journal and to finish my graduate career strong!

10 Years of Excellence: Celebrating the Journal, Authors, Editors, and Readers

Keywords
student research journal, peer review, graduate journal, scholarly research, scholarly publication

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Thank you to all 84 editors who have served on the Editorial Board of the Student Research Journal; our Faculty Advisor, Dr. Anthony Bernier; the 2020-2021 Managing Editor, Sarah Wilson; and my family, who encouraged me to pursue this position on the Journal and to finish my graduate career strong!

About Author
Catherine Liebau-Nelsen will graduate in August of 2021 with her MLIS from San Jose State University's School of Information. After serving as the Editor-in-Chief of the *Student Research Journal* for the last year, she is excited to see what awaits after graduate school. Liebau-Nelsen is currently a library technician at a junior high school library in her hometown.

In June of 2011, the inaugural issue of the School of Information's *Student Research Journal* was published by the first Editor-in-Chief, Suzanne Scott. In Scott's editorial, she writes that library and information science professionals "must actively promote their expertise through evidenced-based [sic] research, scholarship, and communication" in order to "drive discourse of and action resolution to the issues of discovery, access, and preservation of critical information and new knowledge" (Scott, 2011, p. 5). Dr. Anthony Bernier undertook the task of researching how best to found the project – a graduate student journal written, edited, and run by graduate students. After several months of planning, the *Student Research Journal* began. The first Editorial Team consisted of Scott as the Editor-in-Chief; Richard Thomchick as the Managing Editor; Cynthia M. Cohen, Samantha Godbey, James E. Hicks, Kimberly Price, and Theresa Putkey as Content Editors; and Susan E. Edwards and Colleen Vincent as Copy Editors. Eighty-four editors have been a part of the Editorial Team, and the *SRJ* will welcome five additional editors to its ranks this coming Fall. For the last decade, Dr. Bernier has served as the Faculty Advisor for the *SRJ* and keenly inspired and offered guidance to the editors with whom he has worked.

Even at the Journal's conception, the *SRJ* aimed to help authors reach *escape velocity* – the topic of Dr. Bernier's invited contribution in that first issue. It remains a piece that is read by each incoming *SRJ* editor to present the types of manuscripts that we look for and the sort of constructive critiques we offer. According to Bernier, *escape velocity* refers to the level of original or pertinent thought contained within a manuscript that allows it to build upon and contribute to current discourse rather than simply restating what has already been said. At the start of the Journal, the success of the *SRJ* was measured by pieces published; articles were the only submissions accepted at the time. Later, book reviews and evidence summaries were added to the mix. The first book review – Mary Vasudeva's review of *Overcoming Information Poverty: Investigating the Role of Public Libraries in the Twenty-First Century* by Anthony McKeown – was published in the *Student Research Journal* in 2017. An evidence summary wasn't published in the *SRJ* until 2019 when *SRJ*'s own Content Editor, Channon Arabit, published "Digital Commons and CONTENTdm: Not Entirely Accessible." A decade of growth and redefining 'success' has led the Journal to measure its worth not by the number of publications but by the number of student submissions put through double-blind peer review and by the quality of content published. Coming back to the concept of *escape velocity*, our goal is to not only publish articles, book reviews, and evidence summaries that reach *escape velocity* but also to help authors' work "'break free' of the gravitational pull of current scholarship" (Bernier, 2011, p. 10) with the acute observations and critical notes from our editors.

Because I have only been present to witness the last year of the *SRJ*'s progress and continued success, I asked several previous editors to describe their experiences working on the Journal. Among the reflections, similarities stand out among each: The experience of working as an editor for the *SRJ* is referred to as “the best thing I did in library school” (Meyers, E., personal communication, October 16, 2021), “the highlight of my time at SJSU” (Hockin, T., personal communication, January 7, 2021), “hands down, my most rewarding experience while at SJSU” (Greggs, R., personal communication, January 30, 2021), “among the most valuable [experiences] of my graduate degree” (Pistorino, P., personal communication, January 29, 2021), and “the highlight of my tenure at the iSchool” (Price, M., personal communication, February 3, 2021).

The Journal has undoubtedly come a long way in the last ten years. Thank you to all of the authors, editors, readers, and faculty who have brought the *SRJ* to its current status at the SJSU iSchool and in scholarship, in general. I am beyond pleased and proud of what our current editorial team and all of our predecessors have accomplished.

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Student Research Journal: A Decade of Building a Global Community of Scholars

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Student Research Journal: A Decade of Building a Global Community of Scholars

Acknowledgements

About Author

Dr. Ruth Huard is the Dean of the College of Professional and Global Education, serving as the leader for multiple areas within the college: the academic departments in information and data science disciplines, professional and continuing education, global programs and services, and two research and training centers - Silicon Valley Center for Global Studies and the Silicon Valley Center for Big Data and Cybersecurity.

With over 20 years of academic and professional experience in the areas of learning sciences and technology design, Dr. Huard has facilitated the growth of online teaching and learning opportunities for the SJSU community through academic entrepreneurship and accessible technologies.

This is a truly proud moment for the College of Professional and Global Education and San José State University as we celebrate the 10th anniversary of the *School of Information Student Research Journal* (*SRJ*). In 2011, *SRJ* was created because of the strategic foresight and innovative spirit of the School of Information's leaders, faculty, and students. They understood the importance of providing access and opportunity for students to disseminate their scholarly work in the disciplinary areas of library, information, and data science. To this day, *SRJ* continues to hold its distinctive position as the university's only student governed, peer-reviewed, open-source journal for student research.

Since its founding, *SRJ* has thrived. It has:

- published 78 editorials, articles, book reviews, and evidence summaries
- been downloaded more than 140,000 times from 190 countries
- mentored, trained, and worked with 84 student editors
- received 41 submissions in queue to undergo the peer-review process

The data above not only reflects the vital statistics in *SRJ*'s evolution, but also captures *SRJ*'s most significant achievement of creating a global community of scholars to provoke thought, discussion, and action.

SRJ, as a rigorous, peer reviewed journal, serves as a foundation for an intellectual community in which scholars, students, and practitioners drive relevant and scholarly discourse around the discovery, design, access, analysis, protection, and preservation of data and information. The editorials, articles, and reviews are consistently contemporary, yet the value of those scholarly contributions persist through time. For example, early issues featured articles that addressed health literacy (Flatherty, 2011), privacy and ethics (Tesseler, 2014), needs of homeless library patrons (Barrows, 2014), internet filtering technology (Overaa, 2014), patient access to electronic health records (Zuniga, 2015) – all topics that continue to be relevant and important in today's scholarly conversations across our global communities. Of particular significance as the world faces the COVID-19 health pandemic, *SRJ* has published several articles, both from student contributors and faculty guest contributors, that have focused on health topics. As an example, *Crisis Informatics: Perspectives of Trust – Is Social Media a Mixed Blessing?* contributor Chris Hagar assessed the effectiveness of social media for sharing information during a crisis.

The global reach and relevance of *SRJ* since its inception 10 years ago are a testament to the thoughtful and critical review process undertaken by *SRJ*'s editorial team. It also signals their understanding of significant topics and issues in their discipline and beyond. Congratulations to the *SRJ* editorial staff, Editor-in-Chief Catherine Liebau-Nelsen, and all those who came before them in upholding the rigorous standards of scholarship and for their significant role in developing an international community of scholars.

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Designing Human-Computer Conversational Systems using Needs Hierarchy

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Designing Human-Computer Conversational Systems using Needs Hierarchy

Keywords

information science, artificial intelligence, computer conversation systems, user needs

Acknowledgements

About Author

Souvick 'Vic' Ghosh is an Assistant Professor at the School of Information, SJSU. His scholarship involves the development of research models and methods that extend the traditional view of information seeking into voice-based and interactive environments. His work in these areas is informed by and contributes to the necessary research on Conversational Information Retrieval at the level of individuals interacting with a voice-based search system, and to the developments and innovations pertaining to such systems. It involves extensive use of techniques and approaches in Machine Learning, Natural Language Processing, Deep Neural Networks, and Human-Computer Interaction.

Before joining the doctoral school, Souvick completed his Bachelor's and Master's degree in Computer Science with a focus on Natural Language Processing and Machine Learning. In his work, Souvick loves using technology for social good.

Souvick has a strong teaching record at Rutgers School of Communication and Information, having taught multiple graduate-level and undergraduate-level courses, both online and on-campus, on Data Science, Programming, and Computer Science concepts.

Introduction

Research in conversational systems has gained massive popularity in recent years. While the commercial attraction of such systems could be attributed to novelty - you can talk to the system in natural language - conversational systems solve several problems in the medical domain and search space. Conversational systems allow a greater degree of multitasking as the user no longer needs to type in the queries. The voice-based support allows the user to "converse" with the system without having to look at the screen. Therefore, the use cases include situations where the user wants hands-free or eyes-free operation (Ghosh, 2020). Additionally, conversational systems are a solution to accessibility problems for people with disabilities (visual or manual impairment) (Ghosh, 2019; Guy, 2016; Frummet et al., 2019). These systems have also been used as open-domain conversational partners, and therefore, have found application in the mental health domain.

Commercial conversational agents are so ubiquitous that they are used in healthcare (Winata et al., 2017), education (Lee & Fu, 2019), elderly care (Kopp, Brandt, et al., 2018), customer service (Gnewuch et al., 2017), and information retrieval (Barko-Sherif et al., 2020). These systems are also known as intelligent personal assistants (IPA) or virtual assistants. Amazon's Alexa (https://developer.amazon.com/en-US/alexa), Google's Assistant (https://assistant.google.com/), Microsoft's Cortana (https://www.microsoft.com/en-us/cortana), and Apple's Siri (https://www.apple.com/siri/) are some of the more popular personal assistants available on the market.

The preference of users for humanoid systems has led to increasing research and development in making conversational systems more human-like in every way. The robotic voice has been replaced by human voices - male, female, and even celebrity (https://www.blog.google/products/assistant/new-voices-your-google-assistant-nine-countries/). Ongoing research is working towards making the agents more empathetic and affective, which requires research into user interfaces (which has to be more user friendly and accessible), natural language understanding (to improve the cognitive skills of the system), natural language generation (the system dialogues), and information retrieval (how much information to retrieve and how to present it). This interdisciplinary nature of conversational systems research makes it necessary to use techniques from Computer Science, Information Retrieval, Human-Computer Interaction, Psychology, and Cognitive Science. After all, since wheels have already been invented, it does not make sense to reinvent them for conversational systems.

Users interact with conversational systems with task fulfillment objectives. The user could have a specific task in mind, like operating the smart home appliance, or may want to engage in a casual conversation with the objective of minimizing boredom or isolation. Since the interactions between the conversational system and the user are governed by the success or failure of these tasks, it is important for the system to differentiate between tasks of varying importance. In this paper, we look into the framework of human needs to develop insights into how a conversational system should be operationalized to provide maximum satisfaction to the user. For our analysis, we use the user-system interaction data collected as part of an experimental study.

The rest of this paper is organized as follows: First, we briefly discuss what conversational systems are and why it is important to explore the design aspects of such systems. Next, we look into the hierarchical framework of human needs and how they apply to conversational systems. In the following section, we explain user experiences with existing state-of-the-art conversational systems. Finally, we conclude the paper by highlighting the challenges and proposing how a needs framework could be used to improve future systems.

Conversational Search Systems

Conversational systems are characterized by the use of natural language dialogues between the user and the system, which could be in the form of text (e.g., chatbots) or audio (e.g., intelligent personal assistants). The back and forth dialogues could occur over multiple turns, and therefore, these systems are called "conversational."

The use of conversations in search has tremendous implications for the Information Science and Retrieval Community. If we are able to replicate the interactions between the librarian and the patron, then we could have an ideal search system. The users (information seekers) will no longer need to use keywords (or query terms) to express their information problem (Begany et al., 2015). The shorter queries – which are difficult to formulate and often not the right representation of information need – could also be replaced by long, natural language descriptions of the user's information need. A better understanding of the user's search context would also increase the relevance and usefulness of the retrieved information.

A conversational system may also be categorized based on the medium of interaction. While text-based systems are commonly referred to as chatbots, audio-based systems are called personal assistants. Some systems allow the use of multiple modalities – as in embodied conversational agents (ECA) (Bickmore & Cassell, 2005; Cassell et al., 2000) – where the agent may have a face or body in addition to the voice. Each of the above-mentioned categories has its own advantages and use cases. A voice-based conversational system is more useful for hands-free and multitasking situations. On the other hand, a chatbot is more suitable for extended dialogues, collaborative information seeking, and multimodal retrieval. An ECA is widely used in mental health domains as it can express emotions using facial expressions, gestures, and other non-verbal cues (McNeill, 2011) as is common in human-to-human conversations. The ubiquity of mobile devices has popularized the conversational systems for searching (Brandtzaeg & Følstad, 2017; Mallios & Bourbakis, 2016), smart home operations, vacation planning (Shiga et al., 2017), tour guidance (Kopp, Gesellensetter, et al., 2005), flight booking services (Dubiel et al., 2018), or as conversational partners (Radziwill & Benton, 2017) in medical (Winata et al., 2017) and non-medical domains (Clavel & Callejas, 2015; Ring et al., 2013).

However, the existing conversational – and conversational search – systems are in a nascent stage. The developments, while novel, fail to achieve the standards of human-human conversations. Conversational systems have a wide application area and can massively improve user satisfaction if implemented properly. While computational development is a crucial part of system development, we must also look into human psychology to gain insights on how such systems should be operationalized. Therefore, we look into the framework of human needs in the next section.

Framework of the Human Needs Hierarchy

The design and development of any human-computer interaction system should focus strongly on the end-users – what their needs are and how the system should be implemented to solve those needs. In 1943, Maslow (1943) proposed the hierarchy of needs which suggests that the survival of humans as a race and the levels of satisfaction are not random but dependent on how the human mind assigns importance to things around us.

Maslow's theory explains the reason behind human motivation. Let us imagine the life of a human being. When a baby is born, all it cares about are the fundamental items for survival – food, optimal temperature, and comfortable surroundings. Any harsh change in the environment is perceived as a threat to survival by the baby. As the baby grows to an infant and finally to an adult, it strives for growth and development. The fundamental needs are still important and prioritized, as they are keys to survival, but the individual pursues higher-order needs, which could be materialistic, egotistic, or philanthropic.

In Figure 1, we present the five-tiered structure of human needs as presented by Maslow. The pyramidal structure of the need hierarchy suggests that basic needs necessary for survival must be satisfied before the individual targets higher-order needs. If we move upwards from the bottom, the bottom two levels represent the basic needs for survival, followed by the two levels of psychological needs, and the top-level representing self-fulfillment. Let us now look into the five stages (and three new levels added later) in the need hierarchy in more detail.

- Physiological Needs:

  Survival and self-preservation are the greatest of all needs. Every human being needs air, food, water, sleep, and shelter to maintain and lead an optimal life.

- Safety Needs:

  The next level of need is the safety and security of self, followed by those who are closest to the individual. Human beings prefer a certain order and predictability in their environment which they can control. Unforeseen and dangerous situations – threats to life, health, economy, independence – jeopardize the basic living conditions and are, therefore, avoided by individuals.

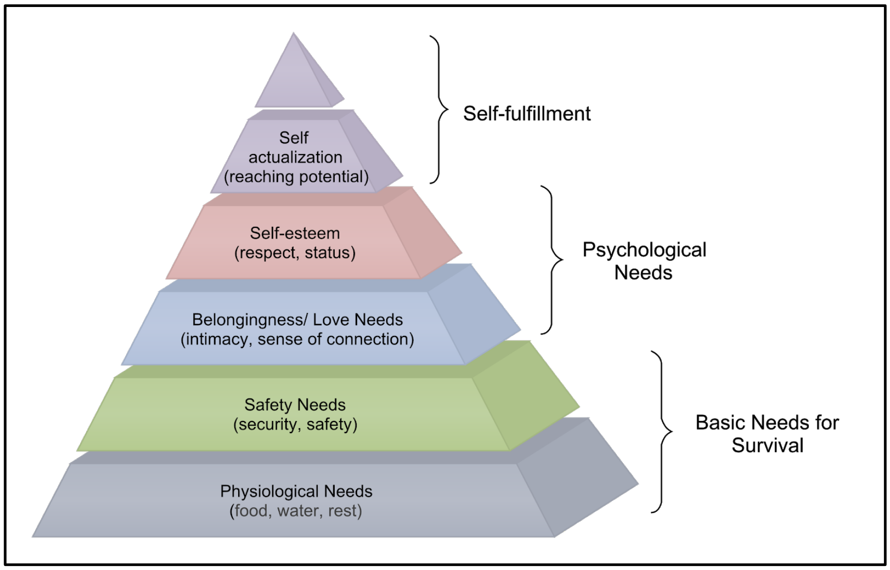

Figure 1. Human Needs Hierarchy (Maslow, 1943)

- Community and Belonging:

  Human beings are social animals. While individual survival is prioritized, humans value the sense of community and togetherness which they enjoy with their loved ones. The companionship offered by friends, family, and romantic partners is highly cherished as they help the individual avoid loneliness and depression. This level of need is required for psychological well-being as it allows humans to connect to something more than just themselves, which could be the social group they belong to, the organization they work for, or any other collective.

- Esteem Needs:

  The next level of psychological need relates to the esteem and feeling of self-worth for individuals. It is not enough to survive, but there exists an intense desire to be accepted by peers and social circles. Humans strive to earn respect from others (increase in popularity, fame, social recognition) and also self-respect (feeling of dignity, freedom, and competence). Social status is an important metric of self-worth in a community space which could be related to the economy, power, or achievements of an individual.

- Cognitive Needs:

  This level of need was later appended to the original five-tiered model. Cognitive needs allow humans to nurture their growth potential through the performance of cognitively challenging tasks.

- Aesthetic Needs:

Aesthetic needs were also added later to the hierarchical framework, as they represent an innate desire in humans to create and appreciate beauty.

- Self-Actualization:

  Self-actualization was the highest level in the five-tiered hierarchy and is related to self-fulfillment. The desire for growth and achieving true potential acts as a strong motivator in individuals. The needs could be short- or long- term and could include gaining skills and knowledge, fulfilling dreams, and pursuing happiness. Overall, it allows an individual to become a better human being based on the metrics they consider most important.

- Self-Transcendence:

  Self-transcendence has been added later to the needs hierarchy and involves spiritual needs. Just like an individual values the social circle they belong to (Community and Belonging Needs), there is also a deeper desire to be part of a larger universe or purpose. This greater purpose could be spiritual, religious, or scientific, but it goes beyond the needs of the self.

  In the words of Maslow:

  > It is quite true that man lives by bread alone — when there is no bread. But what happens to man's desires when there is plenty of bread and when his belly is chronically filled? At once other (and "higher") needs emerge and these, rather than physiological hungers, dominate the organism. And when these in turn are satisfied, again new (and still "higher") needs emerge and so on. This is what we mean by saying that the basic human needs are organized into a hierarchy of relative prepotency. (Maslow, 1943, p. 375)

The hierarchical framework is built on the premise that the primary needs must be satisfied before the individual strives for higher-order needs. Maslow's framework also connects human needs to motivation. Interestingly, for the basic needs, the higher the deficiency, the stronger the motivation. Lack of food, water, shelter, or safety acts as the strongest form of motivation. As these needs are met, the motivation keeps decreasing. However, the same is not true for higher-order growth needs (love, self-esteem, and self-actualization). As the growth needs are being met, the motivation increases as well.

Researchers have wondered if the framework of the needs is indeed hierarchical. Do human beings pursue the lower-order needs exclusively until they are satisfied? What triggers the desire for higher-order needs? Well, it depends on the individual and the socio-cultural environment they are in. The top of the hierarchy is difficult but aspired, but they are rarely pursued unless the basic needs are satisfied. While there is no fixed threshold that motivates the individual to move to a higher need, there should be no deficiency in the previous level. Exceptions are common, especially for high achievers, who often ignore the basic needs for growth, fame, and self-esteem. For others, we could observe a back and forth movement between the different needs over the life of the individual. For example, an individual may be poor but healthy and could be motivated by financial gains (safety needs over physiological). Next, they meet their romantic partner and move to the higher need level (love needs). They start a family and realize that they need to be stronger financially to support their family. Therefore, they will focus on a lower need again. They may also focus on esteem needs and self-actualization parallelly. However, as the individual gets older, they may develop health complications and the physiological needs might become more important. After a balance has been reached, humans push for needs that are either more important to them or the ones which are more likely to decline in the near future. That is why an older person has greater physiological needs whereas a young adult prioritizes love and esteem needs. Therefore, unlike a hierarchical pyramidal structure, the framework may have multiple and different degrees of overlap.

Experiences with Voice-based Conversational Systems

An artificially intelligent conversational system should behave in a way like any human would, framing the responses and assigning urgency based on the framework of needs. For example, the user may be desperate when they are facing threats to their physiological needs (a user looking for food stamps or homeless shelters) and safety needs (requesting an ambulance, emergency care, suicide support, or law enforcement). Searching for a restaurant or hotel is also similar but not as severe as the previous examples. The system should immediately call for human assistance (law enforcement, social services) or return the information urgently. Any delay in providing information could adversely affect the user experience. For higher-order needs – where the limit of fault tolerance is also higher – the system should attempt to tune the response to provide maximum satisfaction to the user. For example, if the user is feeling lonely, the system could play the role of a listener and be empathetic (thereby addressing psychological needs). Also, the system should always take the blame for any unsuccessful interactions. The esteem needs of the user are violated if the system holds the user accountable for the failure. If the user feels incompetent or offended by the system, there is a strong likelihood that they will never use the system in the future.

We looked at some hypothetical situations involving different levels of needs and observed the system responses. Let us look at some examples.

- Example 1 (Violation of Safety Needs):

  John feels there is someone trying to break into his house. He asks the voice-based assistant to call the cops, but the assistant fails to recognize his voice. John uses his phone to call instead.

- Example 2 (Violation of Physiological Needs):

  Lily is hungry and wants to order food delivery which would take the shortest amount of time to deliver. She asks the conversational assistant to find the restaurant, but the assistant responds with a long list of restaurants to choose from. Lily finds the list hard to navigate and decides to order online from her laptop.

- Example 3 (Violation of Esteem Needs):

Stuart starts talking to his voice-based personal assistant about his health condition. Stuart decides to explain his situation in more detail, but the system cuts him off midway and starts providing irrelevant information. Stuart is upset and decides to stop talking to the system.

- Example 4 (Violation of Esteem Needs):

  Shruti is a non-native English speaker and has an accent. She wants to operate her smart home devices using a voice-based assistant, but every time she issues a command, the system responds by saying that it was unable to understand what she said. Shruti feels upset that the system response was a criticism of her English pronunciation.

The above examples may be hypothetical, but there are several situations in which our interaction experiences with the conversational system are unsatisfactory and problematic. If the system's actions are in direct violation of human needs, the users tend to discard the system and never use them in the future.

Conclusion

In this paper, we looked at the design and functionality of conversational search systems using the framework of human needs, originally proposed by Maslow. Since human-computer interactions are goal-oriented and related to task fulfillment, it is important to consider the relative importance of the tasks. The user may perform a wide range of functions using voice-based assistants or chatbots. This includes (but need not be limited to) searching for information online, managing smart home devices, writing notes and emails, calling and messaging contacts, or placing an online order. Casual chitchats are common, too, and these are motivated by the users' desire for companionship. The role of the interface is crucial, as it decides the success or failure of the system.

By using the framework of human needs, the system designers can leverage the unconscious and subconscious preferences – or aversion – of the human mind towards different actions performed by the system. Each of the user-system interactions can be tied to different levels of need in the need hierarchy. Therefore, the system's actions – the style of response, the vocabulary used, and the overall urgency – can either satisfy or threaten the needs. The existing state-of-the-art conversational systems do not satisfy the primary or basic human needs. Once the novelty wears off, the purchasing decision made by the customer will be contingent on the fulfillment of the needs. Therefore, in our work, we highlight how the commercial success of the system and customer satisfaction can be enhanced by applying the framework of the human needs for system design and development.

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What's Mine Is Yours: The History of U.S. Tool-Lending Libraries

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What’s Mine Is Yours: The History of U.S. Tool-Lending Libraries

Abstract

Tool lending is a relatively new phenomenon in the world of libraries. Instead of loaning books, libraries with tool collections lend kitchen and yard tools to ambitious do-it-yourselfers. These tools can be used to tackle home projects or do seasonal cleanup without burdening borrowers with concerns about cost or storage. As these libraries gain popularity and begin to expand in the U.S., it is worth taking a look at their origins. As it is presented in the current literature, tool libraries began in 1979 with the founding of the Berkeley Tool-Lending Library (BTLL). Information unearthed from newspaper clippings, blog posts, and websites, however, support the existence of a much earlier tool library in Grosse Pointe, Michigan. Based on this finding, the paper will present a revised timeline that puts the birth of tool libraries in the 1940s. In doing so, the paper will correct the existing narrative of these unique libraries and firmly establish Grosse Pointe Library—not the BTLL—as the first of its kind.

Keywords

tool libraries, object-lending libraries, library history, United States

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This article is adapted from a term paper written for Professor Donald Westbrook’s Applied Research Methods course. Many thanks to Professor Westbrook for his sage advice and consistent encouragement throughout the research process. I also want to express my appreciation for the time and effort put in by Kyle Stokely to look over this work.

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In the middle of their latest project, an amateur woodworker runs into a snag. They double-check their toolbox and fish through the shed, but no amount of digging turns up the piece of equipment they need most: the bow saw. The frustrated woodworker considers purchasing the equipment at a hardware store, but on second thought, they wisely opt to borrow it from the West Seattle Tool Library. There, they can lease a saw without needing to spend a dime or worry about storing it after use.

More than fifty U.S. tool-lending libraries like the West Seattle Tool Library in Washington are in operation today, but they were not always so numerous. Where and when, one might ask, did the practice of tool lending in libraries begin? Just decades ago, they were nebulous ideas in librarians' minds that lacked the necessary support to get off the ground. It was not until the late 1970s, as most historians see it, that the first tool library in the country materialized. The Berkeley Tool Lending Library (BTLL) in California was formed as an extension of the community's public library in 1979. It was originally housed in a portable trailer, staffed by a single employee, and had 500 tools for lending (Berkeley Public Library, n.d.). Its disorganized beginnings made the BTLL seem like a novel idea, leading many to assume that it was the first creation of its kind. The BTLL, though, was not the innovative pioneer historians have made it out to be. In fact, the BTLL belongs to a second generation of American tool libraries that stands on the shoulders of forgotten predecessors. Decades before the emergence of the BTLL, little-known tool libraries were quietly transforming the traditional library model.

To give these unsung institutions the recognition they deserve, the history of tool-lending libraries must be rewritten. Rather than beginning with the BTLL, the timeline must extend further into the past and start with the actual first U.S. tool library: the Grosse Pointe Library. Other libraries that came before the BTLL will also be explored to make clear that the BTLL owes its existence to several forerunners. Instead of being the path-breaking institution historians have cast it as, Berkeley's library must be re-characterized as the successor of trailblazing tool libraries in Michigan, Ohio, and Washington. After presenting the revised historical timeline, it will be evident that the BTLL could not have started from scratch; it merely added to the progress made by others.

Literature Review

Before delving into the updated history of American tool libraries, it is essential to examine the groundwork laid by scholars. Literature on tool libraries is scant, with little research having been conducted on these institutions. What few scholarly works have been written about them will be couched in a broader literature review on object-lending libraries. Though these libraries, too, garner minimal attention, they are worth probing to better understand libraries that loan unconventional items. From this literature review, it should be apparent that this area of library science has been largely neglected and requires fresh research to fill its missing pieces. In particular, gaps related to the origin of U.S. tool libraries will surface in this section and be addressed in the discussion.

Object-Lending Libraries

In the past half-century, libraries in the U.S. have shown themselves to be more than just book repositories. New community demands have put pressure on them to abandon their reputation as sterile warehouses and create a new brand. Especially with the advent of the Internet, fewer and fewer individuals have been visiting libraries to borrow their texts (Martell, 2008). Instead, people are using phones to get information and looking to libraries to solve other pressing problems (Dahlkild, 2011). In response, libraries have built unique collections that have new "value and usefulness" for their patrons (Söderholm, 2018, p. i). These collections, however, are not made up of print works as one may expect; they are comprised of art, toys, plant seeds, and other objects not typically associated with libraries. Unusual as they may seem, these bookless libraries are fulfilling the material and even social needs of their local communities (Söderholm, 2018).

In spite of the novelty of object-lending libraries, Söderholm contends that they are a natural progression from what has already existed. He points out that games and music—two unlikely categories of library objects—have been part of collections since the second half of the twentieth century (Söderholm, 2018). These items, much like tools, do not readily conform to the usual materials offered by libraries but were incorporated to meet patrons' recreational needs. Riley (2014) also argues that object-lending libraries are a logical next step given the rising popularity of bookless libraries. With more books making the transition from print to pixels, people are getting used to the idea of shrinking in-house collections and expanding digital libraries (Moyer & Thiele, 2012; Riley, 2014). If patrons are becoming acclimated to borrowing non-physical items, surely they can get used to checking out baking pans, musical instruments, and other atypical materials. Both Söderholm and Riley believe that libraries are primed to make the small jump from books to objects and that patrons, too, are ready for object-lending libraries.

Though some have raised concerns about libraries' pivot from lending publications, even suggesting that they may be on the verge of an identity crisis, libraries are eager to embrace something new (Svensson, 2018). Individuals worried that libraries are straying too far from their roots should be comforted by the fact that these institutions are still sticking to their same function (community lending) but simply expanding their pool of materials. It is true that the shift from loaning books to objects may require adjustment for librarians and patrons, possibly forcing them to divorce their association of libraries with texts (Scott, 2011). However, libraries are just doing the same thing in a different way. Had libraries stuck to their original model as hoped for by Svensson, they would risk facing obsolescence in the modern world.

Tool Libraries

Despite the promising future of tool and other object-lending libraries, the scholarly literature on these institutions is surprisingly underdeveloped. What little research has already gone into the subject focuses mostly on tool libraries that are yet to exist. Take, for instance, Worthington Library's published article on future trends. In 2010, library staff predicted that they would build a bike-lending program and tool-circulating collection in the coming years (Staff of the

Worthington Library, 2010). More than a decade later, neither idea has come to fruition, and the tool collection that was to be has been put on hold indefinitely. Sadly, the Worthington Library is not alone in populating the literature with dreamed-up tool libraries. Others like Söderholm and Nolin (2015) envision public libraries reworking their community roles and physical spaces to become tool libraries by the dozens. Having come to terms with their limitations in the digital age, libraries will re-evaluate their in-house collections and lean on tool distribution to stay relevant (Söderholm & Nolin, 2015). Six years out from their predictions, tool collections have increased in number but failed to take off as Söderholm and Nolin had anticipated. Their work, in conjunction with Worthington Library's, captures the current status of the literature well. Rather than abounding with research on existing tool libraries, it is clogged with papers focused on imagined ones that never caught on.

Other scholars contribute to these limited talks by providing generic blueprints that library staff can follow to build their own tool collections. In fact, many of these publications frame tool collections as mere extensions of public libraries and discuss how librarians can develop them from scratch. Gunnels and Green's (2018) analysis fits this mold perfectly as it guides readers through the process of forming a tool collection. Their work focuses mainly on the logistics including initial funds, long-term costs, storage, and upkeep. Gunnels and Green (2018) also recommend tapping into the power of social media or distributing a survey to identify potential users before creating a tool collection. Hult and Bradley's (2017) article adds to this conversation by exploring a case study of a Swedish tool collection in the city of Malmö. Paying particular attention to the materials and methods that went into the collection's construction, Hult and Bradley (2017) discover that one of the best ways to establish a tool collection is by garnering support from local officials. Though this Swedish collection is miles away from the U.S., Hult and Bradley's study was done with the hopes of encouraging others to develop their own tool-lending platforms. Their paper also defends the legitimacy of tool collections by discussing their institutional belonging in public libraries (Hult & Bradley, 2017).

In other works that make up the meager tool library literature, scholars have mentioned in passing the history of these institutions. A consensus among researchers exists that Berkeley was ground zero for tool lending in U.S. libraries. One author has even gone so far as to applaud BTLL for its successful "experiment," which has supposedly had an "outsized…impact on national and international culture" (Broner, 2017, p. 30). In further praise of Berkeley, journalist Dave Weinstein (2008) asserts that the town is responsible for many "firsts," including a tool-lending library (p. 12). The idea that the BTLL was the first of its kind has even moved beyond academia and into the general public. Magazines are adopting this account and naming the BTLL as the "first of such services" ("Lending tools for the hands as well as the mind," 2011). Many publications are pointing to the BTLL as the founder of the tool library movement, but this assumption is seriously flawed. The current narrative leaves out a handful of libraries that were established well before BTLL, including the first true tool library in Grosse Pointe, hence the need to revise the current timeline.

Discussion

The following section aims to reinvent the existing narrative on tool libraries by stitching together news clippings, refereed articles, blog posts, and websites. The revised history will be segmented into three generations that collectively span the time from tool libraries' inception to present day. Each emerged from a special set of circumstances, struggled with distinctive challenges, and made unique contributions to the library world. By studying them together, it is hoped that one can grasp the complete story of these one-of-a-kind institutions.

First Generation of Tool Libraries (Mid-1940s)

The Second World War was responsible for depleting basic supplies on the U.S. home front including kitchen and yard tools. Raw materials that usually went into the production of these items were syphoned off to support the war abroad, leaving Americans to deal with the tool shortage. To fix this problem, local communities pooled their tools and freely borrowed from the public stockpile. Eventually these informal reserves found their way into libraries, where some found a permanent home. Michigan's Grosse Pointe Public Library was the first to welcome tools into its collection and is the only institution from the initial wave of tool libraries that is still in existence.

Grosse Pointe Public Library

When navigating the Grosse Pointe Library's website, one is immediately struck by the strangeness of its offerings. Unlike cookie-cutter libraries that lend publications, Grosse Pointe has more than just books on its menu. Screwdrivers, aerators, and even X-Acto sets make up the tools housed at the library since the mid-twentieth century. These items are part of the library's special collections and were initially provided by the Boys' Work Committee of Grosse Pointe Rotary Club in 1943 (Severs, 1943). In light of the tool shortage brought about by the Second World War, members of the Rotary Club made generous donations of kitchen and yard tools to the library. These donations were intended to be shared by the local community and "encourage manual dexterity in the younger generation" (Grosse Pointe Public Library, n.d.). Since then, Grosse Pointe residents have come to the library to not only borrow books but also check out tools. It is believed to be the first tool library in the U.S. and houses tools ranging in complexity from a stapler to a wallpaper seam roller. Using a library card, patrons can freely borrow an array of tools that are traditionally too expensive to purchase or too inconvenient to store.

Initially, the nascent collection numbered twenty-five items and was stored in a small case in the middle of the library's reading room. Though it was not much, the original items helped locals weather the lack of tools and allowed the library to step into a new community role. Several tools from the initial donation, including an antiquated hand drill, still belong to the collection and are available for patrons to borrow. With the continued help of the Rotary Club, Grosse Pointe Library's collection has grown to more than 150 tools and is being actively added to, based on patron suggestions. The library has even expanded its holdings to include high-quality bird binoculars and a telescope—both of which were donated by the Ken Etherly Foundation—as well as an outdoor projector and a cornhole toss. These acquisitions are not tools per se but are popularly circulated among residents for use at "family gatherings and neighborhood celebrations" (Moran, 2019, para. 13). No matter the item selected and borrowed from the collection, all come with a complementary pamphlet that describes how to use the object.

Since the collection's founding, the Rotary Club has stepped forward to serve as the main caretaker of the tools. They not only purchase and create labels for new equipment, but they are also in charge of cleaning and repairing tools when needed. Given all that they do, it is undeniable that the Rotary Club's sponsorship is the key ingredient to the collection's success. Without their physical assistance and financial backing, it is very possible that the first U.S. tool collection may never have taken shape.

Second Generation of Tool Libraries (Mid-1970s to 2008)

After Grosse Pointe started the tool library movement, there was momentum for other libraries to follow suit. But rather than bringing library after library into its fold, the movement came to a sudden halt and became confined to Grosse Pointe. Over the next thirty-three years, the small Michigan suburb would be the only place to have a tool collection on U.S. soil. It was not until the second wave of tool libraries surfaced in the mid-1970s that the movement finally gained traction and began to spread.

The long pause begs an obvious question: Why did new tool libraries take so long to come about? A number of hurdles are responsible for delaying their emergence, with one being the difficulty of operating collections manually.

Libraries, lacking the necessary technology to efficiently catalog tools, simply gave up on the idea of tool collections before even trying them out. Still, other factors dissuaded libraries from pursuing tool lending. The rise of consumer culture coupled with the availability of cheap products made overseas led to a diminished desire for durable, well-crafted tools (Llewellyn, 2019). Together, these elements made tool libraries infeasible for years. Only after patrons remembered the joy of working with high-quality tools did the second generation of tool libraries enter into the picture.

ModCon Living Tool Library

More than three decades after Grosse Pointe established the first tool-lending library, a second was founded in the nearby state of Ohio. In 1976, the city of Columbus eked out funds to construct a tool library meant to support local homeowners. So long as residents could prove themselves to be homeowners or tenants, the tools were at their free disposal. Housed in an unremarkable warehouse, the makeshift library began with a modest assortment of tools that later expanded to a collection of over 5,000. Hammers, drills, hoes, and tillers make up some of the items found there, but other, more archaic tools can also be discovered. Outdated nail pullers and bush removers lend the library an old-farmer's-shed quality, but most of these tools represent the library's first purchases. Take, for example, the bush remover. For $230—a steep price for the newly developed library—the handmade device was purchased and integrated into the collection. Decades later, requests for the medieval-looking tool are still common, leaving librarians wishing they had purchased more (Weiker, 2015).

Even if patrons cannot get a hold of the popular bush remover, thousands of other tools are regularly available for checkout. With the swipe of a barcode, library members can borrow equipment for up to a week, free of charge. Some high-demand items, however, can only be leased for a day before they must be returned. These include ladders and lawn mowers, the second of which switches hands two to three times per day in the busy summer months (Weiker, 2015).

In 2009, management over the tool library was assumed by ModCon Living—a non-profit organization devoted to sustaining old homes in Franklin County. The takeover has breathed new life into the library, which now has more volunteers helping to catalog and repair its inventory. The tool library has also begun to create video demonstrations on how to repair common problems around the house using tools from the collection. The latest video shows audiences how to deal with leaky faucets (Williams, 2020). Whether in the form of tools or videos, the resources made available by the ModCon Living Tool Library have empowered Columbus homeowners to carry out DIY home repairs and renovation projects.

Phinney Tool Library

Since 1977 Seattle, Washington residents have been welcome to borrow what they need from the Phinney Tool Library without incurring the cost of a tool they may never use again (McGrath, 1992). With up to 3,000 items to choose from, patrons are guaranteed to find whatever tool they need for their next project. The tool bank consists of average hand and power tools like drills, staple guns, and wrenches as well as bike repair tools and cleaning supplies. Other items in the library's possession include apple pickers and cider presses, which fly off the shelves during the appropriate season.

The Phinney Tool Library was initially the work of a professor from the nearby University of Washington (McGrath, 1992). Students—wishing to clear out their dorms and offload their unused tools—approached the professor who turned their trash into community treasures. The library began as a small locker of basic tools but quickly swelled to hundreds of items. Growing to a size that was unmanageable for the professor, the tool library was passed off to the Phinney Neighborhood Association (PNA) (Castleman, 2019). Ever since, the PNA has been responsible for cataloging, maintaining, and fixing tools in the collection. When volunteers identify tools that are broken beyond repair, they tap local artists who recycle the damaged items and repurpose them as lamps or sculptures (Castleman, 2019). At the Phinney Tool Library, not much goes to waste.

Third Generation of Tool Libraries (2008 to Present)

Between the 1970s and 2000s, the number of tool libraries in the nation gradually increased from one to several dozen. A sudden uptick, however, came in 2008 when the Great Recession put millions of Americans out of work. Strapped for cash, the unemployed could no longer afford to purchase expensive tools to maintain their homes. Rather than buying and owning tools, Americans grew interested in sharing equipment. What came of this shift in attitude was an explosion of tool libraries. Within the next decade, the number of libraries offering tool-loaning services multiplied twofold as it made sense to more and more people to borrow cheaply (Urban Sustainability Directors Network, n.d.). The Sacramento Library of Things in California and Chicago Tool Library in Illinois represent just two of the many institutions that joined the ranks of the tool-lending movement. Due to their saturation in the library literature, this paper will not explore specific institutions linked to the third wave of tool libraries. It is enough to know that tool libraries are continuing to boom despite economic recovery, a sure sign that they are here to stay.

Cloud-based software has further facilitated the recent popularity of tool-lending libraries. New technologies like myTurn are allowing libraries to keep track of their inventory affordably while also improving the efficiency of cataloging. The advantages of myTurn are not restricted to librarians, however. Patrons, too, are reaping benefits from this platform as it enables them to easily rent tools online. The increased convenience has had a marked effect on tool libraries, helping to increase their circulation by a remarkable 100 to 10,000 percent (Llewellyn, 2019). Integrating such software has both eased the lending process and expanded patron access to tool collections. For these reasons, tool-lending libraries are faring better now than ever and only seeing their popularity climb.

So well liked are these libraries that they have recently crossed international borders and become established in Europe. One particular region where tool libraries have taken off and experienced wide public support is the United Kingdom. In 2015, Scotland's Edinburgh Tool Library was founded and became the first institution of its kind in the U.K. Local demand resulted in the library's growth to include sites like Leith and Portobello—both of which represent underserved areas in the Scottish capital (Edinburgh Tool Library, 2017). London soon followed suit and opened its own Library of Things in 2018. It is run exclusively by volunteers dedicated to making tool recycling a community norm and helping local organizations build tool-lending collections of their own (Library of Things, n.d.). With this much interest surrounding tool libraries, the movement is sure to spread to neighboring countries and possibly other continents. Luckily, libraries around the world have examples of thriving tool collections in the U.S. to follow.

Conclusion

For too long, the scholarly literature has been ignorant of important historical facts—namely, that the BTLL is not the first U.S. library to lend tools. It was one of the earliest and most conspicuous to appear but did not predate Grosse Pointe—a mid-sized library that has successfully loaned kitchen, garden, and home repair tools for more than seventy years. This institution, along with other early tool lenders, was unfairly eclipsed by the BTLL until now. The new historical timeline proposed in this paper sheds much-needed light on those that came before. By pushing the origin of tool libraries back to 1943, four decades have been added to the original narrative. The tool libraries that were born in those lost years deserve to be recognized and further studied if the complete story of these unique institutions is to be understood.

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Central-Peripheral Information Behavior Theory

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Acknowledgements

Central-Peripheral Information Behavior Theory

Abstract

In researching information behavior theory, a significant gap has been revealed: How can information behavior theory comprehensively identify the information behaviors and needs of information communities without the foundational understanding of information, communication, and community, and their intersection? It is asserted in this paper that information behavior theory must clearly define information, communication and community, and how these terms intersect, to comprehensively identify information communities' information behaviors and needs. To test this thesis, a qualitative study on the tourist information community has been conducted. Seen through the lens of the novel central-peripheral information behavior (CPIB) theory, the tourist information community's central information behaviors are acquisitional (encountering, seeking, browsing, and searching) and emotional (reacting and sensing). The community's peripheral information behaviors are collaborating, sharing, and creating. Key information access needs are Internet and mobile technology. Prominent information use needs include mobile applications (e.g., Tripit), social media sites (e.g., Pinterest, and blog sites), Travel 2.0 websites (e.g., TripAdvisor), and e-commerce sites (e.g., Expedia). The paper's key findings about tourist information behaviors and needs can guide libraries in tailoring services to the tourist information community or hybrid (online and offline) information community member. Libraries have an opportunity to better serve the tourist information community by providing a trustworthy virtual space for members to get together through non-commercial travel cafes. Libraries are also uniquely positioned to help travelers become more culturally competent. In physical spaces of libraries, tourists can be attracted by offering strategically placed and spacious mobile device charging stations.

Keywords

central-peripheral information behavior theory, information behavior theory, tourist, traveler, information needs, information behaviors, information community

Acknowledgements

About Author

I have a Bachelor of Arts Honours Degree in Mass Communication with Minors in Psychology and Philosophy. I completed my undergraduate work at Carleton University in 2009. Since moving to British Columbia in 2011, I have worked for the Government of British Columbia.

Currently, I work full-time as a writer at the Ministry of Social Development and Poverty Reduction. As part of my job, I maintain a corporate messaging library containing hundreds of documents. I am also an author and have published two children's picture books, *Bubba's Balloon* and *Ollie the Orca*. In the future, I would like to work as a special librarian in a government library or as a public librarian in my community. I started San Jose State University's MLIS program in fall 2019 so I could work towards the qualifications needed for my career endeavors.

In the library and information science field, a common thread found in information behavior theory literature is the need to define the following fundamental terms: information, communication, community, and information community. Looking at the similarities and differences in how these concepts are defined and the subsequent information behavior theories that have emerged, it is clear that current information behavior theory lacks concise definitions of information, communication, and community as well as an understanding of how these terms intersect.

This problem sparked the following question: How can information behavior theory comprehensively identify the information behaviors and needs of information communities without the foundational understanding of information, communication, community, and their intersection? It is asserted in this paper that information behavior theory must clearly define the aforementioned terms to comprehensively identify information communities' information behaviors and needs. To test this thesis, a qualitative study consisting of a literature review on the tourist/traveler information community and an interview with a community member have been conducted.

To fill the current information behavior theory gap, the information, communication, and community (ICC) model and the central-peripheral information behavior (CPIB) theory have been created. In the ICC model, the foundational terms – information, communication, and community – and their intersection are clearly defined. To incorporate the ICC model into information behavior theory, the central-peripheral information behavior (CPIB) theory has been developed. Through the CPIB theory lens, the information needs and behaviors of the tourist information community have been comprehensively identified, bringing forward the opportunity for libraries and information centers to better serve this community.

Information Behavior Core Concepts

In reviewing information behavior literature, it was discovered that in the early to mid-1900s, Wiener's cybernetics theory stirred academic interest by examining information's relation to physical and social actions (Bates, 2009). Since then, there has been much attention paid to defining information. Bates (2009) identifies seven categories of information definitions, including communicatory/semiotic and social. The communicatory/semiotic and social definitions of information blend the meanings of information, communication, and community. In Bateson's communicatory/semiotic definition, information is seen as something that makes a difference to someone (Bates, 2009). Social definitions of information include Cornelius' human artefact of social situations and Goguen's interpretation of community signs (Bates, 2009).

In communication definitions, there is also cross-over with information and community. In Krikelas' information behavior model described by Case and Given (2016), the act of information giving can be interpreted as communication. Similarly, Biagi and McKie (1999) define communication as the transmission of feelings and thoughts between people or groups.

Definitions of community include reference to information and communication. A definition of community can be seen in Kuhlthau's (1991) description of her information search process model, where "evidence of the transmission of information into meaning is present in the products or presentations in which users share their new knowledge with others" (p. 361). Regarding the concept of community, Fisher and Bishop (2015) cite Hillary's core categories of community (geography, social interaction, and ties) and describe Christen and Levinson's four key angles of community (affinity, instrumental, primordial, and proximate). Fisher and Bishop (2015) define an information community as "a group of entities that blurs the boundaries between information seekers, users, and providers, recognizing that a single person or institution can embody multiple segments of the information life cycle" (p. 22). To strengthen their definition of an information community, Fisher and Bishop (2015) specify five characteristics of effective information communities. In summary, an effective information community has diverse information providers who collaborate to increase the community's capacity to meet their members' information access and use needs. This is accomplished by exploiting the information-sharing capabilities of technologies that increase social connectedness through barrier-free information sharing.

With respect to information behavior, much effort has been dedicated to looking at information acquisition behaviors. In her paper on information encountering, Erdelez (1999) focuses on describing information encountering as a distinct and valuable type of information acquisition behavior, separate from seeking and browsing. More generally, Bates (2017) summarizes information behavior as "the term used to describe the many ways in which human beings interact with information, in particular, the ways in which people seek and utilize information" (p. 2074). In Kuhlthau's (1991) information search process model, she identifies six stages – initiation, selection, exploration, formulation, collection, and presentation – where each stage is related to feelings that direct action.

Method

To review literature on the tourist information community, peer-reviewed journal articles were located using two common library information science databases: Library & Information Science Source and Library and Information Science Collection. Community-based and research-based resources used by the tourist information community were also researched. To learn more about specific information resources used by tourists hiking the West Coast Trail, a tourist was interviewed about their travel information resources.

Literature Review

Community Building Information Needs and Behaviors

Dickinson et al. (2017) describe the tourist community's membership and connectivity building as a form of a "neighbourhood affect" (p. 175). Through their qualitative research study in which interviews were conducted with tourists and data was collected from their use of a collaborative travel application, they found that tourists form communities, including temporary communities, where people interact in physical spaces—and in these shared social spaces, temporary neighborhoods form. As such, it is necessary for tourist communities (subdivided by place) to maintain connections with members physically and virtually in order to increase capacity for community support within both temporary neighborhoods and established social networks. This research is important because it highlights how sociability is dependent on access to a technological tool (e.g., smartphone or laptop) and an Internet connection.

Community building also comes from tourists collaborating on information searching, which creates more of a shared experience for participants. With Mohammad Arif's and Du's (2019) research, they found that an effective (synchronous and asynchronous) collaborative information search system with user/group filters is needed to improve collaborative information searching and planning. To come to this conclusion, Mohammad Arif and Du conducted a mixed research study with the proposed design pilot (ColTIS) being assessed and compared to Google Talk-embedded Tripadvisor.com through the feedback of 18 pairs of participants.

Information Access and Use Needs

Through researching the information access and use needs of the tourist information community, key information access needs such as Internet and mobile technology were identified. Prominent information use needs were also identified, including social media/blog travel websites, Travel 2.0 websites, and e-commerce websites. In Magasic's (2014) auto-ethnographic qualitative research study, he conducted embedded research on travel blogging through writing a travel blog over the course of a three-month trip. Magasic found travel bloggers act as travel narrators who need to regularly find a place to access an Internet connection. As tourists find themselves using mobile devices while traveling, they too must regularly find an Internet connection to access the travel information they need.

Karanasios et al. (2015) found that mobile devices influence tourist information behavior. In their literature review, they analyzed the use of mobile devices throughout the three stages of travel planning (pre-trip, during-trip, and post-trip). Interestingly, they found that information access and consumption are occurring more in the during-trip stage because of mobile device technology. With the increased use of mobile devices during trips, there is an opportunity for tourists to explore local community services and attractions that may not be found during pre-trip Internet searches.

With the work of Tan et al. (2009), the changing information needs of tourists who use context-aware mobile device applications are examined. The researchers conducted a literature review to explore tourist information needs related to common travel tasks and context-aware mobile device applications. They also conducted two focus groups with eight participants in each. The researchers found that tourists use context-aware mobile device applications in five different contexts (temporal, identity, location, environmental, and social) to fulfill travel information needs. It is reasonable to expect that the use of context-aware mobile device applications will increase as the tourist information community's need for on-the-go information increases; future research should track this trend.

Tan and Goh (2015) looked at how tourists' social needs influence their use of collaborative information seeking mobile applications by conducting a diary study with 24 participants. They found that inter- and intragroup collaborative information seeking needs change based on context. Intergroup collaborative information seeking is more influential on tourist decision making than intragroup collaborative information seeking when looking to immediately use the information. Tourists experience social triggers in different social contexts, which promote collaborative information seeking with their intra- or intergroups. The importance of tourists understanding how to use online social network and context-aware mobile applications is underscored by their need to use social networks to identify potential collaborative information seekers during travel. Future research should investigate whether certain members of the tourist information community are getting left out as mobile technology advances.

Muñoz-Leiva et al. (2012) were interested in the impact that Travel 2.0 websites had on tourist behavior. To study this, they had 3,269 participants complete web questionnaires about three Travel 2.0 websites: a Tripadvisor community site on Hotel Botanico, Hotel Botanico's Facebook profile, and Hotel Botanico's blog. It was discovered that more tourists are using Travel 2.0 websites to meet their information needs because of the sites' perceived usefulness and ease of use, which creates site user trust. This study pairs nicely with the mobile device use findings of Karanasios et al. (2015); as more tourists access mobile technology to find information during their trips, local service and attraction Travel 2.0 websites will become increasingly relevant.

In Smith's (2004) literature review on how online travel marketplaces are changing tourist purchasing behavior, he found that as more tourists become Internet savvy, online travel marketplaces will continue to grow to meet tourist information needs. This is because online travel marketplaces increase consumer control through the integrated aspects of e-commerce, which increases the availability of discount travel. With the integrated aspects of e-commerce increasing the availability of travel discounts, it would seem logical that more people can afford to go on trips, thus increasing the size of the tourist information community and the need for travel information.

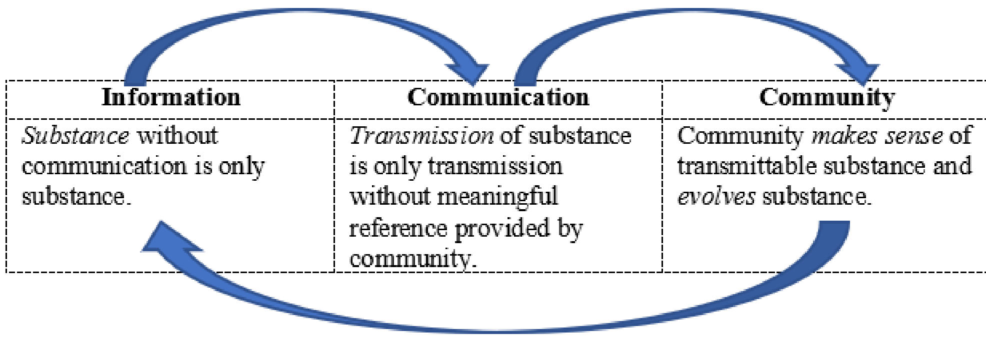
Analysis

The Central-Peripheral Information Behavior Theory

It is asserted in this paper that information behavior theory must clearly define information, communication, community, and how these terms intersect in order to comprehensively identify information communities' information behaviors and needs. Through examining information behavior theories and related definitions of information, communication, and community, as well as seeking to highlight the importance of the interdependency of these core concepts, the ICC model has been created. The model is simple in the sense that it only seeks to identify the definitions of these concepts in relation to the essence of their shared importance – the message. In the ICC model, information is the substance of the message, communication is the transmission of the message, and community provides the meaning and evolution of the message. The interdependency of these concepts is represented in Figure 1.

Figure 1

The ICC Model



The CPIB theory has been developed to tie information behavior directly to the ICC model. The ICC model is at the core of the CPIB theory. With this strong foundation, the CPIB theory seeks to comprehensively identify information behaviors and needs. In the CPIB theory, there are two main types of information behaviors: central information behaviors (acquisitional and emotional) and peripheral information behaviors (collaborating, sharing, and creating). Acquisitional behaviors are encountering, seeking, browsing, and searching. Emotional behaviors are reacting and sensing. The peripheral information behaviors are interconnected. As people share what they create and collaborate on, more information is developed, which in turn spawns more ideas resulting in more creations and collaborations. Emotional behaviors are strictly visceral and contextual, whereas acquisitional behaviors and peripheral behaviors may be contextual or directed by information needs.

The Tourist Information Community Example

Central Information Behaviors

In terms of acquisitional behaviors (encountering, seeking, browsing, and searching), it has been found that the tourist information community primarily uses the Internet (Magasic, 2014) and mobile technology to satisfy their information needs in the context-based during-trip stage of planning, which is now the primary stage of planning for tourists (Karanasios et al., 2015). It has also been discovered that context, as identified by Tan et al. (2009), drives the emotional behaviors (reacting and sensing) of the tourist information community.

These findings are consistent with the information behaviors of other hybrid information communities. Based on the Horizon Reports from 2014 to 2019, mobile devices and applications, requiring Internet access, were of increasing importance to the post-secondary student information community. This is because, like with the tourist information community, "the pervasiveness of mobile devices is changing the way people interact with content and their surroundings" (The New Media Consortium, 2017, p. 40). Information communities are increasingly utilizing mobile applications to satisfy their communities' information needs. As mentioned in the 2014 Horizon Report, apps exist for almost everything people do (The New Media Consortium, 2014).

Peripheral Information Behaviors

In terms of peripheral information behaviors (collaborating, sharing, and creating), it has been found that these behaviors are effective in helping tourists fulfill their information needs. The interconnection of the peripheral information behaviors has also been demonstrated in this research. For example, it is the norm for tourists to collaborate on information searching through mobile applications for group trips (Mohammad Arif & Du, 2019) and to share their experiences of travel with others through the creation of blog posts, which in turn, guide the readers' experiences (Magasic, 2014). Thus, peripheral information behaviors not only increase the amount of information available to the tourist information community through creation, they increase the social ties within the community through collaborating and sharing. This aligns with Hermida's (2014) conclusion about why people share information through social media:

> Social media is transforming how we discover, learn and understand the world around us. But this is not a story about technology. People are not hooked on YouTube, Twitter or Facebook but on each other. Tools and services come and go; what is constant is our human urge to share. (Hermida, 2014, p. 1)

Discussion

Library Programs and Services

Two important information needs of the tourist information community include the need to access technology (e.g., Internet, computers, and mobile devices) and the need to learn how to use online social tools that help people maintain membership in the tourist information community. To assist tourists in maintaining membership in their community, libraries can help them meet their needs to access technology with an Internet connection and to learn how to use relevant applications or social media sites.

In Kenney's (2015) assessment of what library patrons wanted when visiting the White Plains Public Library, he found that many patrons were looking for help with technology use. As he states so pointedly,

> And we've become the help desk for the community. It is assumed that libraries mostly help bridge the digital divide, assisting the poor and disenfranchised in getting online. But it's more complicated than that. Keeping up with the full range [of] technology today is a challenge for everyone, and when users have to fill in a knowledge gap, no matter their educational level or economic status, they're showing up at the reference desk. (Kenney, 2015, what patrons want section, para. 3)

Similarly, Lippincott (2015) found that there are promising opportunities to link technology-ready library spaces to learning.

Based on the White Plains Public Library's website (https://whiteplainslibrary.org/), patrons have access to many technologies and learning opportunities. The services most relevant to the tourist information community's information needs include social media 101 classes, WordPress web design classes, access to computers with Internet technology, tips on online shopping, and information about Sprint Wi-Fi hotspots. Even though this is an impressive list and representative of many other libraries' services, there are some services notably missing that would benefit the tourist information community and other hybrid information communities.

Future Library Programs and Services

It would benefit the tourist information community if members could access mobile devices with Internet technology that they could check out, not just tablets preloaded with learning applications for children (e.g., the Playaway Launchpad program at the White Plains Public Library). Library-hosted online cafés would also benefit the tourist information community by providing a virtual social space for members to connect, ask questions, provide advice, or discuss experiences. With a quick Google search for "online travel café," sites hosted by travel companies and agents were found, but nothing without a commercial agenda like what a library could offer. Additionally, mobile device charging stations could attract the tourist information community. These stations could be strategically placed near tourism reference books and posters advertising the library's online travel cafés. Through looking at many libraries' websites, it is evident that some libraries have begun providing charging stations for patrons.

Libraries and Global Issues

Studying the tourist information community has brought forward a social justice issue that has been examined in many different disciplines: the need for cultural competency learning. Companies are increasingly looking for these competencies when hiring employees, but the need to learn cultural competencies goes far beyond a requirement on a resume. As people become more globalized or internationally connected through technology, travel, social media, and global information communities, we must learn how to appreciate and embrace cultural differences to learn how to effectively work together to build a better world for everyone.

Magasic's (2014) findings about travel blog culture causing travel to become more of a standardized or homogenous experience raise concerns about the loss of opportunity to engage with local cultures more authentically and learn cultural competencies through experience. Libraries are uniquely positioned to fill this gap and support the growing need for these competencies in their communities by providing cultural competency learning opportunities. As always, "libraries are connecting ideas, information and people, and they are facilitating the development of new knowledge in their communities" (Holmquist, 2014, para. 11).

Conclusion

Through studying information behavior theory, it became clear that a more comprehensive approach was needed to understand the information behaviors and needs of information communities. A central question arose: How can information behavior theory comprehensively identify the information behaviors and needs of information communities without the foundational understanding of information, communication, and community, and their intersection? The ICC model and the

CPIB theory have been created to fill this gap.

Information behavior theory must clearly define information, communication and community, and how these terms intersect, to comprehensively identify information communities' information behaviors and needs. With the CPIB theory and research on the tourist information community, it has been found that the tourist information community requires access to Internet and mobile technology to satisfy their travel information needs relevant to acquisitional behaviors (encountering, seeking, browsing, and searching). It has also been discovered that context drives the emotional behaviors (reacting and sensing) of the tourist information community. In terms of peripheral information behaviors, collaborating, sharing, and creating, it has been found that these interconnected behaviors are effective in helping tourists fulfill their information needs. Guided by the findings of this paper, libraries can improve services for the tourist information community by hosting virtual library cafés, providing access to cultural competency learning opportunities, and offering spacious mobile device charging stations within the physical space.

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The Right to Read: The Fight to Desegregate Southern U.S. Public Libraries

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The Right to Read: The Fight to Desegregate Southern U.S. Public Libraries

Abstract

The segregation of U.S. public libraries, particularly in the southern United States, is a shameful chapter in library history. During the civil rights movement, the fight to desegregate was achieved through the bravery and courage of peaceful protesters that staged protests in libraries across the south. The purpose of this research paper is to examine how public libraries enforced segregation and some of the critical protests that took place. The paper also explores the lack of recognition and awareness within the librarianship profession and the general public and four recommendations for how public libraries can begin to make amends.

Keywords

public libraries, segregation, protests, nonviolent, Civil Rights Movement, Brown v. Board of Education of Topeka, Martin Luther King Jr.

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I would like to acknowledge the guidance of Dr. Donald Westbrook in developing this research topic. A lecturer in the School of Information MLIS program at San Jose State University.

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Laura Wertz is a San Jose State University alumna who graduated with her master's in library and information science (MLIS) in May 2021.

Public libraries have always stood as institutions that promote intellectual freedom, diversity, and acceptance. "A person's right to use a library should not be denied or abridged because of origin, age, background, or views" ("Appendix I American Library Association Library Bill of Rights," 2014, p. 771). However, a closer look at the past tells a vastly different story. Sadly, public libraries' complete history has been whitewashed for over six decades. While the American public knows the civil rights history of youth-led protests at lunch counters and on buses, fewer are aware of the fight that took place to desegregate public libraries. The bravery and courage on display during these protests are still not widely known today, both within the librarian profession and in the general public.

The segregation of public libraries, particularly in the southern United States, is a relatively unknown chapter of library history. Southern public libraries excluded Black patrons in a racist, bigoted, and humiliating manner. These actions went against everything libraries stand to uphold. However, like many institutions in America, public libraries became sites for ground-breaking activism and courage during the Civil Rights movement of the 1950s and 1960s. Graham (2002) found that public libraries were desired targets for peaceful protests, as they were prominent institutions most often located in the heart of southern cities. The fight for public libraries' desegregation in the southern United States quickly became a part of the broader equality journey. Peaceful protests served as an essential touchstone in creating change on the long road to desegregation in American society. This research paper examines how southern public libraries enforced segregation and some of the seminal protests in South Carolina, Mississippi, Louisiana, and Alabama. The paper also explores the historical events and individuals that served as inspiration for the protests, the lack of recognition of library segregation history within the profession of librarianship and the general public, and four recommendations for how public libraries can begin to make amends. Reconciliation must occur for public libraries to live up to their high standards and move forward in good faith with the Black community.

Historical Overview

Brown vs. The Board of Education of Topeka and its Impact on Public Libraries

On May 17, 1954, the Supreme Court of the United States ruled unanimously in *Brown v. Board of Education of Topeka* that racial segregation in public schools was a violation of the Fourteenth Amendment. The official decision applied only to public education, but it inferred that segregation was considered unconstitutional in other public settings, including public libraries. This ruling pushed open the door for peaceful protests in public libraries across the southern United States. Another Supreme Court case in 1955, dubbed *Brown v. Board of Education II,* declared that integration was to begin immediately. Nevertheless, no federal judicial ruling was strong enough to fully break the bonds of segregation. "While *Brown* appeared to make clear that separate public facilities such as libraries were inherently unequal and *Brown II* made clear that desegregation was to occur 'with all deliberate speed,' American society at least partially did not appear to desegregate libraries on their own initiative quickly" (Kuffner, 2008, p. 1261). It took relentless effort, bravery, and in many cases, the sacrifice of their safety and freedom by Black patrons to force public libraries to integrate. Civil disobedience was just the first step on that long road to equality.

The Influence of Dr. Martin Luther King, Jr. on Nonviolent Protests in the Civil Rights Movement

The beliefs and approach of Civil Rights leader Dr. Martin Luther King Jr. influenced the nonviolent manner of public library protests in the southern United States. King led the Civil Rights Movement with a pacifist philosophy of nonviolence from 1954 until his assassination in 1968. Cunningham (2018) found that Mahatma Gandhi's Hindu principles of Satyagraha (truth-force) and Ahimsa (love force or nonviolence) inspired King to create his six tenets of nonviolence:

1. Nonviolence is not passive nonresistance to evil; it is active nonviolent resistance to evil.
2. Nonviolence does not seek to defeat or humiliate the opponent, but to win his friendship and understanding.
3. Nonviolence is directed at the forces of evil rather than against persons who happen to be doing the evil.
4. The Nonviolent resister is willing to accept violence if necessary, but never to inflict it.
5. Nonviolence avoids not only external violence but also internal violence of spirit.
6. Nonviolence is based on the conviction that the universe is on the side of justice. (p. 340).

King believed that nonviolence was the only way to bring a clear vision of justice into the public consciousness. Activists put his principles of nonviolence, understanding, and love to good use in public library protests across the southern United States.

Segregation in Southern Public Libraries

Segregation in southern public libraries manifested in ways both subtle and obvious. If libraries were not restricting access to Black patrons altogether, they offered racially segregated services meant to humiliate and sternly discourage them from entering or returning to the library. For example, the Danville Public Library in Virginia created a vertical integration plan that provided limited services meant to frustrate and demean. After paying $2.50 to fill out an application, Black patrons faced many absurd demands. "The new regulations required the applicant to list his place of birth, college degrees, type of books sought, the maximum number of books he would check out, two character references, and two business references" (Cresswell, 1996, p. 559). There were less apparent ways to uphold the status quo of segregation in public libraries. According to Knott (2015), White librarians and staff members would often sternly stare down Black patrons entering the building, while White patrons regularly requested that Black patrons not be allowed near them. With the painful memories of these experiences in mind and the anger over the insulting inadequacy of services and materials at colored libraries, the Black community across the south began to fight for their right to equality and access to information.

Literature Review

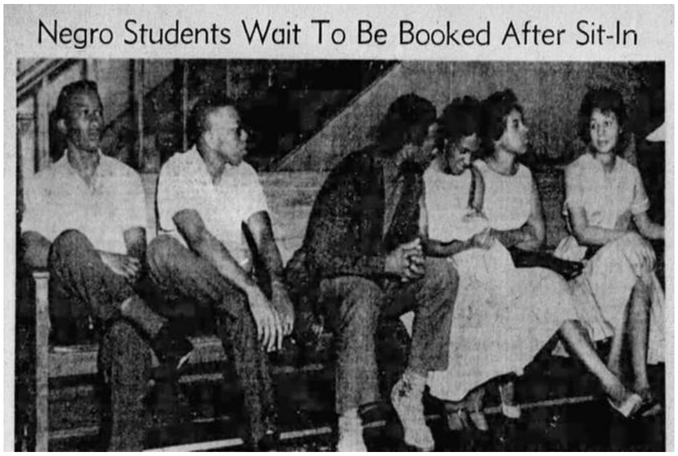
The Greenville Eight

On the morning of July 16, 1960, eight Black students—Dorris Wright, Hattie Smith Wright, Elaine Means, Willie Joe Wright, Benjamin Downs, Margaree Seawright Crosby, Joan Mattison Daniel, and future reverend and civil rights activist Jesse Jackson—walked into the whites-only Public Library in Greenville, South Carolina (Eberhart, 2017, pp. 34-35). Police quickly confronted the students, threatening to arrest them. They left before encountering library staff. The students had been counseled and supported in their endeavor by Reverend James S. Hall Jr., vice president of the South Carolina NAACP. Upon return to his church, Reverend Hall encouraged the students to return to the library. That afternoon, the eight students walked through the Greenville Public Library door again, determined to stay and face a probable arrest. Some of the students browsed the shelves, while others sat down at tables as a handful of White patrons began to file out of the building. Shortly after their arrest, Reverend Hall arrived with Black attorney Donald J. Sampson, and the court released each of them on a $30 bond.

On July 28th, Sampson filed a lawsuit with the U.S. District Court for the Western District of South Carolina, hoping that the Greenville Library system would desegregate. In response, the mayor of Greenville closed both the White and Black branches of the library on September 2nd rather than face a court order of integration. This response was common practice for public libraries of the era when faced with pressure to integrate. However, public pressure from the community regarding their displeasure with the closures forced the city to reopen both Greenville libraries just twelve days later. A statement from the mayor read, "The city libraries will be operated for the benefit of any citizen having a legitimate need for the libraries and their facilities. They will not be used for demonstrations, purposeless assembly, or propaganda purposes" (Weigand & Weigand, 2018, p. 80). Though this statement reads more as a condemnation of the peaceful protest rather than a celebration of social justice, the outcome was still considered a victory for the Black community of Greenville. Although the Greenville Library was not the first in South Carolina to integrate, it was the first to do so in direct response to a protest. The eight students had their charges dropped, and the Greenville Eight took their place amongst other civil rights heroes of the era.

Figure 1

Booking of the Greenville Eight



Note: Greenville Eight students waiting to be booked following their sit-in at the Greenville Public Library on July 16, 1960, in Greensville, South Carolina. From "The Greenville Eight: The Sit-In That Integrated the Greenville Library," by G. Eberhart, 2017, *American Libraries*, *48*(6), p. 35 (https://www.jstor.org/stable/26380947). Copyright 2017 by the American Library Association. Reprinted with permission.

The Tougaloo Nine

On the morning of March 27, 1961, nine NAACP-member students from the historically Black college of Tougaloo University—Joseph Jackson Jr., Albert Lassiter, Alfred Cook, Ethel Sawyer, Geraldine Edwards, Evelyn Pierce, Janice Jackson, James Bradford, and Meredith Anding Jr.— walked into the whites-only Public Library in Jackson, Mississippi (Wiegand, 2017, p. 32). The White staff member behind the circulation desk began berating the students, and the Library Director strongly suggested that the students visit the colored branch of the library. Six police officers arrived shortly after, as the students were quietly reading and browsing through the card catalog. The officers told them to leave, but none of the students moved. They were promptly arrested and held on a $500 bond.

As night fell on Jackson, Mississippi, the students began to fear for their lives. Jackson Jr. started to rehearse what he would say if the Klu Klux Klan came for them, fearing he would have to plead for his life for the sake of his wife and two children (Wiegand, 2017, 34). Police drove the students to the courthouse a few days later. Hundreds of supporters greeted and cheered the now dubbed "Tougaloo Nine" upon their arrival. In response to this show of support, the police confronted the crowd with nightsticks and attack dogs.

On March 29th, the students were taken to court and found guilty of breach of peace. The court fined each student $100, and their 30-day sentences were suspended on the condition that they would no longer engage in any protests (Weigand & Weigand, 2018). The NAACP responded by filing a class-action lawsuit on January 12, 1962. Five months later, a federal judge ordered the Jackson Public Library to desegregate, a direct result of the Tougaloo Nine's bravery and determination.

Figure 2

The Tougaloo Nine

Note: The Tougaloo Nine: Joseph Jackson Jr., Geraldine Edwards, James "Sammy" Bradford, Evelyn Pierce, Albert Lassiter, Ethel Sawyer, Meredith Anding Jr., Janice Jackson & Alfred Cook. From "Desegregating Libraries in the American South: Forgotten Heroes in Civil Rights History," by W. Weigand, 2017, *American Libraries, 48*(6), p. 32 (https://www.jstor.org/stable/26380946). Copyright 2017 by the American Library Association. Reprinted with permission.

Anniston Alabama

On September 15, 1963, two young Black ministers, Reverend Quintus Reynolds and Reverend William McClain, notified the whites- only Anniston Public Library and city officials that they would be entering the premises intending to obtain library cards (Cresswell, 1996, p. 561). The AnnistonPublic Library did not want the attention brought by law enforcement. Despite efforts to keep this integration attempt quiet, a hostile White crowd was waiting outside the library for Reynolds and McClain to arrive. As the two men approachedthe library's entryway, they were physically attacked and accosted with fists, sticks,and chains. Reverend Reynolds and Reverend McClain were unable to escape in their car. The two men were able to flag down a Black driver after fleeing on foot,who took them to the hospital. The events of Anniston, Alabama, illustrate a hallmark of many protests during the Civil Rights movement, a violent response topeaceful action.

That night, the mayor of Anniston, the Chairman of the Library Board, and the Human Relations Council Chairman visited Reverend Reynolds and Reverend McClain in the hospital, promising positive action. The following day, city officials personally escorted the two men back to the Anniston Public Library to procure their library cards. This event was the beginning of integration in Anniston as more Black residents began to register for library cards. Reverend Reynolds and Reverend McClain's beating is regarded as the most brutal moment in the library integration movement. However, it received little press as it sadly occurred on the same day as the tragic 16th Street Baptist Church Bombing that killed four young Black girls in Birmingham, Alabama.

Ouachita Parish Libraries

The desegregation efforts of public libraries in Louisiana benefited from the Congress of Racial Equality organization (CORE). After the passage of the Civil

Rights Act of 1964, CORE was determined to “test”Jim Crow laws in various public institutions in rural Louisiana, including public libraries. A week later, on July 9, 1964, at approximately 2:30 p.m., twelve Black high school students from Monroe, Louisiana, entered the Anna Meyer Branch Library, part of the Ouachita Parish Library System. Dorothy Higgins, Jimmy Andrews, and Etta Faye Carter browsed the shelves before sitting down at a table together to read (Weigand & Weigand, 2018). Bennie Roy Brass used the card catalog to find a book before approaching the circulation desk. He kindly stated his intention to register for a library card so he could check out the book. After being told multiple times that he could not have a library card and should go to the colored branch of the library, Brass returned to his table and continued to read. Students engaging in these protests knew full well that the librarians and staff members would deny their requests. The goal was always to assert their rights keep a level head.

Police arrived after this encounter and asked the students to leave. Minutes later, the police chief appeared and insisted the Black teenagers go; five did. Law enforcement arrested the seven students who stayed for disturbing the peace and trespassing. Weigand & Weigand (2018) describe the heated interrogation that began once the students were in police custody about their CORE association. Police demanded to know who got the students into CORE and who told them to come to the library. Officers even accused them of being Communists. The students were arrested, transported to juvenile detention cages, and held for three days before being released to their parents on $200 bail.

Protesters were not discouraged and refused to give up after one unsuccessful attempt. CORE tests of the three White branches of the Ouachita Parish Public Libraries continued with similar protests on July 14th and July 20th. Black students, some as young as thirteen years of age, quietly and peacefully entered the libraries. When they were denied service and refused to leave without registering for library cards, police arrested the students for disturbing the peace and trespassing on library property. Archival notes from CORE paperwork underscore the influence of Dr. King's nonviolent principles, as well as the organized manner of these public library protests. Youthful testers were encouraged to know their part and stay composed. Weigand & Weigand (2018) paint a detailed picture of how thoroughly CORE counseled students beforehand:

> Throughout, testers were instructed to “conduct yourselves quietly.” When arrested, testers should “go limp” if experiencing force, only answer questions on “vital statistics,” and at the police station request one phone call each. In jail, they were to choose a spokesperson and to set up a daily schedule that included exercise, prayers, singing (not at “late hours,” however), and “quiet times.” (p. 271)

On July 28th, three students who participated in the CORE protests filed a lawsuit in the Monroe division of the federal district court, stating that the Ouachita Parish Public Libraries' segregation was unconstitutional. City officials presented a plan to relocate and build a new library branch in opposition to this lawsuit. A year-long fight between civil rights activists and the city of Monroe ended with city officials relenting. The Ouachita Parish Public Libraries integrated in 1965. The Louisiana protests underscore the determination of protesters and activists.

Students engaged in a long and protracted fight for justice. These undertakings' legal and social complexities were not a discouragement but a stepping-stone to equality.

A Visual Illustration: Albany, Georgia, 1962

No matter how effective the written word is in setting the scene or conveying the emotions of public library protests during the Civil Rights Movement, nothing can compare to seeing one with your own eyes. The 1962 silent news clip from WALB Television in Albany, Georgia, gives a first-hand glimpse of public library protests, and perhaps just as telling, the reaction of White patrons and library staff. In the summer of 1962, Black students in Albany, Georgia, began testing *Brown v. Board of Education's validity* by entering different public institutions. The archival news clip starts with two young Black girls approaching the Albany Carnegie Library's circulation desk. After speaking with two White library staff members, they retrieve books from the stacks and sit down quietly at a table to read. Seeing them, a White patron seated at an adjacent table gathers her belongings and leaves. The film quickly cuts to the Black girls exiting the building. In the second half of the news clip, four Black students walk up the library's steps. They speak to someone inside the library who refuses to open the door more than a few inches, and the students turn around and walk away. Rather than integrate the facilities, the Albany City Commission closed the library in 1962. In 1963, at local citizens' request, the library reopened with no patron seating (WALB news film clip, 1962). Still fighting against full integration like the Danville Public Library in Virginia, these partial integration services were begrudgingly handed over to frustrate and ultimately dissuade Black patrons from coming to the Albany Carnegie Library.

As evident from this archival video, many of the protesters were relatively young, a historical characteristic of activism and peaceful protest that continues to this day. Standing up to injustice recognizes no age limits. The students took matters into their own hands and lived up to Dr. King's peaceful and nonviolent philosophy with composure and courage wise beyond their years.

Methodology and Sources

The methodologies employed in this research paper were secondary data analysis / archival studies. The King Library Database at San Jose State Universityand broader Google searches retrieved numerous secondary sources in monographsand scholarly journal articles that helped build the overview of this paper. *Academic Search Complete, Library and Information Science Source*, and the *Civil Rights Digital Database* were the primary databases used in the research process, each of them retrieving sufficient resources. Sources cover a broad range of the southern United States to present the similarities and differences of protests within different states. One primary source was used to create this paper: a silent video of a 1962 news report on a library protest in Albany, Georgia. This artifact provided an excellent first-hand visual account of what public library protests looked like during the Civil Rights Movement. Historical background research was conducted on the Supreme Court case of *Brown v. The Board of Education of Topeka (1954)* and *Brown II (1955).* Understanding these cases' impact is key to understanding how politics, history, and racial culture converge. Furthermore, historical analysis of the correlation between the nonviolent principles of Civil Rights Leader Dr. Martin Luther King Jr. and the peaceful manner of the public library protests illustrates the Civil Rights Movement's broad reach across the full spectrum of public institutions.

Discussion

The history of segregation in southern U.S. public libraries is a shameful chapter in American library history. Not only because of the racism and humiliation inflicted upon Black patrons but because the librarian profession has done very little to reconcile this history. The rhetoric does not line up with reality. None of the tenets established in the Library Bill of Rights applied to Black patrons. The Black Caucus of the American Library Association (ALA) was established in 1970 to advocate for Black patrons' and librarians' rights (The Black Caucus of the American Library Association, 2020). However, despite this governing body's long existence within the profession, the organization was not granted a professional affiliation with the ALA until 1992. Furthermore, it was not until June of 2018 that the ALA passed a resolution to honor African Americans who fought library segregation (American Library Association, 2018, p.10). Beyond this symbolic apology and a promise to review internal procedures to ensure equity, diversity, and inclusion, the ALA has not announced any concrete national policy implementations. In each of the cases examined above, police arrested the participants for disturbing the peace or trespassing. The ALA must reconcile why Black patrons asserting their right to equal access to information was a public disturbance.

The first step in reconciling this dark past is for public libraries to acknowledge the injustices. In July of 2010, four members of the "Greenville Eight" came together 50 years after their protest at the Greenville Public Library to reflect (Weigand, 2017, p. 18). Members were disappointed to learn that the library has no public marker to commemorate the Greenville Eight's bravery. Moreover, in researching the other public libraries discussed in this paper as they stand today, it was saddening to find that none of the libraries mentioned these protests on their respective "about us" web pages or historical timelines. Formerly segregated libraries where protests took place should have visible historical markers on site, and information concerning this period of history should be easily viewable on library websites. Public apologies on behalf of the libraries to the protest participants is a necessary starting point. The acknowledgment must occur at the local level to move forward in good faith.

The second step is to educate the general public about library segregation history. Southern public libraries must go beyond merely acknowledging the past injustices, and the Black community must have a seat at the table in this process. According to Simon (2016), patrons must be invited in on their terms, with generosity, humility, and recognition of their experiences. Public libraries should collaborate with Black community leaders to educate the general public. Library programming, such as historical exhibitions and presentations on the history of library segregation and the fight for desegregation, is just the beginning of the community outreach process. The heroes who participated in desegregating public libraries are getting older, but their first-hand experiences are crucial to the education process. Library administration officials should be reaching out to these individuals to participate in talkbacks and offer insight on future proceedings.

Doing so will begin to acknowledge the reality of their experiences and include them in the solution.

The third step is acknowledging the racial blind spots in the profession of librarianship and working to correct them. Libraries have historically been White-majority institutions. At last count, the ALA reports that only 4.4% of ALA member librarians identify as Black or African American (ALA Office for Research and Statistics, 2017, p. 2). This is an unacceptable ratio more than six decades on from library desegregation. If the Black community is not represented in public libraries, so continues a gap in public trust. Whether the profession realizes it or not, segregation continues to shape how Black patrons viewlibraries today. The Black Caucus of the ALA provides leadership for the recruitment and professional development of Black librarians. The E.J. Josey Scholarship offers Black students financial assistance to pursue a graduate-level library and information science degree. (The Black Caucus of the American Library Association, 2020). Scholarships of this nature must continue to decrease the racial disparity gap in the profession of librarianship.

The fourth step is for public libraries to commit to programs, policies, and procedures that benefit Black patrons rather than enabling the barriers to access that began in the days of library segregation. Excluding the Black community through unaddressed racial biases in public libraries' institutional structure is the grandchild of segregation. The Government Alliance on Race and Equity (GARE) has partnered with many public libraries throughout the United States in the last decade to increase library access for communities of color and work toward racial equity.

The GARE Theory of Change (2018) recommends six strategies and components that public libraries can utilize to create systems of change:

Normalize

- Cultivate high-level investment
- Establish internal Change Teams

Organize

- Build capacity among staff and stakeholders
- Partner with other institutions and communities

Operationalize

- Use Racial Equity Assessment Tools
- Create a Racial Equity Action Plan (Local and Regional Government Alliance on Race & Equity, 2018, p. 13)

This framework is crucial to public libraries seeking to confront racism and unaddressed prejudices in their programs, policies, and procedures. There are three stages and six steps in the GARE Equity Framework. Normalizing racial equity cultivates a high-level of investment through collaboration with local city governments. Change is more likely to occur when it becomes an institutional priority. Therefore, a shared value must be developed between the library and local civic leaders. Public libraries should also establish internal Change Teams to examine the history of library segregation and the current library policies and practices that shape conditions for the Black community. Organization in the GARE Equity Framework builds a capacity among library staffand stakeholders and forms partnerships with local racial justice leaders. This collaboration will begin to remove barriers to access for Black patrons and examine racial bias in the recruiting and hiring of Black librarians and staff members. The operationalizing process begins with a Racial Equity Assessment (REA). The REA seeks to eliminate racial inequities, identifies clear goals and measurable outcomes, engages the community in the decision-making process, explores who will be impacted by new decisions, and develops mechanisms to implement these changes (Local and Regional Government Alliance on Race & Equity, 2018, p. 30). The assessment is a stepping-stone to deepening the internal dialogue between public libraries and the Black community. The culmination of the aforementioned steps and stages prepares public libraries to create a Racial Equity Plan. The Racial Equity Plan (REP) outlines the desired results, indicators, outcomes, specific actions, performance measures, timeline, and accountability (Local and Regional Government Alliance on Race & Equity, 2018, pp. 35-36). Similar to a Library's Strategic Plan, the REP provides a concrete structure and linear timeline for public libraries to embed programs, policies, and procedures in the long-term.

The tools and mechanisms created by the Local and Regional Government Alliance on Race & Equity have been put to good use by numerous public libraries over the years. In 2016, the Seattle Public Library (SPL) identified Race and Social Justice as a core component of their Strategic Plan by using the GARE Equity Framework. SPL conducted a thorough analysis of its bookmobile routes. A cross-reference of racial and demographic data showed that the bookmobile was not serving low-income children of color as adequately as White children (Local and Regional Government Alliance on Race & Equity, 2018, p. 17). SPL revised its map to increase stops in low-income minority neighborhoods in response. Moreover, the Saint Paul Public Library used the Racial Equity Assessment to investigate implicit racial bias in issuing guest passes for patrons who provided proof of out-of-state residence to use library computers. The library staff was often discrete in issuing guest passes. Extensive survey results showed that patrons who appeared to be minorities were denied a guest pass more often than those who appeared to be White (Local and Regional Government Alliance on Race & Equity, 2018, p. 32). The survey results led to eliminating the policy and the library issuing guest passes to anyone upon request.

Finally, although there is scholarly research addressing the history of segregation in southern public libraries, gaps in the literature still exist. The protests discussed in this paper are cited most frequently in articles exploring the history of library segregation. However, like many hidden figures throughout history, there are numerous other cases of protests throughout the south and across the United States that received no news coverage. No matter how small in size, every public library protest that stood up to the injustice of library segregation contributed to the journey of equality. Examinations of more library protests would be valuable for future study and vital in bringing awareness to this crucial chapter in American history.

Conclusion

Bolstered by the defining legislative moment of *Brown v. Board of Education of Topeka*, *Brown II*, and Martin Luther King Jr.'s nonviolent philosophy, the peaceful protests examined in this paper serve as a sobering reminder that everyone has the right to equal access to information, and everyone is welcome in libraries. Segregation in southern public libraries is only a tiny reflection of racism during the civil rights movement. However, if we try to erase these narratives, we are engaged in a grave injustice: an injustice against the brave participants of these protests, the history of libraries, and the librarian profession.

Despite the progress made regarding equality and equal access to library services for Black patrons, the cycle of clouding the full history of public libraries in the United States continues today. The majority of the librarian profession and the general public are unaware that the stain of segregation extended to public libraries, a disappointing truth exacerbated by the lack of acknowledgment, education, and diversity in the profession of librarianship, all of which must be corrected. Public libraries can begin to move forward equitably by collaborating with racial justice leaders and the Black community to create programs, policies, and procedures that benefit Black patrons. Libraries stand today as safe spaces of freedom. No one should forget the sad reality that this was not always the case; it should be a permanent part of the public consciousness so that the institution of libraries may continue to live up to its highest ideals.

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Book Review: Rebekkah Smith Aldrich's Sustainable Thinking: Ensuring Your Library's Future in an Uncertain World

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Many thanks to the LIS professors at SJSU's iSchool for teaching me the knowledge and skills needed to help make this book review possible. Without their encouragement to publish, it is doubtful that the review would have found its way in the Journal. I also want to express my appreciation for the time and effort put in by Kyle Stokely to look over this work.

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Book Review: Rebekkah Smith Aldrich's Sustainable Thinking: Ensuring Your Library's Future in an Uncertain World

Keywords
public libraries, sustainability, climate change, library leadership

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Samantha Hamilton (she/her) is a San José State University alumna who graduated with her master's in library and information science (MLIS) in May 2021. She is currently a graduate student at Johns Hopkins University, where she is studying environmental sciences and policy to further her aspirations of becoming an environmental librarian/archivist. Her research interests include sustainable professional practices in information settings as well as the history of sustainable library initiatives like tool lending. Outside of the classroom, Samantha enjoys engaging in species conservation efforts and birdwatching in her hometown of Las Vegas.

Aldrich, R. S. (2018) *Sustainable thinking: Ensuring your library's future in an uncertain world*. ALA Editions.

Libraries are not like they used to be. The popularity they once enjoyed has precipitously dropped in recent years as fewer people are visiting them and using their services. A report conducted by Online Computer Library Center (OCLC) and American Library Association (ALA) (2018) found that survey respondents made an average of 8.6 library visits annually, down from 13.2 in 2008. Coinciding with this 35% decline in visitation is the rise of Amazon, Starbucks, and Netflix, which are supplanting many of the functions libraries serve. All these factors considered, it is easy to believe that the extinction of libraries is inevitable and near. However, Rebekkah Smith Aldrich's *Sustainable Thinking: Ensuring Your Library's Future in an Uncertain World* argues that we should not yet quit on libraries.

To give these institutions a fighting chance, Aldrich—a co-chair of the New York Library Association's (NYLA) Sustainability Initiative and founding member of the ALA's Sustainability Round Table—has outlined a novel strategy in her book. The strategy, which mainly draws from her two decades of experience as the Mid-Hudson Library System's sustainability coordinator, calls for libraries to go back to the basics and reassess their foundational values in order to pave a new way forward. Sure, libraries are already doing a commendable job supporting free speech, equitable access, and the right to privacy, but Aldrich strongly recommends adding sustainability to the mix. According to the author, librarians have a unique role as educators, information providers, and community leaders in fighting climate change; to neglect this duty would spell tragedy not only for libraries but also for the planet as a whole. Since the survival of libraries is nested in the survival of our communities, Aldrich believes it is imperative that libraries align their organizational goals with the lofty but necessary aim of saving Earth.

Sustainable Thinking is broken down into four major sections that collectively build a case for libraries to take up sustainability and integrate it into all they do. In the first section entitled "Situation Report," Aldrich sketches where libraries currently stand. No matter how much library professionals want to downplay the numbers, it cannot be denied that the public is using these institutions less and less. Widespread uncertainty about libraries' place in modern society is also contributing to their downward slide. To make matters worse, amplified disruption on countless fronts—"political, economic, technological, environmental, and societal"—are pulling professionals in too many directions, dividing their attention and resources (Aldrich, 2018, p. 10). But, libraries are not helpless. Aldrich concludes the section by noting that climate change has carved out an unlikely space for libraries to survive and even thrive in the twenty-first century. Libraries, by harnessing their unique power to connect people and cultivate empathy, can raise the resilience of their communities. As we head into a future shaped by the unpredictable forces of climate change, libraries must draw on their strengths to ensure communities can weather the stress of natural and manmade disasters.

The second section, referred to as "The Strategy," presents a plan intended to reveal libraries' value to users and non-users through the lens of sustainability. First, Aldrich encourages libraries to craft clear messages that speak to *why* they are embracing sustainability so as to increase public buy-in and inspire loyalty. Libraries can do this by editing their core organizational values and tweaking their mission statements to reflect the recent integration of sustainability into their DNA. The next step toward sustainability involves libraries turning outward and further integrating themselves into the social fabric of their communities. Rather than acting alone in their fight against climate change, libraries are advised to partner with local businesses that understand and prioritize the local environment. Working alongside neighbors to reach a shared goal will not only strengthen the resilience of a community but also demonstrate that libraries are willing to act on their eco-ethic.

Aldrich devotes the third section, "The Tactics," to getting all library workers within an organization on board. From library supervisors to the page, all should be guided by sustainable thinking if an organization is to be seen as a convincing leader on the topic. To accomplish this, the author recommends heightening staff members' ecological intelligence by encouraging them to educate themselves using online guides and manuals. Although Aldrich's idea of converting the hearts and minds of all library personnel is admittedly starry-eyed, one can see the benefits of having an organizational culture founded on shared principles. If all or even most workers adopt a mindset shift and devote themselves to the cause, there is no telling how much progress could be made in the way of sustainability.

The book concludes with a fourth section dedicated to resources. These include resolutions compiled by the ALA and NYLA on the importance of sustainable libraries as well as a climate commitment from the American College and University Presidents. Rounding out these pages is a case study of a New York-based public library that successfully translated their vision into action. Lighting changes, weather strip installations, and ditching the elevator were some of the measures taken to improve energy efficiency (Aldrich, 2018, p. 172). Having accomplished much of what they laid out in their "climate smart" pledge, Kingston Library is living proof that libraries can go green without compromising on their programs or services.

Throughout these sections, Aldrich includes worksheets that prompt library professionals to apply what they have read to their own institutions. These exercises ensure readers are not passively absorbing Aldrich's ideas but actively repositioning their work toward today's climate crisis. Though the discussion questions and checklists are overly vague, they do help readers plot where their library sits on the sustainability spectrum. After all, librarians will more likely heed Aldrich's advice and think sustainably if they first reflect on how eco-friendly their own institutions are.

In general, *Sustainable Thinking* is a quick and inspiring read that can readily be put into practice. For too long, libraries have both failed to sufficiently look into climate change and been noticeably behind in their sustainability efforts. Aldrich's words are the wake-up call librarians need in order to realize that they, too, are responsible for helping to solve the defining problem of our generation. Infusing sustainability into libraries may seem like a tall order, but the existence of our planet—and perhaps even our libraries—depends on librarians' ability to start thinking sustainably. If anything, the ideas presented in the book should spur hard but much needed conversations about sustainability in the profession.

It is evident that Aldrich understands what hangs in the balance during this moment in history, but to double-down on libraries' role as community connectors is to miss their need to be agents of change. With millions of species on the brink of extinction, it is no longer enough for libraries to "conven[e] the table" and serve as "platforms for others to make good things happen" (Aldrich, 2018, p. 59, 40). Library workers of all stripes must be eager to lead and take a seat at the table if they are to make a meaningful contribution to the environmental crisis. To do this, they can begin by carefully inspecting their own professional practices—something that Aldrich fails to spend adequate time on. Digitization of printed works and collection weeding are just some of the sustainable library practices that flew under the author's radar but should have been mentioned.

Also of concern is Aldrich's underestimation of the difficulty climate change deniers might pose to a library's sustainability efforts. The author sees deniers as surmountable obstacles whose buy-in can be secured by "talk[ing] about [sustainability] in a way that results in action" (Aldrich, 2018, p. 26). While reframing the dialogue to exclude controversial terms like climate change might work in conversations with some deniers, the general efficacy of Aldrich's solution is seriously in question. It incorrectly assumes that climate skeptics can neither read between the lines nor see these library initiatives for what they really are: a deliberate move to be more sustainable. The author should be applauded for pitching some solution to this tough problem, but changing deniers' minds will take more than just carefully crafted conversations.

In spite of some shortcomings, *Sustainable Thinking* is a rare gem in the crowded library literature. The compelling case to marry libraries with sustainability is sure to win over any library professional, whether or not they are die-hard environmentalists. Aldrich's work should be a welcomed addition to any academic or public library's bookshelf and is recommended for anyone interested in keeping libraries—as well as ecosystems—alive and thriving.

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Foundations of Information Ethics Book Review

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Thank you, Professor Tunon for encouraging me.

Foundations of Information Ethics Book Review

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Burgess, J. T. F., & Knox, E. J. M. (Eds.). (2019). ***Foundations of information ethics*****. ALA Neal-Schuman.**

Burgess and Knox's *Foundations of Information Ethics* supplements current research for those studying ethics in the information professions. The core question asked is what contextual information is missing from information ethics education? Burgess and Knox answer this by setting up foundational knowledge for a wide variety of information ethics issues by providing context to current research through an examination of the history, laws, and evolution of various ethical issues related to information. In addition, they briefly introduce current and future ethical issues with suggested reading for a deeper understanding.

Burgess and Knox both have a background in Library and Information Science education and ethics. Burgess is an assistant professor of information ethics at the University of Alabama where he also received his MLIS and PhD. His research includes library professional ethics including character ethics, ethics of sustainability, intergenerational justice, and ethical issues arising from artificial intelligence. Knox holds a MLIS and a PhD and is an associate professor at the School of Information at the University of Illinois at Urbana-Champaign. Her research involves information access, intellectual freedom and censorship, and information ethics and information policy; she has published several books and articles on these information issues.

Burgess and Knox sensibly organize their book into several sections. The first three chapters of the book discuss philosophical frameworks of ethics, human rights, and the history of ethics in relation to information professions. Burgess and Knox set the context of the book by describing four philosophical frameworks for exploring information ethics issues. The frameworks are deontology, consequentialism, character ethics, and contractual ethics. Next, the authors explain the history and evolution of these four frameworks by discussing important historical figures from each framework, presenting their works and theories.

Specific information ethics issues are the focus of the next several chapters. The issues covered in chapters 4 – 9 are: information access, privacy, discourse ethics, intellectual property, data ethics, and cybersecurity. The last few chapters are focused on global and intercultural ethics, which are broader in scope than the specific topics discussed in earlier chapters. These chapters examine global digital citizenship, cognitive justice, and intercultural information ethics. The final chapter provides a short summary of several specific current ethical issues and provides references for further research.

Each chapter starts with an introduction and definition of one of the ethical topics. This is followed by the history and evolution of that topic over time. Finally, the chapters end with a paragraph or two introducing current issues related to the topic. Some chapters include case studies from real world events that provide greater insights into relevant ethical issues. The case studies help the reader to grasp the complexity of these issues and to think critically about real-world ethical questions. Each chapter is meant to set a foundation and introduction to a topic: it is not possible to gain a complete understanding from this book. Most of the chapters provide an excellent overview of their specific topic; however, some topics were discussed in a narrow scope, which does not allow for a complete foundational understanding.

These are important issues that information professionals face and require a strong ethical understanding of. It is of critical importance that information professionals have the knowledge to make ethical decisions. The first chapter on information access reflects the complexity of a single issue that information professionals confront regularly. Access to information may be denied for many reasons, including privacy, censorship, intellectual property rights, or the digital divide. While information professionals support access to information and the American Library Association (ALA) promotes access and intellectual freedom, libraries still promote privacy, have internet filters that censor materials that would be harmful to children, and teach about respecting intellectual property.

The complexity of ethical issues arises due to their interconnectedness with each other. It is impossible to discuss certain issues without also considering other connected issues. To illuminate this point, it is impossible to analyze data ethics without also addressing the issue of privacy. Another example is how the ethics of cognitive justice are heavily integrated with the ethics of access. Information poverty due to the digital divide is not just an access issue but a social justice issue.

Burgess and Knox could have deepened readers' understanding by examining each issue through multiple ethical frameworks in each chapter. Examining the arguments from different ethical frameworks is essential to understanding these complex issues. Some chapters do an excellent job of not only describing the history of ethics in a particular subject, but also comparing and contrasting different philosophical arguments of ethical dilemmas. Most notably, the chapters on data ethics and cybersecurity compare deontological and consequentialist views. The chapters on access, privacy, and cognitive justice were very informative and well written. Other chapters merely provide a history or laws on an ethical topic (like the intellectual property chapter, which is almost entirely American laws). The chapters on cybersecurity, global digital citizenship, and ethics of discourse either cause confusion or leave the reader wanting more.

The way in which topic of cyberbullying in the chapter on cybersecurity was addressed seemed unclear and misplaced. Burgess and Knox fail to show the relation of cyberbullying to cybersecurity ethics. Without this foundational knowledge, these topics seem only related by their use of the internet. The chapter discusses ethical hacking and defense against malicious cyber-attacks, adding to the feeling that cyberbullying is out of place. Cyberbullying is a form of online victimization, while cybersecurity is meant to protect internet users from victimization (Choi et al, 2019). Cyberbullying would better fit in the section on global digital citizenship, where according to Crockett (2018) there is an ethical responsibility to respect others. Aside from this one specific point, the cybersecurity ethics information is relevant and well presented, providing different ethical framework viewpoints and highlighting several ethical issues like cyberwar, whistleblowing, and AI and automation related issues.

The chapter on global digital citizenship provides a very narrow scope of such a complex and broad topic. Burgess and Knox only discuss global digital citizenship as a relationship between a people and their governing state. The authors only highlight issues of surveillance, access, and censorship. Crockett (2018) describes a broader view of global digital citizenship as being respectful and responsible for yourself, others, and property. Crockett (2018) views the entire world as a community with which to participate, while Burgess and Knox only consider capabilities of democratic participation within states.

The chapter on ethics of discourse feels unrelated to information ethics. I was only able to connect it to information professions through the case study presented at the end of the chapter. As an example of ethical discourse, the case study uses a reference interview in which a patron trusts a reference librarian with personal information, however the patron's question is unclear. The librarian is able to determine the patron's need for sensitive information by respectfully asking further questions after reading the patron's body language. This chapter was written in a way that was difficult to understand and follow. It contained many quotes and references to ethics of discourse that seem unrelated to information and required a background knowledge of discourse ethics.

Burgess and Knox acknowledge that information ethics is dominated by Western thinking due to the effect of colonialism. Regardless, they contribute to this Western bias by only discussing topics through the lens of Western philosophical frameworks. There are many philosophical frameworks from around the globe that could contribute a deeper understanding of these issues. Buddhism is a well-known and ancient Eastern philosophical framework with a focus on ethics which could be included in ethical discourse (Goodman, 2017). A framework from African ethics with a focus on the importance of groups and collectivism would be valuable, in contrast to the Western focus on individualism (Gyekye, 2011). Global ethical frameworks provide unique insights missing from Western ethics.

These ethical issues are global in nature, potentially effecting communities across the world. Examining and synthesizing a wider range of ethical frameworks should be important for ethical research. As the world continues to become more globalized, the current and future ethical issues become more influential for decision makers. Considering outside ethical views could reveal more ideas, answers, and solutions to complex issues. For example, China is increasing their research and innovation in AI with the intention of becoming the global leader in the field (Larson, 2018). Their ethical frameworks must be included in viewing issues related to AI.

Burgess and Knox devote one short paragraph to fake news, misinformation, and disinformation. There is no mention of deep fakes, which is an incredibly relevant ethical issue that has impacted lives for the last several years and will continue to prove a challenge. Improving technologies, like AI and machine learning, can create content that people are unable to distinguish as real or fake (Kietzmann, 2020). Ethical issues related to misinformation and how technology amplifies it should be included in works related to ethics.

One surprising omission from the topics covered by Burgess and Knox is ethics of sustainability. This is puzzling because Burgess is noted as having conducted research on ethics of sustainability. While sustainability has been a topic of ethical interest, it could have been missed due to the recent inclusion of sustainability as a core value on the ALA's *Core Values of Librarianship* a year after Burgess and Knox published their book (American Library Association, 2019).

Burgess and Knox have created a strong foundational supplement for the study of information ethics, especially for core issues like access, privacy, and data ethics. The book does what it set out to do: provide an overview of the history and evolution of information ethics. By proving the foundational information of the four frameworks and their insights, Burgess and Knox create a basis for analyzing any ethical issue. However, current information ethical issues are only briefly introduced. Burgess and Knox offer minimal help for people interested in a more complete understanding of current information ethics issues.

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User Experience Desires Personalization from Academic Library Websites

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User Experience Desires Personalization from Academic Library Websites

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A Review of: Desmarais, B., & Louderback, P. (2020). Planning and assessing patron experience and needs for an academic library website. *Journal of Library Administration, 60*(8), 966-977.
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Structured Abstract

Objective – To gain user feedback about the current academic library website prior to a redesign.

Design – Quantitative and qualitative survey.

Setting – A state university in a lightly-populated Oklahoma town close to the Ozarks. In fall 2019, a new content management system was chosen to house the library's online information. Before the transfer, the researchers executed this evaluation in the spring of 2020 to learn their users' priorities.

Subjects – Individuals aged 18 years and older from the university's community: (a) graduates, (b) undergraduates, (c) faculty, and (d) public-users.

Methods – The researchers used non-probability sampling. A Google Form distributed through several online means served as the research instrument. Participants remained anonymous. The survey included open-ended and non-open-ended questions as well as Likert scaling. Analysis was conducted on the 117 responses.

Main Results – The survey elicited stakeholders' reactions on common themes centered around the usability of the website's homepage, LibGuides, accessibility, and personalization. Respondent feedback included an appreciation for interlibrary loan, website configuration, and optional live chat. Dissatisfaction occurred in locating personal account logins and the search layout for journals and articles. Additionally, the overall website aesthetic was considered unappealing.

Conclusion – The researchers contend that academic libraries need to consider viewer needs and tailor designated sections of their website to particular users so that they are more engaging, thereby personalizing the information exchange.

Commentary

Though user experience is already a familiar topic in LIS, this study is worthy of review because of who conducted the research, how the data was obtained, and when it was gathered during the evaluation process. The principal researcher was an MLIS student intern who used freely available software to assess the website's current state before implementing any changes. Any MLIS student in a comparable position could consider using Google Forms for research, needing only a free Google account for access (Google Workspace Updates, 2016).

Academic libraries have been mindful of website user experience for the last 20 years (Gillis, 2017, p. 3). Similar to Mierzecka and Suminas (2018), this study found that easily locating the account login remains a top priority for users (p. 162). Interestingly, instruction on information retrieval, either through LibGuides or live chat, ranked higher in this study than in the earlier research conducted by Mierzecka and Suminas (2018, p. 162). Perhaps the pandemic and subsequent quarantine intensified the desire for direct personal interaction and curated content. The preference for increased personalization was also identified in Gillis's (2017) study, which advised libraries to avoid a homogeneous view of students and explore the benefits of adopting "user customization" (p. 5). Like Gillis, this study highlighted several differences amongst students based on their relationship with the university. Voices of a variety of graduates and undergraduates, including students who commute and those who have never set foot in the physical library, were represented. Uniquely, this study also examined non-student stakeholders in the academic community, including faculty and the general public. Unfortunately, public-users only represented 1% of the respondents, yielding little to no conclusions about this group.

The researchers acknowledged a few of their study's shortcomings. They admitted their lack of foresight to include options like "other" or "none" within the thirteen survey questions. The researchers anticipated a higher response rate and planned to conduct in-person surveys with website users at the library, especially general public visitors. However, the restrictions resulting from COVID-19 prevented this strategy. Another drawback mentioned was the choice to use non-probability sampling, as it may not have accurately represented the full swath of users.

A limitation not acknowledged was the adoption of only one research method – a survey. Gillis (2017) conducted interviews, issued predesigned tests, and utilized Blackboard Collaborate to monitor how users interacted with a library's homepage (p.7). Employing methods similar to Gillis's by using other free research tools in tandem with Google Forms could produce further insight. For example, participants could share their screens and record videos of their web usage via programs like Zoom. Observing how users actually interact with library web pages may reveal things not reported within a survey. Additionally, implementing focus groups through Zoom would allow for discussion, yielding opportunities for feedback that individuals might not generate on their own. Lastly, Bedi and Webb (2017) used a method called photo-elicitation, whereby images help to promote discourse. Photo-elicitation can be used two different ways: Researchers can display visuals of their topic to spur dialogue with participants, or users can present their own images to recall their personal impressions. Collected screenshots representing different areas of the website could be taken by users and/or researchers then uploaded into a Google Slides presentation to facilitate evaluation.

The study also had a limited categorization of students and other users. Asking participants to self-identify among a broader range of options, without disclosing direct personal information, might lead to further discoveries. Limas's (2020) study of undergraduates noticed a multitude of distinctions and crossover among student demographics and interests. If personalization is something researchers want to incorporate, they need to know more detail about their user groups to address their needs.

The researchers concluded that personalization was key to improving an academic library website. However, no suggestions are offered, other than the development of more LibGuides. With the advent of COVID-19 stifling face-to-face contact, one possible way to foster connection between a library and its users is targeted video content. Creative videos may be an effective means of communicating with different audiences while also helping users familiarize themselves with the site's features and navigation. For instance, Limas (2020) describes undergraduate students filming videos of their campus and uploading them to YouTube as an informal marketing tool (p. 27). If libraries add personalized and engaging video content to their websites, they may bridge the gap between information professionals and users. Libraries could even collaborate with their users to create and evaluate the content.

This study was published at a crucial time. Though COVID-19's long-term societal effects remain unclear, our reliance on the internet for connection and information retrieval is evident. Many libraries closed their physical doors during the pandemic, leaving digital outreach as their primary communication channel. Information professionals might ask themselves, are the services outlined on their website clearly understood by the user? It is commendable that this study sought to answer that question with user feedback analysis, establishing a benchmark before undergoing a redesign. This examination was performed at an academic library, but other types of libraries could consider the study's methods, evaluation techniques, and results to improve the usability and appeal of their own websites. They could pinpoint users' needs, enhancing their experience while also saving time and resources.

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