

EXPLORING PERSONAL CONNECTIONS IN A DIGITAL READING  
ENVIRONMENT

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## **Dedication**

To Zac, Tim, and Tyson:  
for your unending support, for your willingness to listen to my excitement about libraries, books,  
pdfs, hypertext, and all other sorts of reading, for being people who love to read, and most  
importantly, for continually showing me the importance of connection.

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## **Abstract**

This thesis presents a phenomenological, qualitative study of students and faculty and their experience with reading in both the physical and digital realms of reading. Results are based on the analysis of personal, one-on-one interviews from the context of a university environment, specifically, community members of the University of Hawaii. The phenomenon of connection between readers and their reading sources is explored resulting in six themes, which represent manifestations of connection between the study participants and their reading. Important to note, touch and tangibility continue to play a significant part in the reading process, especially due to aspects of familiarity, accessibility and ownership.

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## **Purpose**

Identifying how a patron connects with resources is an essential aspect of academic librarianship, especially with the onslaught of digital technologies. In the past, physicality and corporeal matters, such as touch, played a major role in readership. With traditional books there are clear tangible interactions between the texts and the individual who reads them. These interactions fuel relationships between the readers and the material (bibliophiles are prime examples of these relationships). Even in an environment where digital items are often less expensive and more accessible, many readers return to the tangible book; they relate and are familiar—comfortable—with books. So, with the increase in digital text, questions arise. Are there ways in which patrons connect with digital reading materials? How are these connections manifested? Does the corporeal aspect still play an important role in the discussion of connection in a digital environment? The purpose of this research is to explore these questions and come to a better understanding of how readers express connections with their texts in print and digital environments.

## **Problem Statement**

Books, as physical objects, continually entice generations of individuals. Books catch attention with a well-designed cover and hold readers captive with textual information that intrigues, excites and captivates. Books become an essential part of the individual, enough so that the individual refuses to part with them. Some book lovers—or bibliophiles—amass such incredibly large personal book collections that they gain notoriety. These large collections often help fill our libraries. Thomas Jefferson, for instance, is remembered for his grand library, which he sold to the American government to replenish the Library of Congress after the fire of 1814 (Library of Congress, n.d.). Collectors express sincere kinship to their books as a “joy” in their lives (Basbanes, 1995). This happiness is partly fueled by the physicality of the resources.

The need for books, however, is not limited to bibliophiles. The curiosity and necessity of information remains a vital part of civilization, but alternate resources in the form of e-books or pdf readers, for example, battle for the opportunity to provide the literary gratification once only supplied through a physical book. Libraries—once held as the ultimate proprietors of the book—steadily report declining numbers of print circulation and actual library visits (Ross & Sennyey, 2008; Vogel, 2012). The physical library is now less important as a receptacle of physical information sources, leading librarians to continually rethink and adapt library space to better accommodate new technologies (Plutchak, 2012).

Similarly, in response to emerging technologies, librarians regularly contemplate and realign their roles as information professionals and the function of the library as an institution. A disconnect exists between the perspective of librarians and the view of library users; librarians’ structured way of searching and using information is no longer as practical due to the continual

rise of “trial and error” methods patrons now use to search for information (Gibbons, 2013; Haglund & Olsson, 2008). Cervone notes that technology has affected how students “think and process information;” their reading includes interactive and visual aspects thus affecting their learning styles (2013, p. 202).

Librarians already grapple with these changing learning styles and continue to adapt to current trends to prove their relevance in a digital society. The Association for College and Research Libraries (ACRL), for example, lists the need for effective discovery in technological environments and spaces that allow users to “interact with ideas in both physical and virtual environments” as important principles in their Standards for Libraries in Higher Education (2011). Similarly, the American Library Association (ALA) adds the importance of transforming “libraries and library services in a dynamic and increasingly global digital information environment” as a key action area in their strategic plan (2015). ALA has highlighted trends such as “Connected Learning,” “Digital Natives,” “Flipped Learning,” and “Internet of Things” as important issues connected with transforming libraries for the future (ALA 2015). These professional library organizations promote the importance of the digital environment and the need for libraries to address patrons’ needs in this setting. Researching students’ connections with their digital resources helps build greater understanding of current learning styles and supports the goals set forth by professional library organizations such as ALA and ACRL.

Recent research involves studies of online learning and how library resources contribute to that environment, theories involving linear versus digital reading, and even ethnographic studies of small groups of students and their use of digital information (Carusi, 2006; Cervone,



2013; Rose, 2011). Other studies include library use in terms of shelf space, common areas, Internet, and database usage (Becker, 2015). Additionally, the constant presence of change in technology has been a focus for study; “Librarians must now confront disruptive innovation as a matter of routine” (Ross & Sennyey, 2008, p. 147). Change is no stranger to the field of librarianship and studying the present changes plus the history of past modifications is helpful (Becker, 2015). Studying the past helps to answer questions such as: What motivated patrons to partake of library resources in the past? Conventional resources—what keeps traditional book lovers returning to the book? Do relationships exist between individuals and the information they utilize? If so, how can such a relationship be found?

A look into the types of relationships with textual material that existed in former days allows for a good comparison with current reading trends. For example, speaking from experience, a person nowadays has the opportunity to purchase books at fairly decent prices from various book shops (new and used), over the internet, or at school book sales, and has the option to borrow books from public or academic libraries. Whereas, in the past, as Lerner states, “The ‘public’ libraries of Renaissance Europe were intended for the use of scholarly gentlemen” and access was not necessarily meant for the public at large (2009, p. 125). Plus, the purchasing of copies often proved too costly even for wealthy students studying at universities (Lerner, 2009). Hence, in Europe during the medieval period, the common person was lucky to have access to a single book, let alone access to a library.

Libraries at that time were, indeed, treasures filled with wealth—a wealth of knowledge and a wealth of highly prized books. Michael Camille, a scholar of medieval literature, compares those early medieval libraries to our present-day establishments and argues that the “institutional

aims of the modern library have been to exclude the body from the site of reading, to make a...purely mental experience, a process that will only accelerate in the future with the increasing in-corporeality of the electronic word” (Camille, 1997, p. 40). Camille’s comment raises the question of the importance of the body in relation to the experience of reading and the differences experienced when reading becomes less of a physical, corporeal experience through the use of digital technologies. This idea of a book-body connection is worth a second look and will help locate rapport between patrons and their information sources. In particular, I suggest investigating whether tangible, corporeal aspects—such as touch—still play a role in a digital reading environment. Furthermore, this research attempts to discover examples of how current connections or relationships to texts are exhibited. Whether the medium be print or digital, I propose that relationships exist and that by better understanding this phenomenon, librarians can better understand the needs of their patrons.

## Research Questions

Considering the relationships that individuals develop with their books and the fact that—in an academic library setting—pdfs and hypertext reading are now, perhaps, the most common form of text sources, there is concern as to whether similar attachments are formed with digital reading materials. This study seeks to address this issue by posing two key questions for research and exploration:

1. How do readers express feelings of connection with their texts in print and digital environments?
2. How can library spaces be designed to elicit and support these feelings of connection?

I propose that owners or readers of digital materials experience comparable associations to that of traditional books. I explore correlation by examining the types of connections experienced between individuals and their information sources. Specifically, this research addresses the research questions through the following objectives:

- a) Search for examples of connection manifested in participant responses (e.g., nostalgia or sentimentality, anthropomorphism/personification, the building of collections, fan participations, etc.)
- b) Discover whether tangible, corporeal aspects—such as touch—still play a role in a digital reading environment

## **Background and Theory**

This research builds upon literature concerning libraries and their historic role in book-body connections, bibliophiles and the world of book collecting, anthropomorphism, and convergence theory. My initial curiosity for this topic stems from the juxtaposition between current technologies versus physical print sources, and the book-body connections possible among the two types of reading materials. The idea of book-body connection is often represented in a medieval book setting where individuals connected with physical reading sources. Thus, a study of the history of libraries and book collectors are important to the intellectual framework of this study to understand how readers connected in the past to the physical materials.

Anthropomorphism is included as part of the background research because it has the possibility of showing up in the past and the present as an interesting and vivid manifestation of connection. Last, convergence theory has foundational underpinnings of this research due to the multimodal aspect of information today.

### **1. Libraries and Book-Body Connection**

The history of libraries can be traced as far back as 3000 B.C., to Sumerian clay tablets (Lerner, 2009; Schramm, 1988). As civilizations meet certain economic, social and political conditions, libraries arise (Harris, 1999). Libraries collect records, preserve information and provide connections. Rebecca Knuth states:

In addition to their innate vitality, books animate societies, and libraries collect the stories that give shape and meaning to our lives, helping individuals and cultures to orient and know themselves, to connect with each other, self to self, past to future, and future to past. (2003, p. 2)

The concept of the library is an important worldwide phenomenon, which reaches into almost every civilization. Libraries help build and shape the people and their societies.

Books were cherished, revered objects that were housed in special library repositories. As mentioned previously, Michael Camille emphasizes the incorporeality of modern libraries; he states that today's libraries are not the "site of performance" as were the early medieval libraries where scribes created multiple copies of books and physically touched and connected with the books they read and wrote (1997, p. 40). To some extent Camille's viewpoint is true. Nowadays, libraries are less about the physical and instead compete to be information providers, appealing to incorporeal needs. There is a call to adapt the storage space—shelves and all—into more "dynamic learning environments" (Cervone, 2013, p. 202) that center on the technologies rather than on ownership of books and physical objects (Grace, 2014). I would like to further explore Camille's argument that the body is removed from our current institutions. Certain differences are obvious (e.g., books are printed elsewhere and not inscribed on premises, materials are available to more than the strict few, libraries are more than just receptacles of storage, etc.), but many other functions of the early library remain intact in this age.

For instance, although there is a strong emphasis on digital formats today, libraries do still function as physical book repositories that allow people to interact with the actual tactile object. People still create information while in a library setting (though this creation process happens on paper or a computer rather than a piece of animal hide). And with the advantage of technology, people can even take their libraries into their own personal spaces (Rose, 2011). Camille depicts how individuals in the medieval library setting would have marked up their books, "doodled in them, defaced them, chewed them, tore them up, and even slept with them,"

(1997, p. 40). I'm sure many a librarian, today, can attest that these activities continue to take place. In fact, nowadays, it is common practice to download information to pdf format and mark-up and "doodle" on materials. As for reading in bed, e-readers make it possible to bring all sorts of digital books and information into various private and public environments—including one's bed. If a person is truly, a book lover, then ways will be found to keep books nearby and accessible.

## **2. Bibliophiles**

In fact, the subject of book lovers, or bibliophiles, is another important aspect in answering the question of book-body connections because, even though digital sources are easily accessible and often less expensive, book lovers continually relish and return to the physical print form (Daniels, 2012). They represent the ultimate book-body connection and have been around as long as the book. A prime example of how the body was part of the reading experience exists in the words of fourteenth-century bibliophile, Richard Aungerville de Bury. He employed anthropomorphism when speaking of his books and how to care for them, giving them a voice to cry out against injustices committed against them by their readers. Aungerville, Bishop of Durham under Edward III, is recognized as one of the earliest bibliophiles due to the incredibly large amount of books collected for his personal library (Lerner, 2009). His work, *Philobiblon*, gives life and voice to his books. He scolds users who deface and take little care of these objects and his words impress upon the reader how truly attached he is to his reading materials. Camille studies Richard de Bury's *Philobiblon* as part of an extensive literature on the book and the body (Camille, 1997). The strong corporeal use of language promotes the idea of connection; texts become meaningful and important.

The current world of book lovers is also important to this study. Nicholas Basbanes has done extensive research concerning the world of book collecting. He presents a glimpse into the lives of people who collect books as a hobby, fetish, and also for employment (Basbanes, 1995). Addressing this aspect of book culture illustrates a variety of reasons why people love and search out books. Basbanes uses investigative journalism to sift through libraries and personal narratives to get at the heart of why people form these attachments and the significance of their efforts. I study his research (though I intend to take a more phenomenological approach—less investigation of the person and more emphasis on the experience) as well as the work of others such as Harold Rabinowitz and Rob Kaplan whose collection of stories and essays details additional information on book lovers, to gain a better understanding of how and why connections to books as physical objects continue to play a role in our current society. This idea is especially important because, nowadays, the book is not the only option when looking for information; other, often less expensive, reading materials can be acquired, yet many people continue to search out actual, physical books.

### **3. Anthropomorphism**

Anthropomorphism is prevalent in all aspects of life. This phenomenon appears as the subject of many studies including animal behavior, religious works, and even as a literary tool better known as personification. It is a social tool used to aid in sense-making. Aristotle speaks of man as a social animal; this drive for social and emotional attachments can spill out into our descriptions as individuals strive to understand and make meaning of the world around them (Epley, Waytz, & Cacioppo, 2007; Waytz et al., 2010). As individuals begin to identify with people or objects, empathy comes into play, and they imagine how others might react or feel;

they utilize their own experiences of being human as a way of understanding the world around them (Libell, 2004; Zimmer, 2011).

Indeed, human-like descriptions of books abound and provide strong examples of how anthropomorphism helps people relate and understand shared experience. Common expressions such as, *carriers of civilization*, *written on the heart*, *objects of affection*, or *read me like a book*, showcase the collision of the living, breathing world with inanimate books. Other examples include anthropomorphized roles as “companions,” “teachers,” “magicians,” “bankers,” “children,” etc., for “[b]ooks are humanity in print” (Tuchman, 1980, p. 13). People are constantly “[converting] books or the essence of books anthropomorphically into human beings” (Stern, 1989, p. 14-15). Knuth points out that personification occurs in accounts of book and library destruction; titles such as “*Wounded Libraries in Croatia*”, and “*Blitzkrieg and Books: British and European Libraries as Casualties of World War II*,” express and provoke sentiment and emotional connection (2003, p. 1). Her work explores how libraries, as carriers of books and other sources of culture, are targets of destruction—especially in wartime—when enemies want to truly wound their foes. The destruction of books and libraries is a form of “human trauma” (Knuth, 2003, p. 2). I suggest that it is more than coincidence inspiring people to use anthropomorphism when trying to depict such heartfelt experiences; instead anthropomorphism is a readily available device to help portray human connection.

Opponents of anthropomorphism warn that it is not accepted as psychology and that human-like descriptions applied to animals do not necessarily predict behavior. However, the fact that even Charles Darwin used anthropomorphic descriptions quells some of the more scientific discontent (Busciolano, 2000; Epley, Waytz, Akalis, & Cacioppo, 2008; Epley et al.,



2007). Other researchers rule out the idea of anthropomorphism as it relates to the computer world over an argument of definition, that it is a conscious belief that something inanimate is human (Kim & Sundar, 2012). Kim and Sundar's study combat this stance with the idea that anthropomorphism could instead be an effect of unconscious, mindless tendency. Their thoughts and ideas, build a foundation to start from and demand further investigation. Their work, however, is far from being the only research regarding anthropomorphism and the human-computer interaction. Other studies revolve around anthropomorphism and robotics (Duffy, 2003; Karr-Wisniewski & Prietula, 2010), computer interfaces (Burgoon et al., 2000), and human-computer interaction in relation to gender and sexuality (van Doorn, Wyatt, & van Zoonen, 2008; White, 2009).

#### **4. Convergence Theory**

Convergence theory is important to address in this research due to the environment of technological change ever-present in the field of librarianship. I explore the idea of convergence theory as it relates to media. Henry Jenkins explains that "our lives, relationships, memories, fantasies, desires also flow across media channels" (2006, p. 17). People use multiple technologies on a variety of platforms on a daily basis. These different technologies converge and function together in day-to-day life.

In a Pew Research Report, Purcell et al. point out that even reading the news happens across various technologies; they state: "In this new multi-platform media environment, people's relationship to news is becoming portable, personalized, and participatory" (2010).

Understanding these new types of relationships is important for librarians to adapt services and examples of these connections will be noted throughout the proposed research. For example, do

people bond with the information apparatus or rather with the words or information itself? Books may not be the most common item seen in a person's hand as you walk down the street, but it is a common occurrence to see a person accompanied by some form of device, be it tablet, computer or phone. The delivery technology can be just as important—if not more—to some people, and presently, people use more than one technology to gain access to what they want to read, watch, or experience (Jenkins, 2006). Researching this aspect of information will help better understand connections with new media.

I draw heavily upon the work of Henry Jenkins in his book, *Convergence Culture: Where Old and New Media Collide*, which addresses cooperation across media, and that it is cooperation, or a convergence, among and across multiple types of media that now exists and captures attention. Loyalty only goes so far in this fast-paced media environment; audiences will search and reach for the information and experiences they want. Today's technologically advanced society allows for access across multiple venues; media intersect and act together:

Convergence occurs within the brains of individual consumers and through their social interactions with others. Each of us constructs our own personal mythology from bits and fragments of information extracted from the media flow and transformed resources through which we make sense of our everyday lives. (Jenkins, 2006, pp. 3–4)

These intersections are highly important in forming connections, and the “strength of a connection,” Jenkins states, “is measured in terms of its emotional impact. The experience should not be contained within a single platform, but should extend across as many media as possible” (2006, p. 69).

The “emotional impact” is, in fact, the premise of this research. Locating examples of these connections, whether they be examples of anthropomorphism, collection building—in book or e-book format, or whether the “emotional impact” is manifest in the form of convergence and participatory actions will lend significance and understanding of how to “repurpose” library space to accommodate the different types of activities and media that patrons need and desire (Ross & Sennyey, 2008).

## **Methods and Research Plan**

A qualitative, phenomenological approach was used to collect data. This method allows the researcher to understand individual realities or lived experiences as told by the individuals themselves—“to understand the phenomena in their own terms” (Groenewald 2004; Bentz and Shapiro 1998). A phenomenological approach—studying lived experiences—is especially necessary when dealing with research involving a person’s feelings or personal attachments. There is no correct answer when discussing emotions, thus a more qualitative method is the most effective way to collect data. This particular study searched for examples of connection as illustrated by sentimentality or nostalgia, participation, item collecting, and anthropomorphism.

### **Definitions of Connection**

Sentimentality or nostalgia is discernible as individuals share stories or memories. These stories demonstrate how a person relates to a particular item. They identify the object with a part of their life. For example, a law librarian sifting through an old government book of statutes came across newspaper clippings and marginalia that invoked personal memories and thoughts of the former individuals who had handled the same book (McCormack 2011). Her experience caused her to form a simple attachment to this document. She remembered the book and also her experience with it. A connection was formed. Similar stories discovered among interview participants were marked as possible examples of connection.

Another manifestation of connection is active participation. Nowadays, knowledge happens across multiple media. A piece of literature may start out as a book, will gain a fanbase and stretch to blogs, websites, and even to movies. Often when these fans are so attached to the literature they actively engage in activities outside the simple act of reading. These interactions

and the information gleaned from the texts help form an individual's "personal mythology" to help "make sense of our everyday lives" (Jenkins 2006, p. 3-4).

The collecting of texts, print or digital, were considered as an expression of connection. Bibliophiles are excellent examples of this type of connection. People who collect or hoard items feel emotionally connected or comforted by the items (Timpano and Shaw 2013). Often these behaviors are accompanied by another type of connection—anthropomorphism. As mentioned previously, anthropomorphism is a social tool that signals a person's attempt at empathizing with the world around them. Examples of this type of personification are noted as they appear in participant responses. All types of connection, however, are possibilities of what might result in the interview responses and are considered in the overall study.

Another important aspect taken into consideration were the participant's approach to reading and whether they are using efferent or aesthetic reading styles. Efferent reading relates to a more "outward" approach or reading with the intent to take away information for thought and reflection; aesthetic reading deals more with internal contemplation, "the reader's attention is centered directly on what he is living through during his relationship with that particular text" (Rosenblatt 1994, p. 24-25). Examples of efferent reading include newspapers, recipes, textbooks, etc., while aesthetic reading examples involve items defined as literature or art (poetry, novels, etc.). These types of readings relate to Louise Rosenblatt's transactional theory, which asserts that "transactions" take place between readers and their texts (Rosenblatt 1968, p. 34-35). She states that "text is merely an object of paper and ink until some reader responds to the marks on the page as verbal symbols" (Rosenblatt 1994, p. 23). The research study

concentrates on the way in which a reader responds to the text (digital or print), thus it is important to know the type of approach or “transaction” a reader uses.

### **Collecting Data through Personal Interviews**

To collect data, I conducted eleven interviews in a personal one-on-one setting. Allowing individuals to give first-hand accounts best isolates how a person identifies with the texts, whether they are print or digital. This research method permits the researcher to:

encourage students [and other patrons] to articulate and share their experiences of the on-screen reading of books and papers, in the conviction that remaining attuned to students’ lived experience...is essential to achieving a sound pedagogical response to emergent technologies. (Rose 2011, p. 525)

The particular focus of this research project relates to an academic library environment, thus participants were chosen among college students, faculty and staff members, essentially individuals who could be possible university library patrons. Open-ended questions, designed to spark conversation, were asked of participants. Each session lasted between 45-60 minutes and was recorded. Possible questions included:

- Do you enjoy reading? Why or why not?
- What type of reading do you take part in on a daily basis?
- Do you have internet access? What type of access (school, home, etc.)?
- How do print books figure into your academic life?
- What about outside of academia, how do print books figure into your reading then?
- Tell me about your favorite book; would you consider reading it as an e-book? Why or why not?
- Are there other particular books, pdfs or e-books that you refer back to time after time? Why?

- Do you identify with the majority of material you read?
- How does the material you choose to read represent you?
- Tell me about the time you read your first e-book.
- What types of reading mediums do you prefer (pdf, online, e-book on a tablet or reader, physical books or copies, etc.)?
- Do you like reading online? What were some pros and cons of reading on-screen?
- What were some pros and cons of reading on-screen?
- When do you find yourself choosing a print book over a digital resource? Why?
- Do you have a preference of devices? Why?
- How would you describe your ideal reading environment?
- Does the reading space or environment you are in affect what you read? How?
- Does the physical library space/building engage or distract you? Can you talk about an example?
- Do e-books engage or distract you? Can you talk about an example?
- What about hypertext (online reading with links)? Does that type of reading engage or distract you? Please explain.
- Does the medium of the reading source change depending on what type of reading you are doing (i.e. research vs pleasure)?
- What about the social aspect? How does that play into your reading (reading in a group, with a group, for a book club, class presentation or discussion, to keep up with peers, to talk out what you are working on, etc.)?
- Describe how you feel about reading overall?
- Explain project and get feedback or opinions on how people connect and how they think they connect with their reading (digital or otherwise).

Important variables addressed in the interviews included the types of media people use for their information (books, e-books, pdfs, hypertext), whether the information is used for study or recreation, what the reader expects to get out of the reading (effertent vs. aesthetic reading), what

types of devices are used to display the text, and the places in which the participant chooses to read.

Following the interviews, analysis of the responses was conducted. Manifestations or expressions of connection (sentimentality/nostalgia, active participation, item collecting, anthropomorphism) were noted and compared to see if they were common occurrences between participants. All instances were considered to better understand how individuals express connection with their texts both in print and digital sources. Other delineations adding to the results included three general age groups (18-30, 31-45, 46-80), and whether the participant identified as an undergraduate student, graduate student, faculty, staff or other. Codes were generated based on detailed findings and grouped into similar concepts or categories for further examination.

## **Timeline**

The following table records the timeline of activities for the research study. The schedule changed slightly from the initial dates, but the basic outline of tasks remains the same. The next section provides a more detailed description of the interview process.

January 2015 - June 2016	Interview 10-12 participants
June 2016 – January 2017	Transcribe interview recordings
January – February 2017	Analyze and code the results: <ul style="list-style-type: none"> <li>• Generate codes and encode minute details</li> <li>• Create memos of themes which become apparent</li> </ul> Note groupings that might be concepts/categories
February – March 2017	Write up of thesis document
April 2017	Thesis defense



## **Interview Process**

### **Recruiting**

Originally, I proposed using a snowball method for recruiting. I discovered two extra participants via the snowball method, however, this method of recruitment was not as successful as I had first hoped. Instead, I recruited additional individuals in other ways. For instance, I created a poster for the Hawaii Library Association (HLA) conference that explained my upcoming research and invited people to participate in the study. I also spoke as part of the Library and Information Science (LIS) department's research colloquium and gathered a few participants there. Classes and work provided me with opportunities to invite other individuals to participate. Last, a few people, knowing about my study, proactively volunteered, asking if they could contribute to the study.

In total, I recruited thirteen participants though I only interviewed eleven of those individuals. I had a difficult time with the scheduling of a couple of the participants' interview who continually cancelled appointments. I concluded the interview process after eleven interviews because, after reviewing the material collected from their interviews, I had sufficient data to analyze and study.

Out of the eleven interviews conducted, I had three individuals from the LIS department, three individuals from the engineering department, and five individuals from other departments on the University of Hawaii campus. I deemed the triplicate in the LIS department to be acceptable because one, they volunteered, and two, they all had an interesting perspective of libraries and reading by virtue of being in a library program of study.

The snowball method of recruiting was, in some part, responsible for the triplicate of the engineering participants. Having too many related fields is one possible drawback of the method, but I found that the individuals and their responses differed in a substantial way so that responses collected were still helpful. In addition, the snowball recruits provided another interesting perspective: a view that the subject matter studied in the academic environment does not directly affect one's overall view of reading, meaning people do not necessarily have the same thoughts of or style of reading just because they pursue the same academic degree.

Furthermore, I hoped to have more than two interviews from faculty/staff members, but time constraints and scheduling difficulties prevented more faculty participants. I had also expected to have one staff interview (someone working at the university that was neither student nor faculty), but was unable to follow through with this interview due to cancellations. It would have been an interesting perspective to have someone acquainted with the academic environment who read without any particular academic purpose (no homework or classes to prepare for).

Finally, though I allowed for three main age categories, participants fell into only two of the groupings, 18-30 and 31-45. Age as a factor is important. For future studies I recommend a tighter breakdown in age brackets, perhaps: 18-25, 26-35, and 36-45. The following chart (Figure 1) visually represents the demographics of the sample.

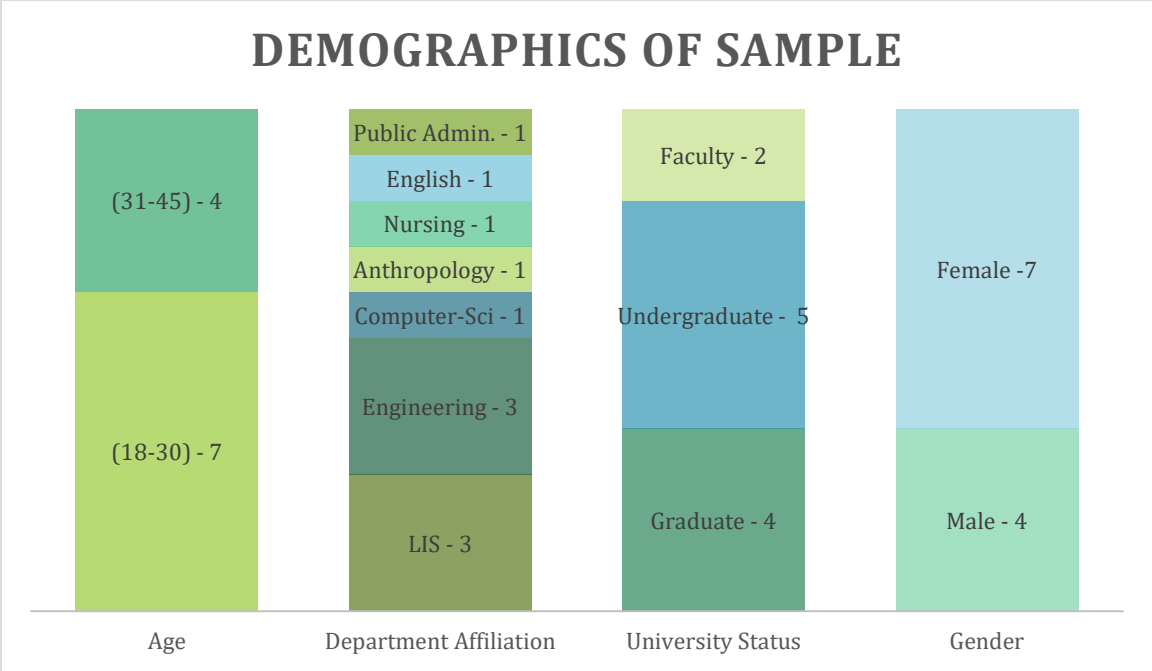


Figure 1: Demographics of Sample - 11 total participants

**Locations and Recording**

The setting of the interview was another facet of the interview process that I consciously considered. I tried to hold interviews in locations that were convenient for participants, in a somewhat unbiased, environment free from loud noises to better accommodate talking, listening and recording. For one interview, we had to shift the location twice. Despite the interview finishing up in a somewhat loud and crowded location, the conversation held steady and the recording came through nicely for transcribing purposes.

I did the majority of the interviews face-to-face. I also conducted two interviews via Google Hangouts. I audio-recorded all of the interviews through an app on my iPhone. I then used the recordings to create transcriptions so I could reference the interviews in a textual format.

I also had on hand a printout of all interview questions with white space to record participant responses. The handwritten responses were important in the analysis of the data collected from the interviews because I often had thoughts about what I was hearing at the time of the interview, which were almost forgotten by the time I was able to transcribe the recording. Having the notes from the physical copy allowed for renewed perspectives and helped emphasize certain aspects of the interview.

### **Interview Questions**

I was able to ask all participants the same questions. Often I found that certain questions were already answered in conversation occurring in response to previously asked questions. Many of them were interrelated, like questions about how their reading represents them or how they identified with their reading. Interestingly, the identity questions stood out for most participants. Many individuals asked what was meant by those questions. I often told them the questions were up for interpretation. After allowing them to contemplate the questions, I found many of their answers to be interesting and thought-provoking. Some questions may have seemed rudimentary, like the question about whether or not the person had internet access, but I still appreciated receiving an answer.

Sometimes I had to remind myself to sit back and appreciate the silence after a question was asked. Part of the learning process for me was in understanding how to let the participants ponder the questions before expecting an answer. Upon review of the transcripts, I found that there were a few instances where I bombarded the interviewee with follow-up questions trying to clarify my meaning. Unfortunately, my attempts at clarification confused the participants and they often stumbled deciding which question to answer. However, my interview skills improved

with each session conducted and I now understand the importance of silence in the contemplation of meaningful responses.

### **Other Difficulties**

A few other difficulties encountered with the actual interview process involved technical difficulties and the actual time required for conducting interviews. For example, unbeknownst to me, my recording device (my iPhone) shut off in the middle of one of the discussion and I lost half of the audio for that interview. Thankfully, I still had the physical paper copy to reference. Despite this is being a difficulty, I find that it is another example of the importance of the physical in the realm of reading and learning. Sometimes, the reliability of text on physical paper outweighs the extra features so attractive in technological devices.

## Results

### Iterative Analysis Phase I:

For this first phase of analysis, I examined the interview transcripts and highlighted comments or scenarios that stood out as important to this study. I especially watched for examples of sentimentality or nostalgia, convergence across formats and devices, bibliophile or collector mentalities, and the type of reading style or approach the participant seemed to take when reading, all of these examples being proposed expectations. I saw a few of these factors emerge along with other interesting concepts like spatial awareness, eye strain, linearity, and skimming versus in-depth reading. I coded my findings into nine general categories: Familiarity, Distractions, Social, Ownership, Nostalgia, Expense, Accessibility, Approach, and Space. Special concepts and ideas were listed as codes within each general category (Figure 2 shows the full list of codes and categories used). I then analyzed the data from the various category viewpoints to understand how they related to interrelationships between the participants and their reading.

Near the end of each interview I asked the participants to describe how they felt about the experience of reading overall. I expected everyone to say that reading is important—it seems like the *right* answer—and indeed, “important” was the most common description, but their reasons, as to why reading is so important to them, helped answer my main research question: *how do readers express feelings of connection with their texts in print and digital environments?* Their responses illustrate manifestations of connection as a means to escape or to have fun, to learn, to grow and gain perspective and understanding, to function, and even because it is the socially-expected, right thing to do. An in-depth analysis of the transcripts resulted in seven key

Familiarity	Distractions	Social	Ownership	Nostalgia	Expense	Accessibility	Approach	Space
Spatial awareness	Hyperlinks	Motivation: forced/free	Collecting Physical	Sentimentality	Cost of device	Note-taking	Efferent	Environment
Linearity	Noise	Convergence Theory	Collecting pdfs	Family or other times of life	Cost of book	Ease of access	Aesthetic	Comfort
Tabs	Temperature	Recommendations	Most people only buy physical	Environment	Value of physical outweighing cost to buy	Size (of screen)	Using a visual tactic to read	Separation / Individual space
Progression / Progress	Ability to access other programs	Participation	Don't want to give it away if they find it helpful or valuable	Fragility	Time	Portability	Memory, Retention	Temperature
Convention	Eye strain	Empathy / Understanding		Identity		Time	Skimming or in-depth reading "lost" in the reading	
Comfort / Discomfort	Comfort / Discomfort	Exposure		Exposure		Interactive	Learning	
Trust	Concentration	Interests		"Lost" in reading		Currency	Type of reading: academic vs pleasure	
Anthropomorphism	Environment	Currency		Emotion		Length	Convergence	
Exposure	Visual aspect					Multi-tasking		
Visual aspect	Time					Convergence		
Identify with	Multi-tasking							

Figure 2: Codes and categories used in initial analysis

concepts/themes that affect a person’s ability to connect with their reading, namely: Familiarity, Distractions, Social, Ownership, Nostalgia, Expense, Accessibility, Approach, and Space. At this point in the analysis, I chose to highlight the first three concepts, namely, Familiarity, Ownership and Accessibility.

**Familiarity.** Originally, I thought sentimentality would have a part to play as a manifestation of connection. For instance, I proposed that people feel connected to a reading source because of nostalgic memories associated with a particular book or story. Many respondents indeed mentioned nostalgic associations with reading; some spoke of a favorite childhood book while others shared stories of their youth and their parents’ influence. One person stated she would read because her single mother restricted outdoor activities, but allowed her to dig through all the books available at home. Another respondent said she “needed” books

in her life because of her dad's habit of being an avid collector of books. The need for books stemmed from experiences of their past. These experiences instilled a lifelong love of reading, providing fuel for future connections.

The need for books usually entails a physical aspect, partly because the traditional, physical print book is the familiar option. Most respondents grew up having first read print sources. As part of the interview process, I asked participants about their favorite books and then whether or not they would consider reading them as an e-book. A few individuals stated that they would consider the e-book option because it was the subject matter they loved about the book, but two people in particular mentioned that they would not want to re-read it in that type of format. Both individuals worried that the experience would not be the same. For these two people, the experience was the connection. The physicality of the reading source was just as sentimentally wrapped into the experience as was the content of the writing. The idea of re-reading the book at all created a worry of ruining the memory, but to then consider re-reading it as a source different than the original was unthinkable. These reading experiences were highly memorable, precious and cherished.

On the other hand, when questioned about their first memories of reading an e-book, many participants sputtered and struggled to recall such a time; they mainly wished to speak of physical resources. Though the majority of participants fell in the youngest age bracket, their exposure to digital resources didn't seem to be a strong influence until middle school age, thus their familiarity with reading sources is based on traditional print resources. No one truly felt they had a favorite e-book mostly because they preferred the familiar, the traditional print object.



Furthermore, participants want their reading materials in a familiar format for the actual reading process. My analysis from interview data consistently shows that the physical action of flipping a page or seeing a 3D representation of progress are important aspects associated with reading. When asked to relate their experiences of reading in an e-book format, many responded with negative comments related to an issue of not feeling right. In fact, *feel* or *feeling* were common descriptors used to illustrate the problem with electronic reading sources. For instance, here are a few responses:

- I guess for me I really like old-fashioned books that I can flip and bookmark...because I feel with the Kindle you're just looking and it doesn't feel right for me...It's too much into our technology.
- You don't have that feeling of progress when you're not turning pages. When you have pages or less [to read] you have to look at the page number, but just to be scrolling down this endless document, you never feel like you're getting anywhere.
- I think there's less of an intimate connection...I think it comes down to the tangibility because it doesn't feel like a real thing as much...plus it's fun to turn pages.
- One of my pet peeves with e-books is sometimes they don't show a page number. Most of the time I see they have a progress bar, but I'm like, what page am I on? Because usually they have the book and know how many pages, the page length of the novel, even if it's an e-book, but they don't show it. With paper books, you can see you have a page. You can kind of feel I'm almost done.
- The thing that I remember that was weird about reading e-books...I feel like I need to know the page...and even though I know it gives you the percent, I don't feel it's the

same...It's just that feeling of being almost to the end and being able to see or visualize where you're at.

- The con [of on-screen reading] is that you can't feel it, touch it, really get personal with it; it's less personal.
- I remember being really irritated by the way [the e-book] handles page turning...It wasn't fast at all if you want to flip back...but you can't do that on an e-reader. You're forced to read it very linearly. And if you skip forward, it's not the same like when you flip through the pages.
- Like with a physical book, you just have this feeling when you flip the pages. You can see how far or how close you are to the end. Like that exciting moment when you are just a couple pages from the ending or the end of a chapter. I like those feelings. But with digital, well it tells you what page you're on out of how many, but it's not the same.
- There's something about the manifestation of text on paper, especially with those kind of things that are very natural and kind of sensitive that I feel having a book is a little more powerful.

Flipping a page or visually seeing the progress, are physical characteristics that highly influence how individuals interact and connect with their reading. The familiarity of the physical reading object, like using page numbers and thickness of pages to determine progress, impacts connection. Until readers fully acclimate to this spatially flat representation, a feeling of unease will continue to pervade digital reading.

I did note, however, an interesting adaptation to the problem with spatial recognition associated with electronic types of reading. The phenomenon appears with online, hypertext

reading sources. One participant relayed his tactic of creating a type of linearity to his online reading by opening hyperlinks into new tabs. He then reads one web page at a time, continuing from left to right on the tabs lined up at the top of his screen. This strategy keeps his reading in a logical order—the order in which he clicked it—and thereby retains a semblance of spatial recognition.

One of the top reasons people said they enjoy reading is to learn. Learning is, therefore, a manifestation of connection. A few individuals mentioned how spatial recognition, or the lack of it, on digital reading sources affects their learning abilities. Memory of subject matter in location to where the information is found within the reading source was mentioned as part of the reading/learning process. For example, one participant stated:

The disadvantage [to reading online] is I just don't retain the information as well...I really think it's because the way I remember things is as a location...The location is not static on a screen, so my mind has a hard time assimilating the information just because, I don't know, my memory works that way, but it does.

Memorizing information in relation to a location is difficult without a set, dedicated position, which as the participant noted above, is not “static” in most online reading sources.

Similarly, annotations, which often help students recall important information to their mind, lose their functionality when they cannot create notes on a static page or in accustomed fashion. Note-taking seems to be such a simple, traditional part of studying. Many of the students mentioned note-taking as part of their reading process; they said that being able to write it—not type it—helped solidify the subject matter in their minds. These ideas, expressed by the study participants, match other research results on the effects of memory between handwritten and

typed work. For instance, one particular study found that “increased kinesthetic information from handwriting creates a more complex memory trace than created by typing” (Smoker, Murphy, & Rockwell, 2009, p. 1746). Essentially, the more physical the action involved in note-taking, the better a person remembers and comprehends the material.

Furthermore, pdfs and other digital reading sources often make the annotation process difficult, which impedes the reader’s knowledge and connection with the material. When questioned about the use of comment boxes, highlighting tools and other mark-up features available in pdf readers, participants seemed unenthusiastic, often stating that they chose to print out the document to have a physical copy for note-taking or annotating purposes.

I did note how a few participants found ways to adapt to the digital environment. One person in particular decided to keep a Google Doc of all his annotations, thereby creating a fixed space for all of his notes. Although the location is not directly connected to the text source itself, he can remember the spot on his document in relation to other notes. The format of the Google Doc is familiar, separated into individual pages so he doesn’t have to worry about the issue of scroll bars or issue of creating comment boxes that do not to show up in the margin.

This person’s note-taking strategy shows ingenuity and adaptability, but the worry of impermanence remains. As Rose observes, this Word-doc type of note-taking has only a “provisional utility,” and that “over time, their usefulness erodes” (2011, p. 520). Annotations, when used for studying, need the context of the material they correlate with, which is why many participants prefer writing on a physical copy of the text.

**Ownership.** Another aspect of note-taking documented in Rose’s study that I found in my own research related to the concept of ownership. Rose contends, “To comprehend

something fully is to ‘take ownership’ of it, and in order to own a text, I must hold it in my hands, scribble notes in the margins, underline, highlight and star important bits” (2011, p. 519). My creative Google Doc participant creates his sense of ownership by recording all of his notes, thoughts and opinions on all of the books he has read in his personal space, making the text to some extent, his own.

I, myself, relate to Ellen Rose’s statement; I annotate directly in the margins of my books and pdfs. If I have a pdf, I highlight it considerably and add comment boxes to keep track of my in-time thinking process. I invoke my own thoughts and opinions into the text through my notes; the subject matter then becomes part of my understanding and comprehension. As Georges Poulet suggests, “I am someone who happens to have, as objects of his own thought, thoughts which are part of a book I am reading, and which are therefore cogitations of another...I think something, that something becomes in some indefinable way my own” (1969, pp. 4-5). The more I understand the content, the it becomes my own and the more I connect with the text.

On the other hand, ownership and connection for others, isn’t necessarily about note-taking. One graduate student described how note-taking was not something she did to take ownership of her reading materials. For her, keeping the books in pristine condition showed her connection to the resource. This individual has a hobby of collecting books. She enjoys the “thrill of the hunt” and treats each find as a special object to care for. She does read the books, but is careful to keep the books in good condition. She also reads e-books and will collect them, but usually only when they are free. Otherwise, if she likes an e-book enough to buy it, then she will purchase it in print. She admits, “the only reason I would buy an e-book is that that was the only format available.”

I recognized this type of priority regarding ownership among some of the other participants in the study. I recorded four responses, in particular, which stated the person would read an e-book but would never buy it in that format. Another participant said she prefers to start out with an electronic version. She seems to test-drive the content with an initial reading, then if after a second reading she finds it valuable, she will add it to her collection, but as a physical version; she either purchases the physical book or prints out a hard copy of the pdf depending on its format. Interestingly, however, this person prefers to keep all of her readings, even if they are in an electronic format. When asked how she might recognize a manifestation of connection, she declared: “ownership.” She also stated that items she especially feels connected to get “prime space” on her bookshelf.

I also found that ownership signified connection because research participants found a sense of trust and permanence with physical items. One participant stated that because she would refer back to information for future teaching she needed something she could rely on, so she would prefer to keep a physical accessible copy. Another undergraduate student had an especially interesting epiphany during the interview discussion. In answer to my question, *how do print books figure into your reading*, he answered that he hated reading online, but he had recently read a fiction novel on his phone, “surprisingly.” He elaborated by saying he did this because, “I don’t think I’m going to have to refer back to it later. I don’t care about remembering what I read or processing it too heavily.” I pointed out that referring back to something seemed to signify an importance with print. He was really struck by the realization that, yes, that if he really cared about what he was reading, he wanted it in print. “I didn’t even realize I did that,” he remarked.

This same student said, “I straight up told my mom I’m not buying any of those online books...I want to keep it forever. I don’t want to have to look for it on a computer somewhere or risk losing it.” The physical occupation of space allows books to be held in higher esteem. And yet, ownership of digital reading sources also appeared as an important factor among at least three of the participants. One person, is a book collector, a book blogger and also book reviewer. She stated that she keeps all of the e-books she has downloaded. For one, she wants them accessible in case she decides to re-read them (which she admits rarely happens), but also to help for reference to the blogging and reviewing she does. Ownership and accessibility go hand in hand.

Another participant shared that she loves to collect and own the books for accessibility, but also for nostalgic or environmental reasons. Her comment:

I have a big, quote-unquote, collection. I haven’t read everything on the shelf but there’s literature, we have some atlases, there’s dictionaries, and sometimes even, it’s funny because even if I don’t read it, I’ll just go look on the shelf and read the spines and go, oh yeah, that book, or when I have free time that’s the next one I’m going to read...I guess I’m a packrat because books I read like freshman year in college and stuff, I don’t get rid of them because who’s going to want it or am I going to donate it to the library? And what if I want to read it again? So I just keep it.

Her response highlights how connected she is to her reading materials. She has sentimental attachments to them because of previous reading experiences with the material, she worries about what will happen to these beloved items, and also feels concern about accessing the information later. She shared that she has a similar affinity to her digital reading items, pdfs and

older crafting e-books. She said she had floppy disks from around eight years ago full of pdfs of craft projects she liked and wanted to retain access to. She said, “there were all these craft things online, all these pdfs how to do this, so I just mad-crazy downloaded them.” She said she has a problem accessing them now, but other pdfs she stores on her computer or on thumb drives for better access.

Similarly, a third individual was worried about losing access to a few helpful, free e-books during his undergraduate years. He wanted to have the e-books available to him later so he downloaded them because of a worry of loss of access. He said, “I don’t think that it was necessarily that I needed to own them, it was just that I wouldn’t have access to them later.” He also has a decent-sized physical book collection—items he accesses regularly—but there isn’t the same sense of urgency or worry to collect and save items like there is with digital items. I think even the worry about loss indicates a connection to digital reading. People devise ways to protect against that loss.

One last interesting factor to note regarding ownership is cost or expense to own. Three people responded that the benefits of owning the physical book far outweighed the cost of the item. One person had a neutral stance preferring to purchase both the physical and digital versions of books for different benefits, but cost wasn’t something to worry about either way. The majority of participants mentioned that cost was an issue as it related to textbooks, and they were all specific in their descriptions; textbooks were the drudgery when expense was a concern.

For one participant, expense was a huge priority. She shared that she doesn’t write in her textbooks because of resale value. She explained that there is always a worry of whether or not the book will be good enough to keep, but errs on the side that it will not be worth keeping and



refuses to write in or highlight the texts so she can sell it back if she needs to. During this discussion I mentioned that I enjoy writing in my books and do it often. Her reply, “I think if I had a second copy I would maybe be open to that.” I found this to be an interesting response. Not only does it highlight the importance of cost, but also ownership. Writing in something would make it a permanent possession, but the redundancy of owning two copies reflects a seriousness to really attaching herself to that item. To purchase a book and to write in it would be a true manifestation of connection for this individual.

Expense also crept into the topic of digital reading. Four people stated outright that although they preferred reading their pdfs in paper format, they chose to read them electronically (usually on a computer) because of the expense of the printing. Device cost was also a factor for people’s e-reading habits. I recorded comments such as:

The light source on the computer, it hurts my eyes. I know there are products out there like the Kindle that takes that [glare] away, but I don’t think I would pay for a device like that just to be able to read better.

and

I think [an iPad] might be a really nice medium for me, but I’m too cheap to buy one.

These comments demonstrate one way that digital reading counteracts connection, because of expense. Although the physical option is preferred for pdf reading, and students may connect more with the reading by being able to write on the paper copy—making it their own—the expense of the printing pushes away that option. Then, forced to read on-screen, readers hit another obstacle of expense with devices. Devices and software that perhaps better fit the needs of readers are pushed aside because of expense. I suggest that librarians take these dilemmas into careful consideration. If academic libraries could ease printing costs or provide device rental or

other device options at affordable prices, then I suggest that readers would be more prone to connection with their reading materials.

**Accessibility.** I mentioned accessibility in relation to ownership; it is important to discuss accessibility as its own factor because it also affects how connections are manifested between people and their reading. However, I should clarify these factors seem to be more an issue with people connecting with the reading source rather than the content of the text. Factors that affect accessibility are size, portability, time, special features, and convergence across various formats and mediums, all of which play part in the general importance of comfort and convenience.

When asked about preference of devices, most participants replied that they preferred laptops for reading. Their partiality was due, in large part, to size. For as one participant put it, “I like using my computer because it’s bigger and it’s just, you get a better grasp of things.” Although most participants had smart phones equipped with internet access and the ability to read an assortment of texts on their phones, the size of the screen was a great deterrent. Even the larger tablets or e-reader were mentioned as being convenient or comfortable to hold, but laptop screens are still larger and therefore preferred. Plus, laptops still have the extra benefit of being portable.

Also, on the subject of portability. One participant, who commented throughout his interview that he hated and mistrusted e-readers, wrote to me a few months after his interview to inform me of his purchase of an e-reader. He loved the portability of the device along with many other positive features that he absolutely raved about. He especially worried about the physical element of glare, but said that it was not an issue with the device he had recently purchased. His response demonstrates that the physical is just as important with the device, and when the device

truly covers all a reader's needs, then the reader can connect with the device and the reading. The real question then is how do librarians accommodate the many needs of its readers? Is it possible through a particular device? A seating arrangement? A dedicated space? This is where understanding the multitude of possible connections comes in handy. By understanding more fully how readers find connection with their reading (and their devices) librarians can incorporate spaces, learning areas and devices that help instigate being absorbed into the text.

Convergence across devices is very applicable to the idea of accessibility and connection. Most academic reading happens on pdfs, which are accessible online, but they can be read on a variety of devices (seen as a plus) or printed out (even better). My participants admitted to reading online and in print. One comment highlighted the ability to switch between apps or programs; the participant stated: "On most devices you can easily switch from one thing to another, from reading something to checking my email and back." She deemed it a positive feature.

Another participant shared other positive views of convergence across devices as. Specifically, he stated:

I feel like easy access to information, the way...the instrument was created to provide access to information for people...the way that it's moving toward now, is having easily accessible but also easily processible [information] for people. So, in some ways that can be good and in other ways it can be dangerous; it's like a double-edged sword.

This person was definitely wary of electronic reading, but he shared thoughtful comments on how accessibility of digital reading is a boon. He further shared a "pro" (as opposed to a "con") of on-screen reading saying, "the integration of multi-modal elements...this integration with text

with video, with slides, with interactive elements too. I think it's a pro." I think he is right. The visual element adds to the accessibility and promotes better understanding of information.

Other issues affecting accessibility include currency and hyperlinks. Currency is important, especially in science fields. Digital reading is vital to currency because the process of publishing takes so long (write-up, edit, review, acceptance into journal or book form, and then to actually print it and ship to various physical places). Being able to access current articles digitally is extremely helpful for academic library patrons.

Plus, participants do not always have the time to go to the library to find just the right book or article, which highlights another benefit of electronic reading sources. One participant, interestingly stated that when she has time then she reads books. Perhaps that is another reason time is a factor of digital reading and accessibility. In academia, with the mounds of reading to get done for classes there is less time now for books. Students expect to read many shorter articles. And yet, it should be noted that most students still make time for social media, both for the reading and the writing.

Last, hyperlinks were pointed out as benefits because of their ability to provide easy access in reading circumstances. For example, the two following quotes illustrate the appreciation for hyperlinks:

- "I think that links and hyperlinks and hover-over links have potential to create credibility within the text"
- "I love it when there's a link to just click to that and read that thing and then back."

I noted a sense of trust that participants placed in a text if the reading included links. Some referred to this as a form of reliability, that if it had a link then the content must be substantiated

elsewhere. Some also saw it as a form of credibility by being able to see where some of the information for the text came from.

### **Iterative Analysis Phase II:**

At this stage of my analysis, I revised my approach process and re-evaluated the categories I listed. I still knew that social, distractions, approach and space were important aspects of the results, but they (as well as the previous categories) needed to be regrouped into more solid, better defined themes. It was at this time that the second phase of analysis began.

During the process of writing out my findings under the general categories, I began to recognize trends that, upon closer examination, showcase real engagement with reading. I perceived a thicker meaning underneath and meshed between the general categories. As I took a step back and re-analyzed the collected data, focusing on these interesting trends, six themes emerged representing the manifestations of connection realized from this study.

#### **Comprehension.**

“The students valued literature as a means of enlarging their knowledge of the world, because through literature they acquire not so much additional *information* as additional *experience*.” (Rosenblatt, 1994, p.38)

Comprehension, understanding, awareness, knowledge--no matter what term is used, readers become engaged with their reading as they grasp a new concept or even experience. In the academic environment, knowledge is somewhat taken for granted. It's the reason we are here, to learn to grow, to expand our knowledge and understanding. Yet, I found that participants, all of whom seek knowledge and learning at the university, had different experiences related to the comprehension of the knowledge; without understanding it is just information.

I found that reading approach mattered within this context. Many of the participants mentioned differences in reading versus skimming materials. Digital reading is often skimmed for its information nutritional value, while pleasure reading—which often is read in a physical, traditional book format—is usually taken in at a deeper level. This isn't to say that participants didn't connect with their digital reading, but that their approach to the reading affected their comprehension, thus leading to their attachment to the material. For instance, one person stated she doesn't read through full e-books, she only skims them. Another person stated she cannot read for a long time online; she said: “when [I] read too much online, sometimes, I'm not reading the line after, so I'm not really straight...so I limit myself reading too long.” I see this as meaning that, in an online environment, she isn't able to read for long *and* fully comprehend the information. Thus, she feels less connection to that type of reading source in general.

Another factor is time to read. Readers need time to fully connect with the information. About a third of the participants specifically said being forced to read something in short amounts of time doesn't usually cut it; they can pull information they need for the next class, but usually because they have skimmed the book or article for quick relevant information. One particular student spoke of reading books from classes long after the classes were past. Being forced to read the material made him skim it for key points for class discussion, but no lasting comprehension was achieved. He admitted he barely perused the material during the semester the book was required, but found the subject matter seriously enjoyable and relatable later. Time mattered.

Ownership is another vital aspect concerned with comprehension. To have the text available, whether by ownership of the physical or ease of access via a computer, tablet, or

reader is extremely important to many individuals. Many participants hold on to their pdf readings just as much as their physical books so they can refer back to the material for further contemplation.

Also, as observed during my phase I analysis, taking notes upon the object, whether it be in digital or physical format helps the reader to connect by taking ownership. To repeat Rose's sentiment: "To comprehend something fully is to 'take ownership' of it, and in order to own a text, I must hold it in my hands, scribble notes in the margins, underline, highlight and star important bits" (2011, p. 519). Whether participants took notes directly on a physical or pdf copy or whether they made notes on a separate Google doc or physical piece of paper, they took the time to make notes to contribute to their understanding, to more fully comprehend and understand it through an action of making the text personally identifiable to something in their own experience. These actions of ownership show their need and desire for comprehension and reflect a strong manifestation of connection.

One other interesting factor that affected participants' intake and understanding of the reading content was the visual aspect. There is a convergence across devices, programs, and senses. A few people said they first read through the written information and then turn to YouTube for additional help. Another person compared reading fiction to television. She said the experience is like "watching how the story unfolds." Another individual said he reads through all the graphs and images in his academic reading first before he ever reads any text. He describes his experience:

I look at every single graph in the paper I'm reading and read the captions of the graph and then I go back and read the paper. So, I suppose yes would be the answer, that the

visual images...I probably get more meaning or use out of that than I do the words. It's hard to say, but I suppose the words give clarity to what you're doing

This clarity obtained through the use of both the visual and textual elements add to the overall comprehension and connection to the material.

**Lost in the Reading.** We've all had those moments of deep concentration, satisfaction fed by a story of fiction, a plot so interesting that you can't tear yourself away from the book. I have had experiences where a book is so engaging that I read straight through the day and well into the night until it was finished. I lost myself in the reading.

This type of total engagement showed up in a few of the interviews and weaved its way amongst many comments. A couple of people associated this phenomenon as a desire attached to the act of reading. When answering the question about ideal reading environment, one participant painted a picture of not only the environment, but the experience. She described: "my ideal reading environment would be a warm, sunny day on the beach. I can hear the waves, but the sun is not so bright that you can't see your page, and nobody's bothering you and you're just laying down and you're just lost in a good book." This ability to lose herself was an idyllic idea, one that she craved and one that I feel illustrates a form of connection between readers and their reading.

I questioned participants about engagement with reading sources, online hypertext reading and e-books specifically. Some were less doe-eyed about the process, one person comparing it to the craziness of trying to focus while surrounded by kids; her comment: "It's really hard to focus on reading with kids around, because they're talking to you all of the time,



asking insane questions, then I have to drop everything and go to Wikipedia and try to answer...it's kind of like hypertext then, having kids around."

Another person, however, claims he engages with all types of reading; he said, "When I get hold of something, a magazine or anything, I devour every single page, the ads, everything. I like to absorb the information." This same person shared that he still felt engaged by a digital format. In fact, if he was really into a text, then he would read it across multiple formats depending on where he was or what device was available. With one book series, for example, he said he preferred reading on a Surface tablet, "but [he] would go from the Surface to the phone to the whatever because I was interested in whatever was happening in the book. It's absolutely more the content than the device for sure." He also said he preferred the physical, but the content was at the core of what was most important.

I found other proofs of this type of connection with other interviews too. The physical is always preferred, but if the material fuels true engagement, then readers will get lost in reading via any format. For example, my book reviewer/book collector said she felt she is "more easily lost in a print book than in an electronic book," but acknowledged later that engagement still happens in other formats:

If I can get my mind focused and not get distracted, I can get lost in reading something electronically and just read it. And in that sense, if you're getting lost in your reading, you're connecting with it because it's engaging you.

Another strong example came from a computer science student who stated he "falls" into his reading. He describes his experience as being like a "third-person camera" creating the scene in his head and placing his mental reality into the reading scenario. He does this not only for his

fictional pleasure reading, but also when reading computer code. He explains, “for example, I’m actually picturing what the code will look like and what it’s doing and what the output is.” He places his mind in the context of the reading and completely engages with the content. It’s a very interesting type of engagement.

Approach, then is an important aspect of being able to process the information enough to get lost in the reading. An aesthetic approach, or reading to explore experience you have while reading, is also relevant to this theme, though I would argue that some people could perhaps get “lost” in social media or say a recipe book too. Intent to get something meaningful from the experience of reading, not just a casual spot of information aids in readers’ connection, comprehension and finally engagement with the reading.

I think it is important here to note that distractions also play a huge part in whether a person is able to find themselves *lost* in their reading. Distraction was a huge component of this study. Complaints registered from the participants mainly fall within the category of distraction. Every single interview transcript has multiple examples of distractions that frustrate reading experiences and impede possible connections.

Although participants complained of a few distractions related to physical reading sources, the most common distractions noted correlate with a digital reading environment. Problems with on-screen reading included matters of eye-strain, size of screen, glare, hypertext links, and even easy accessibility to other apps or programs. Many of the participants found themselves caught up in these distractions rather than engrossed with their reading. These types of issues are nothing new. Rose’s 2011 study highlighted many of these problems; her conclusion:

Most of the objects that we encounter in the world are ready-to-hand: as we seize them to perform a task, our attention is focused less upon the object itself than the activity we are performing with it...From this perspective, if students are conscious of their experiences with reading on-screen text, it is because its fundamental obstinacy breaks the momentum of their reading, allowing them to become somewhat disengaged from the reading itself as they focus on the unready-to-hand entity. (524)

Result from this phenomenological study lends further support for Rose's findings, but shows that these issues can be overcome when a connection with the content of the text is achieved. And when connection is realized and the reader finds herself completely engrossed—lost—in the reading, then these common distractions melt away.

**Willingness to Adapt.** Study participants often found a lack of familiarity frustrating. One reason they enjoyed and desired further reading experiences with the physical print sources was because these sources were familiar to them. My participants grew up reading traditional print books with individual paper pages to flip. They like the touch, the smell, the size, the feel of the book's weight in their hand. They appreciate the combination of using their senses of sight and touch to register their progress through a book. They assign importance of a physical item because of special, memorable instances in their life. I believe that when a reader is able to look past the familiar and try to adapt to a new type of reading format, they do so because they are interested enough in the subject matter to assign it a level of importance. I suggest this willingness to adapt also registers as a manifestation of connection.

Recently, I toured the health sciences library at the university. I was excited to hear the librarians speak about their patrons' desire for digital and online reading sources. They shared

how important quick access and currency was to their students' studies. One librarian argued that the push is continually toward digital. This library has the physical resources available, but they try to have other digital options available to their readers, who have found ways to use the quick and easily accessible pdfs from databases and e-books. The patrons of the library, the readers, adapt their reading habits to unfold and capitalize on digital sources.

My study participants also demonstrated adaptability in their reading. My favorite example of this willingness to adapt is the tabbed online reading of one participant. This person said he liked online reading and even appreciated hyperlinks when present. When he comes across a hyperlink in online reading, he opens it as a new tab and then will read, first the tab he is on, then the next tab, then the next tab, and so on and so forth. He creates a new type of linearity, a new page almost. This tabbed reading illustrates a connection because the person adapts the linear process of reading, and as Carusi describes, "in a hypertext, governed by the link rather than by binding, the reader creates his or her own path through the text and, in so doing, co-creates the text" (2006, p.167). Not only has my ingenious participant adapted to a non-traditional format of reading, but he has made it his own and is now a "co-creator"; the experience becomes more personal and meaningful, plus his comprehension of the subject matter increases.

Not everyone was as comfortable with the non-traditional formats of electronic reading. I highlighted spatial issues as a strong matter of concern after analyzing the interview transcripts. Almost every participant mentioned frustration with the status or progress bar listed on e-readings. Comments included:

- I like flipping pages...I like reading physical books for fiction 'cause I like to see how much I can read, how much I have to go. I can see I have this much left...like the whole progress.
- You know when you're reading something kind of boring and you're hoping to get to the end of it soon? You don't have that feeling of progress when you're not turning pages. When you have pages or less, you have to look at the page number, but just to be scrolling down this endless document, you never feel like you're getting anywhere. So one of my pet peeves with e-books is the format of the e-book...only a couple of them will show page numbers. Most of the time I see they have a progress bar, but I'm like, what page am I on? With paper books you can see you have a page. You can kind of feel like, oh hey, I'm almost done.
- I remember being really irritated by the way [the e-book] handles page turning. I think I was reading it on a computer. It wasn't fast at all if you want to flip back. The way I read...I'm going to skip ahead three pages and read ahead and then go back...but you can't do that on an e-reader. You're forced to read it very linearly. And if you skip forward it's not the same like when you flip through the pages.
- With a physical book, you just have this feeling when you flip the pages, like you can see how far or how close you are to the end, like that exciting moment when you are just a couple ways away from the ending or the end of a chapter. I like those feelings. But with the digital, well, it tells you what page you're on out of how many, but it's not the same, you know?

- [Speaking of first experience reading an e-book] It was a challenging read, to be honest with you, because I was reading it for a class and I knew I didn't want to assign the whole book, so I was trying to pull out chapters and it was really hard. Like normally, I would flip back and forth and have things tabbed, and it was really hard for me to do that in an electronic format.

These spatial complaints correlate with issues of familiarity. Readers are used to having a traditional, familiar process of getting from one page to the next. When someone, like my tabbed reader pushes beyond the familiar, he shows not only his willingness to adapt, but also that the material is important and worth the extra effort.

I noted other ways people combatted feelings of unfamiliarity associated with digital reading and ways study participants push themselves out of their comfort zones. Some individuals said that topics, such as concern for the environment, took priority over their level of comfort. Thus, they chose to read their pdfs on-screen rather than print out the information in hard-copy format (the preference). Other individuals adapted by focusing on the positive benefits of digital reading, such as quick links in the table of contents (to help overcome the problem of physical pages to flip through), searchability (the CTRL-F feature), and even the ability to highlight or copy/paste text. Other positive features noted by the participants, included the ability to quickly look up the definition of a word, or the ability to change the size of font for ease of reading (though one participant mistrusted this feature because he liked to see how the original format was created; he did not want to make it his own). Focusing on the benefits of digital reading led to a few more positive reflections and many admitted their appreciation for these features. Their appreciation implied a sense of connection.

One highly interesting example of appreciation (and connection), stemming from a participant's willingness to adapt, relates to an email I received from the student a few months after his interview session. During the interview, he stated that he really didn't like e-books or e-readers. He was especially concerned with the glare. Later, however, I received the following response via email:

So I just bought myself a Kindle, and I've got to say... After just a week or so, I'm truly in love with it. The technology has really come a long way. E-ink technology in the Kindle no longer flashes between every page turn and Amazon has really made great strides in optimizing the reading experience. I can carry 30 books in my back pocket now and easily mark them up and highlight parts I find interesting! The built in back light makes it easy to read in difficult lighting conditions as well.

Being stranded out in [X] for the summer without access to a library meant that I was stuck to finding ways to entertain myself, and I ended up spending the equivalent of around half a year's worth of Netflix to grab the Kindle. So far, I'd say this is the purchase of the year for me.

Plus, I've been doing so much traveling this year that it became hard to always find room to even pack two or so books in my tiny carry ons [sic]. The Kindle is so small that I can slip it in my jacket pocket or squeeze it between my papers in my backpack without worrying about losing space or damaging the pages in a borrowed book. And I can easily highlight pages and quickly look up words with the built in dictionary. With the rise in adolescent laziness (me) and our expectation to get everything given to us (also me), I've found that the ability to get my books dropped into my hands digitally means that I'm

actually the most excited about reading today than I have been in a very long time. I might read more book casually this year than I have in the past 4 years combined just because of the sheer convenience the Kindle provides.

What really got me though, is that I can check out ebooks from the Hawaii State Library even though I'm in [another state]. I absolutely love that feature. And I'll still be able to check out books when I travel...this fall. The "paper display" is not a pain on the eyes like an iPad or laptop screen, which means that it doesn't destroy my ability to fall asleep if I read it right before bed or on the plane.

However, if I'm reading a technical document or a journal article, there's still really no substitute for printing out the report and going to town with a highlighter and pen. Being able to truly milk every ounce of information from a journal or tech doc is just so much easier on paper than it is on a glaring screen.

But as for casual reading, my Kindle Paperwhite rules.

His highly positive response shows how once he opened up his mind to alternate, digital ways of approaching reading, that his attitude blossomed into an appreciation for the digital reading environment. His adaptability led to a heightened sense of connection to his reading material (equated by the increase in his interest for reading) and also the physical device that he utilized to access the text.

**Sentimentality.** In my initial analysis I perceived examples of familiarity with reading due to upbringing, parental influence, and other nostalgic experiences. I still feel my interpretation from phase I is correct, but feel it was termed incorrectly under familiarity. I won't



reiterate those examples extensively, but I want to emphasize the importance of sentimentality as an indicator of connection.

So much of this type of attachment relates to my initial proposal of sentimentality. I am pleased to note that I did, in fact, see this factor present in the analysis of the transcripts. Experiences and memories shared by various participants attest to the importance of sentimentality and connection. Nostalgia showed up as a vital part in some readers' lives. For instance, I refer back to the example shared previously of the two participants who said they would not want to re-read their favorite books because they were afraid it would ruin the original experience. They were connected to the experience just as much as they were attached to the book. Another example of this nostalgic power came from a student whose father had passed away when she was young. She felt very connected to a certain book because it reminded her of her father and the similarity between herself and the character in the book. Some participants felt reading habits stemmed from their upbringing or examples from their parents, etc.; in this way even their reading habits took on a sentimental vibe.

One last factor of nostalgia and sentiment is evident in participants' habits of collecting books (and pdfs). One participant loved just looking over her bookshelf, reflecting on certain books she had read at one time or another. Another person had special spots on her bookshelf reserved for beloved fiction or books she felt were valuable for various reasons. She said she reserved one spot at the top of her bookshelf for items that nobody else can touch; she expressed, "It's a special space. It's important."

Many other responses, previously mentioned in the ownership section, relate to sentimentality. I found that most participants held onto items of sentimental worth. Once

attached to a text, they kept it either as a physical item on a shelf or as a pdf in a digital folder on their computers. I appreciated this realization because it showed that even in a digital reading environment, people found themselves attached to their texts and these connections were manifested in terms of saving or collecting these valued items.

**Social Interaction.** I was surprised to note the extent of how social aspects affected reading. In our current society, social media is an easy example to reach for when applying a lens of social interaction, but I found instances of social interaction amongst participants who stated they didn't have social media nor did they like the idea of book clubs or other obvious social reading communities. Their responses also reflect a strong sense of connection to others through choices they make in their reading styles and processes. From social media, to the sharing of physical books or just book recommendations, to the forming of identities, and just reading to understand different perspectives, people read to connect socially.

Though I said social media is not the only social aspect of reading, it was, perhaps, the most common characteristic I observed. Some participants didn't at first recognize social media as examples of reading, but later noted that they did spend quite a bit of their time on these sites reading updates and staying *connected* with their friends and peers. One person said she reads Facebook not only to stay connected with her friends, but also the world. She expressed:

I get a lot of sources from social media so it definitely does [play into my reading].

Definitely. A lot of my news-type sources or current campaigning and politicking sources, a lot of my Facebook friends are working in Indian Law so I tend to get a lot of my indigenous political stuff from that. I just love that because I can get a tribal

newspaper. Someone will take screenshots of the tribal newspaper and, of course, you're not going to find that in most libraries. It's really rare.

She further states, "I really like [reading], but it's very functional for me." I found this a fascinating statement. The social aspect of reading helps her connect with her peers and the world, and adds to her ability to function overall in her life.

Another reason I believe social interaction registers as a manifestation of connection is because of the importance assigned to it by the study participants. Every single interview contained an element of reading and social interactions. Nine out of the eleven participants mentioned this importance in terms of recommendations from friends, both as recommendations coming from others or as suggestions to their friends of what to read. Many of the participants noted looking for reading suggestions via sites like Goodreads, but other recommendations came simply by word of mouth. Plus, one person pointed out that he read to keep up with his peers in academia. Knowing what the profession was reading and writing was essential to his career.

Some of the most fascinating examples of social connections to reading I observed, relate to book sharing. One participant's story, that arose in a discussion of books and preferences, was a memory of exchanging books between friends. She described how fun it was to swap books when she was a child. She happily remembered, "I lost many book that were never returned." When she looked back on the experience, she saw it with a positive light even if the physical objects were gone forever. She later said that she continued the practice well into college.

Others, including myself, also shared stories of lending out books for classes. I remember purchasing a used book for an astronomy course that had been highlighted throughout the chapters. I highly appreciated the previous owner, because the highlighting was extremely

helpful for studying. That previous owner knew just what to mark up. And, not only did I benefit from the highlighted text, but seeing how helpful the book was for me, a friend and classmate also asked to have the book after I was finished with it to aid in her own studies. That one astronomy textbook passed through three sets of hands (perhaps more), and became a real boon to our education. Without ever being able to realize it, the previous owner lent me “her” book because of the highlighting, and I was then able to, in turn, lend it to my friend. There was a somewhat indistinct, but real social interaction concerned with the reading of that academic textbook and the connections we all made with the subject matter and even with each other. I will never forget that textbook nor my experience with it.

Similarly, other people conveyed interesting memories of their experiences sharing reading materials. For instance, after sharing how my son and I like to still read and re-read his favorite comic books together, my interviewee gave this thought-provoking response:

Well, there’s an element of sharing, that strikes me, is why he wants to read it with you even though he’s read it a million times, because it’s so much more interesting when you can talk about it or you know that they shared the joke or that they had the same experience. I mean, that what I find with the books that I love, because I’m always trying to get other people to read them...I used to have this problem of collecting books and having too many books and going to used bookstores all of the time. I mean I stopped using libraries for quite a while through college because I just went to used bookstores. I want[ed] to *have* the books because if I told someone about it, then I wanted to be able to give it to them, like here, read this.

First off, she touched on the significant point of how much more enjoyable the reading experience is when you are able to share it with someone else. Then she showed how strong that desire to share is through her story of buying books she loved just so she could give them away to others, to share these precious treasures with others so that they, too, could appreciate the value of the reading experience. What a strong illustration of connection!

The inclination to share reading materials was not limited to just that one participant. Other people also spoke about sharing books. One of the faculty members I interviewed spoke about the process of reading to discover what would be good for her classes, for her students' reading suggestions. Furthermore, three participants said they regularly read aloud with their significant other. In this instance, the reading experience, as well as the reading material is shared.

I also observed how this sharing of reading and experiences affects identity. One of my interviews turned up some particularly profound thoughts on identity and the construction of community. In answer to my question, *do you identify with the majority of the material you read*, the student answered:

As an umbrella answer I want to say, yes, just because I think identity is constructed through the way that we interpret...the way we interpolate text...We view text as the subject and we view literature as this sort of thing with its own agency with the capability to change how we think. So I guess in this sense I identify with it just because it informs a lot of how I think and how I feel.

First, I'd like to note that his response illustrates a tiny example of anthropomorphism. At the start of this research I proposed that anthropomorphism demonstrates a manifestation of

connection because we anthropomorphize the unknown to subject matter familiar to our experience. This student's mention of text and literature as a "thing with its own agency with the capability to change how we think" is an instance of anthropomorphism. He uses this tactic to explain how the text affects us/him and the surrounding world. The student employs anthropomorphism a few other times later in the interview. Examples include:

- I think independently as a text it has its own life and agency...I feel that way with a lot of books too. [Context: Speaking on the connection of memory between class and the book read for that class]
- Speaking pragmatically, I think that with the advent of technology we have this fixation on becoming, of localizing the entire globe and connecting each other, and that's important, but sometimes books...physical books have this existence that's outside of this global scheme.

His usage of anthropomorphism emphasizes a strong current of feeling regarding his attachments to books, his view of their importance and function in the world, and how they (the books) affect people's connection to each other. Although I only had one interview with strong examples of anthropomorphism, I argue that the point is still valid, that anthropomorphism still manifests connection. Thus, the fact that these anthropomorphisms show up in relation to reading, identity, and social interaction, supports the argument that social interaction is thus a manifestation of connection.

Returning to the interview discussion. The next question I went with is the reverse of the first identity query; I asked, *how does the material you choose to read represent you*. He replied:

I think about faculty biographies, their research interests. I feel like the things we're interested in, in academia, continue to construct the way people see as professionals, or even as students. So, I think in that sense, text and things that we digest, and things that inform our practices do construct our representation...So, there was this girl reading [X] and we sort of got talking because I like that book too. So yeah, it constructs the mutual space...It constructs this representation; reading constructs the space of mutual intelligibility.

Let's unpack this response. First, similar to social media, the academic world utilizes facts or interests (research interests) to highlight academic identities. These characteristics are written down in biographies or author abstracts and read by various audiences interested in either the author, their work, or both. The biographies help to construct a social identity.

Moreover, as illustrated in the participant's experience, we, as social beings, identify with others who seem to share similar likes or interests. The student was drawn to interact with the other person because that person was reading a book he both liked and was familiar with. The reading source acted as a catalyst for a social connection, or flipped, the social interaction was a manifestation of connection between the student and the book he had read.

The digital reading environment is also ripe for stimulation of social connections. One participant keeps up a book review blog. She reads some books of her own choosing and many that editors or book publishers send her way. She also uses the online environment to reach out to authors. Her comment, "it makes [authors] feel more approachable online," struck me as a poignant remark. The digital reading environment has a way of breaking down social barriers and provides a level of access to others outside our realm of comfort and usual understanding;

it's ungendered, non-corporeal culture eases some social norms and provides avenues for social connections otherwise unattainable.

Last, the importance of gaining new perspectives was an important aspect of reading for individuals in the study. Participants read to understand or be understood by others. One thoughtful remark summed up this idea perfectly; the participant observed: "There's only so many things you can really understand and experience, but I feel like through books and other things you can understand different people, the way people view things, the way people feel." Another student shared an example of how this idea works for him. He related his experience of constantly referring back to a particular anthropological book because it helps him see "different viewpoints." He refers back to the book when issues arise amongst members of his various school clubs and keeps him "looking at things from an objective view."

Furthermore, one participant, in answer to the question, *what about reading do you enjoy*, said she liked learning about "different people's life experiences." She continued, "I like being able to step into someone else's shoes, to see what it's like to live in a different place and time and think in a different way." She connects with her reading because of its ability to help her understand others. She further stressed this opinion later by stating, "If there's something in the way that [the characters] think, that they express themselves, that you can relate to, then you can make a connection." While opening her mind to a different way of thinking or different type of person, the reading also helps her find commonalities in society.

Another participant claimed these commonalities might show up as "mutual suffering." The idea jokingly stemmed from the idea of preparing to discuss reading for class, but he then built off of the idea, speaking about texts, like the opera, *Tristan and Isolde*, or Toni Morrison's



*Sula* or *Beloved*, texts that are “painful to watch.” Reading this type of material helps create compassion and understanding, or as he further described, “mutual suffering isn’t necessarily bad, it’s just, reading certain texts creates empathy amongst people.”

This same thought-provoking participant also pointed out that besides reading to find empathy, it also helps “construct community.” Throughout the interviews I saw this phenomenon of creating and building identity and expanding one’s social network via reading habits. For example, my blogger/collector participant continues to build her relationship with her mother, while shaping her identity as a book collector by shopping for physical books. As I mentioned previously, another participant is working on an identity of being a peace-keeper by applying the concepts he learned from one of his books. Yet another participant related how reading her friends’ Facebook posts helps her stay current in the political arena and gives her a feeling of inclusion. And last, another participant shared how stumbling into an online feminist site opened his eyes to a new perspective and resulted in him “identifying with this broad community of people.” Speaking of this somewhat-new identity, he said, “I think a lot of current feminists and feminists following online is driven by an idea of a mutually-identifiable text.” And then, with the added aid of word of mouth, the ideas of the text reach out to wider audiences. “So,” he states simply, “it constructs community.”

**Space Matters.** The final theme discovered from the interview transcripts relates to my second research question: How can library spaces be designed to elicit and support these feelings of connection? To answer this question, I wanted to understand people’s concept of the ideal reading space, what distractions keep them from connecting to their reading and getting “lost” in the experience, and the role of current libraries in their reading habits. I found that many have an

idyllic, unreal idea of the perfect reading space, while others fancy the simple homey feel of their bedroom. Many technical factors come into play, like temperature, noise, seating, dust, etc., but other areas relate to how the social affects library use (i.e., separation or division of space is important, how “creepy” the place is, convenience of getting what you want and then going home to actually read). No matter the multitude of reasons, space can make a huge impact.

Common factors involved in the making or breaking of participants’ ideal reading environment included four main categories: temperature, noise, dust and lighting (see Figure 3). The majority of participants preferred a quiet reading area, but there were a couple of people who identified noise as a desired attribute. Often this noise equated to ambient noise from people surrounding them in a public setting to soft music playing usually by means of headphones. Two people said that cold was a problem for reading, and that unfortunately, libraries were usually the culprits of too-cold reading environments.

Common Factors				Preferred Seating		Library Environment	
Noise	Temperature	Lighting	Dust	Desk/Chair	Couch/Bed	Engaging	Not Engaging
5	2	2	1	9	7	7	4

Figure 3: Factors Affecting the Ideal Reading Environment

Dust and Lighting also factored into the library environment in particular. One person mentioned a few times throughout her interview how distracting a dust-filled library was. She

simply could not bear with dust, which is certainly an issue to be aware of in libraries. The lighting issue was somewhat less substantial as a concern. Of the two main libraries on the University of Hawaii Mānoa campus (Sinclair and Hamilton), one student claimed he preferred Sinclair because of better lighting. Another participant mentioned lighting in terms of the lack of lighting; she said that dark “creepy” corners of the library were somewhat helpful because they encouraged her to get her studying done quickly so she could get out of there faster.

The physical seating used for reading also showed up as aspects of space and reading success. Invariably, people prefer different types of locations to read at different times. The type of reading, though, factored in greatly to the choice of seating. The majority of participants wanted to lie down or lounge on a couch or bed for their leisure reading, while the preference skewed toward desk and upright chair (capable of promoting good posture) for academic or technical reading. This issue of preferring both types of seating for different times is reflected in Figure 3 and explains why the responses between the two columns equal more than eleven. Some people prefer both types of seating for different reasons.

Also reflected in the table is a tally of responses to the question of whether or not participants found the library to be an engaging place to read. The four that responded in the negative had a few differing reasons (one was very concerned with temperature and dust as mentioned previously), but other explanations aligned to give a better picture of what problems lay with the library as a reading environment. For one, the library was seen as a social spot. The extra noise of people talking or even passing by was distracting. One person mentioned it was a great place to listen for gossip. One simple reason for three of the participants, was the fact that alternate private spaces (office, bedroom or house) were preferred over the public space and

were fairly close to campus; it was a much more desirable option to go to the library, find what material was needed, and then head back to their preferred space.

Preferred space for some individuals equated into archetypal, perfect visions. I found that some participants craved an idyllic reading space just as much as they craved the perfect reading source. For example, here are a few descriptions of some of the more utopian desires accompanied by views of reality:

- Like in my dream house I would have floor-to-ceiling bookshelves, but I like reading on my bed because it's soft and comfortable and I can sit or I can lie down.
- Ooh, my ideal reading environment would be a warm sunny day on the beach; I can hear the waves, but the sun is not so bright that you can't see your page, and nobody's bothering you and you're just laying down and you're just lost in a good book.
- I have this image of this reading environment, but never actually had it. You know those little, library-type chairs, the leather chair with the reading lamp and a little blanket. That's how I want to read, but I've never done it like that. More practically I end up at my desk in a very comfortable chair, I like to have places where I can put things.

I appreciated the fact that these people had actual daydreams of perfect reading spots. I believe that deep down we all have those dreams of perfection, but as shown in the above examples, we also realize that the small, simple, functional features sometimes provide just as much, if not more satisfaction.

One reader stated that reading is functional for her. She also acknowledged that the majority of the libraries she had frequented throughout her life were functional rather than “gorgeous.” This thought struck me as an interesting remark to bring up and I contemplated the

importance of a beautiful setting for reading. Two of the participants above painted pictures of a beautiful house or scenic beach spot. More recently, a co-worker, telling me of libraries she had visited around the country, chose to focus on a few libraries' stunning architecture, while questioning the lack of attractiveness in our own library buildings. She mentioned that for her, she was drawn into spaces that fit the stereotypical beautiful library. She daydreamed of sitting at wonderful, wooden tables, opening up book after book and breathing in the information and the environment. I would argue that the beautiful does matter to a certain extent, if only for reasons of enticement. Having an aesthetically pleasing place to read soothes away some possible issues.

Still, the fact remains that the beautiful, the grandeur, did not arise as the most common labels found in my research. Comfort, comfy, comfortable were frequent descriptors when people shared preferences of where and what as pertaining to their reading environment. And, most participants seemed to actually have a comfy chair in mind. Perhaps, my favorite description of an ideal space was mentioned almost in the form of a sentimental memory. It involves an ordinary, everyday space, and entails, not a traditional book, but a digital reading source. She said:

I know it's really bad, [but] sometimes I'll read it, e-books, at night so that way I can turn off my bedroom light and I can still read. I can read in bed instead of having the light on and my mom coming and saying, "hey you need to go to bed." So she can't tell because I'm under the covers reading. It's just like I'm a little kid.

I think the comment illustrates that functional is still wonderful and if it's a space you appreciate (especially a private personal space) then you can still find ways to absorb and appreciate your reading.

This idea of private space also arose as an interesting aspect of ways library space either helped or hindered the reading process. Division or separation of space from other patrons was a particular benefit if it could be found. A few comments about this benefit are as follows:

- I like the study area by the pre-law area...because people are segregated. There's individual work stations that diffuse social activity, but the third floor area [of Sinclair] where there are more communal areas, sometimes it's a little difficult just because people tend to feel more inclined to socialize because...the interface looks like a school setting; it reminds them of their high school experience. It reminds *me* of my high school experience—the library.
- I feel like the tables [at Sinclair] are spaced out well enough and there's this more-or-less physical divisions [sic]. I mean, even with these tables there's a good amount of space between them...and on the third floor, I feel those desks are okay too because they have those little dividers.
- I prefer being in an enclosed area in a quiet setting.
- I like the set-up of the library. Like on the second floor, it's really cozy and there's barriers within, in front of the desk that separate you from the other person. So it just feels like a little cubicle or your own space to concentrate and read whether it's for academic or for your own leisurely purposes.

I found this idea of separation of space interesting, especially considering these dividers and separators are all in a public place. As mentioned in the previous theme, social interaction is an important manifestation of connection, but sometimes, the ability to be alone and find one's self “lost” in a book is just as appealing and must be accounted for as another important example of

connection. One participant's comment represented this dichotomy best when he said, "I think people want the pressure—the communal aspect of it—but they want the personalization of space and the personalization of their work area." The library, as a public space, must then be able to accommodate both types of connections.

One aspect of space I have not mentioned is accessibility of online types of reading and interactions in a space. When asked about device preferences for digital reading, most people preferred a computer. Laptops were the number one preference and all of them had their own. It stands to reason then, that having a space that accommodates laptop use is an especially great concern to invite and encourage connections in a digital reading environment. Having traipsed through the libraries on our Mānoa campus, I noted that the library space has good desks and chairs to prop open a laptop and even a fair number of outlets to accommodate the need for a power source.

However, given that many people mentioned that they prefer to use their computers just to access the reading source and then print out articles, etc., to do the actual reading, I would raise the concern over printing options. Reflecting on this concern, I realize I failed to question participants' ability to print at the library. I find that the physical reading source is still extremely important, even for born-digital materials. Until society is able to fully cut away from their beloved, traditional, physical reading sources (though I cannot believe this to ever be possible), then printing capabilities need to register at an expedient level of concern.

## Concluding Thoughts

Throughout the interview process, I listened carefully for examples of expected responses regarding anthropomorphism and nostalgic, sentimental memories of specific texts. I felt sure that those two items would be strong representations to note and eventually write about. I am pleased to note that I did find a few cases of these attributes expressed in the tomes of interview transcripts, but not nearly as many as expected. Also, I noted a few minor examples of bibliophilia and participation-type responses to reading, but these low numbers could be because of the small sample size I used. These (and other) disillusionments discovered through the analysis process reminded me to be open to the phenomenological approach I chose to conduct for the research. The significance is in the experience.

Perhaps one of the biggest discoveries in this research is how little I still know. Although I feel confident with my interpretations of connection, there are oceans of other literacy theories to apply to such a study as mine. That being said, the themes that I detected (comprehension, willingness to adapt, sentimentality, the importance of space, the phenomenon of getting lost in reading, and social interaction) came from the phenomenological, lived-experience of the participants in my personal study.

My results are similar to a few other studies I discovered along the way. Like Ellen Rose's 2011 phenomenological study of on-screen reading, I found that participants were not impartial. Many of my study participants love the physicality of traditional books and wanted to inform me of all the ways they disliked digital reading. At first, I felt discouraged, hoping to find more positive views of connection with, not only their print books, but online reading and pdfs read on a computer screen, for those types of reading are perhaps the most common expected



sources in an academic setting. Then, however, I learned to listen. I started to pay attention to their experience, to focus in on the trials, and question the small tidbits of reading they did elsewhere. Then I began to find the answers I was looking for.

I discovered that first and foremost, touch matters. The physical is still important and still very much desired. Though there is a push for digital sources that will continue, traditional print items will remain a staple for reading. The statement that originally sparked my interest in the project, Michael Camille's argument that the "institutional aims of the modern library have been to exclude the body from the site of reading, to make a...purely mental experience, a process that will only accelerate in the future with the increasing in-corporeality of the electronic word" is only half right (1997, p. 40). The "in-corporeality" is indeed steadily increasing, but reading has never been and will never be a "purely mental experience" (Camille, 1997, p. 40).

My research showed that people want to hold their books, they want to jot notes down on paper or type the notes into a visible document to *see* their connection to their reading. They want to purchase books or save pdfs to their computers to have ownership and easier accessibility to information. They utilize digital resources available and many of them like hypertext links while others find them distracting. In part, this effect is due to the approach the reader takes, but I ascertained more than just the two general approaches that Rosenblatt mentioned (1938). Aesthetic types of text did seem more inviting for in-depth reading, leading to comprehension and connection with the text, but I noted many examples that could be interpreted as both efferent and aesthetic type of reading. Facebook posts, for example, where readers started reading for light social purposes and ended up finding political treasures.

I think a combination of the senses is another approach not quite thought of in Rosenblatt's time, which mixes the visual words we see with the visual images and sounds of pictures or videos. For, as one of my participants stated, "different mediums of communication are, well a lot of people are caught up in this binary of physical books versus other things—other media—but in reality, books are just a way of communicating ideas." And now, books often converge with other forms of communications. It is an approach; it is an experience, one I perceived throughout the interviews. Plus, often touch still plays part in the visual world through the devices we use to access information, and as people learn to adapt, they find, like my overjoyed Kindle-purchasing student participant, that they love the new feel, look and excitement of digital reading.

Similarly, this excitement over reading sources continues in the realm of physical books. The sense of touch is still important in our contemporary academic library setting. My study revealed that although people are willing to adapt to digital formats to obtain desired information, the need for the familiar, traditional reading source is strong. The number one preference among my study participants was a physical book. The traditional book is what they grew up with, and what they know best. The reader expends little effort to figure out how to read from the book; they simply flip a page, and that rudimentary physical act is highly appreciated.

Thus, libraries must continue to provide the physical reading sources to patrons, even in an academic setting where pdfs and other digital sources are, perhaps, more prevalent. Even participants who stated that they preferred to read in their personal spaces (office, dorm room, home, etc.) had the expectation that they could visit their library and find the physical book they

needed. Regardless of where they performed the reading, they expect to have the option of a traditional book format available to them.

Although budgets must be expended on costly databases that provide the current and quickly-accessible e-books and journal articles, funds must still be set aside for print resources. Actions to take might be as simple as providing extra copies of expensive textbooks for popular classes, or perhaps creating a book exchange shelf for textbooks to be used for an upcoming semester. A book exchange shelf could also encourage aspects of social interaction that, as this study found, influences connections readers make with their reading materials.

Connection is happening in digital reading environments, but a solid attachment to physical books remains. Continual evaluation, paired with an ongoing consideration of various reading preferences, is vital when adapting physical library space. Libraries, still so important in achieving strong reading connections, should be functional (beautiful when possible) and recognize that though we need to spend the money for the databases, just as important is a place to read and print them out. Patrons need a communal but personal space.

My suggestion for best practice concerning libraries and the promotion of strong reading connection is: continue to stay aware of preferences, problems, and distractions with continual change, help accommodate adaptability, promote social exchange and interactions, and recognize the importance of the place for reading. I, personally, believe libraries have always striven to cultivate, foster, and stimulate learning, especially through reading. This research study hopefully adds insight and phenomenological examples to continue that ever-changing, non-ending endeavor of literacy.

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