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Taking an “Ecological Turn” in the Evaluation of Rhetorical Interventions

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Taking an “Ecological Turn” in the Evaluation of Rhetorical Interventions

by

Peter Cannon

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
with a concentration in Rhetoric and Composition
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bibliotherapy

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DEDICATION

To A.R. I couldn't have done it without you. Thank you.

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To quote Dr. Nathan Johnson, “this was hard.” This project, however, would have been far more difficult were it not for the guidance and support given to me by my committee. Furthermore, not only did they guide me when I often went astray and offer support when this project looked ineffable, they also became wonderful colleagues and friends. I also want to thank my co-author and friend Katie Walkup. It was her intelligence, insight, and drive about the topic of health ecologies that allowed me to do much of the work here in my dissertation. Finally, I would like to quote H. H. Munro who poignantly predicted the plight of the graduate student when he wrote, “All decent people live beyond their incomes nowadays, and those who aren't respectable live beyond other people's. A few gifted individuals manage to do both.” As a student working on an advanced degree, I would not have been able to finish my project were it not for the financial assistance given to me by the USF School of Information. The support given to me by the staff, faculty, and the USFSI Director, Dr. James E. Andrews, will always be appreciated.

TABLE OF CONTENTS

| | |
|---|----|
| List of Tables | iv |
| List of Figures | v |
| Abstract | vi |
| Chapter 1: Introduction | 1 |
| Differentiating the Rhetorical Situation and Rhetorical Ecologies | 6 |
| The rhetorical situation | 6 |
| Rhetorical ecologies: Privileging the flow of rhetoric. | 9 |
| Health Ecologies and Agency | 10 |
| What is a health ecology? | 10 |
| Revising the rhetorical situation | 11 |
| Neurorhetorics: A New Heuristic for Old Commonplaces | 15 |
| Research Site: DACCO Library's Health Ecology | 15 |
| Responsive Librarianship and Bibliotherapy | 24 |
| Therapeutic events in context | 30 |
| Research Questions and Data Collection for Studying DACCO | 31 |
| Research questions and a new ecological turn | 33 |
| Uncovering the Multiple Realities in a RL Scheme | 35 |
| Evaluating Narrative Events in a Health Ecology | 37 |
| Dissertation Chapters | 41 |
| Literature Review | 41 |
| Methods | 41 |
| Results and Discussion | 42 |
| Summary and Conclusions | 42 |
| Chapter 2: Discourse Calibration in Health Ecologies | 44 |
| Rhetorical Ecologies: Revising the Rhetorical Situation | 45 |
| Health Ecologies: A Unique Object of Study | 49 |
| Measuring Things: Everyday Issues Faced in Evaluation Practices | 54 |
| Traditional Evaluation and Rhetoric: Attunement through Phronesis | 57 |
| Neosophistic Rhetoric and Competing Discourses: Whose Phronesis? | 62 |
| Chapter 3: Ecologically Evaluating Therapeutic Libraries | 74 |
| AOD and Treatment Health Ecologies: Multiple Discourses | 74 |
| Development of the DACCO Library: From Concept to Health Ecologies | 80 |
| A TBT Model in Context: Tracing the Rhetorical Event of Genre Reading | 85 |

| | |
|---|-----|
| Chapter 4: Research Methods | 94 |
| A Neosophistic Methodology | 96 |
| Textual Analysis of Ecologies | 99 |
| Needs Assessment Survey | 104 |
| Resident Survey | 104 |
| Semi-Structured Group Discussion | 105 |
| Evaluation of DACCO Library Collection | 105 |
| Chapter 5: Results and Discussion | 107 |
| Textual Analysis of Ecologies | 107 |
| Results | 107 |
| Discussion | 110 |
| Needs Assessment Survey | 112 |
| Results | 112 |
| Discussion | 112 |
| Resident Survey | 113 |
| Results | 113 |
| Discussion | 115 |
| Semi-Structured Group Discussion | 117 |
| Results | 117 |
| Discussion | 118 |
| Evaluation of DACCO Library Collection | 120 |
| Results | 120 |
| Discussion | 121 |
| Chapter 6: Summary and Conclusions | 124 |
| How is a Health Ecology Different from Other Ecological models? | 125 |
| Agency | 126 |
| Focus of Inquiry | 128 |
| Audience | 130 |
| Exigence | 133 |
| Discourse | 135 |
| Metaphor | 137 |
| How can we Operationalize Health Ecologies? | 138 |
| Agency | 140 |
| Focus of Inquiry | 143 |
| Exigence | 144 |
| Audience | 147 |
| Actants | 149 |
| Rhetor | 150 |
| Discourse | 154 |
| Conclusions, Implications for Practice, and Future Directions | 157 |
| References | 158 |

LIST OF TABLES

| | |
|---|-----|
| Table 1: Features present in health ecologies and general rhetorical ecologies. | 127 |
| Table 2: Feature operationalization in DACCO's health ecology. | 142 |

LIST OF FIGURES

| | |
|--|-----|
| Figure 1: Bitzer's rhetorical situation (Gorrell, 1997, p. 396). | 8 |
| Figure 2: Text network analysis of <i>The Body Multiple</i> (2002). | 12 |
| Figure 3: Visualization of <i>Bodies in Flux</i> (2017). | 51 |
| Figure 4: A visualization of addiction and treatment health ecologies. | 76 |
| Figure 5: The distribution of addiction in health ecologies. | 78 |
| Figure 6: A visualization of the DACCO library health ecologies. | 85 |
| Figure 7: Cluster Analysis using Cosine Delta. | 108 |
| Figure 8: The results of the BCT analysis. | 109 |
| Figure 9: The results of the MDS analysis. | 109 |
| Figure 10: The results of the Network Analysis. | 111 |

ABSTRACT

This dissertation seeks to develop a new method for the evaluation and assessment of therapeutic libraries in a health ecology. To do so, I employ a modified version of Lloyd Bitzer's rhetorical situation as a methodological tool for the investigation of health ecologies by applying an ecological analysis to an alcohol and other drug (AOD) treatment center in Tampa, Florida. By modifying Bitzer's rhetorical situation schema and expanding the concept of health ecologies, I develop several innovations useful for tracing the impact of actants and rhetorical events specific to health and medicine. A major focus of this dissertation is a shift away from talking about ecologies of health and medicine to articulating the many features that make the *health ecology* an additional, but not distinct, object of study in a way that is useful for evaluating the effect of rhetorical interventions, especially where consideration of the rhetorical situation can be used to classify books for the DACCO library's health ecology. In order to study health ecologies, I focus on two research questions: 1) Extending the work of Walkup & Cannon (2018), how is a health ecology different from other ecological models, specifically in an AOD treatment facility context? 2) How can we operationalize health ecologies in order to use them to study a responsive librarianship text-based therapy scheme? The results of this study provide an example of using a health ecology to help classify books by developing a new methodology for the evaluation of library services in small health information centers that operate as part of a larger health

ecology. As such, I evaluate more than the flow of rhetoric. I also measure the effect of rhetorical interventions in health ecologies, including the actions of the audience/rhetor after the interventions have been introduced.

CHAPTER 1: INTRODUCTION

This dissertation seeks to develop a new method for the evaluation and assessment of therapeutic libraries in a health ecology. To do so, I employ a modified version of Lloyd Bitzer's (1968) rhetorical situation as a methodological tool for the investigation of health ecologies by expanding on the work of Katie Walkup and myself (2018) and that study's application of ecological analysis to an alcohol and other drug (AOD) treatment center in Tampa, Florida. By modifying Bitzer's rhetorical situation schema and expanding the concept of health ecologies, I develop several innovations useful for tracing the impact of actants and rhetorical events specific to health and medicine. A major focus of this dissertation is a shift away from talking about ecologies of health and medicine to articulating the many features that make the *health ecology* an additional, but not distinct, object of study. I hope to operationalize the health ecology in a way that is useful for evaluating the effect of rhetorical interventions, especially where consideration of the rhetorical situation can be used to classify books for the DACCO library's health ecology.

Rhetorical ecologies are complex (Edbauer, 2005). Ecological models focus on flows, crowds, materiality, and interactions. They are concerned less about the solitary speech act, and more about how agents react and adapt to the "shifting dynamics" in a

networked flow of associations (Ehrenfeld, 2018, p. 43). Rhetorical ecologies are metaphorically similar to the eddies in a tide pool, the tiny shifting micro-currents that effect how diverse organisms, such as crabs, snails, and isopods, live and survive. Expanding Jenny Edbauer's (2005) definition of rhetorical ecologies, I define health ecologies as the *interconnected networks of events that distribute agency through rhetorical circulation in a medical context*. While it should be understood that health ecologies are not discrete or distinct forms of the more general rhetorical ecologies, they are indeed different. One reason for this variance is the nature of health and medical discourse, and the health ecology's focus on events rather than actants. According to Christa Teston (2012), medical discourse is characterized by "competing perspectives, stakeholder values, specialty discourses, and the notion of what counts as knowledge [that] all contribute to the complexity associated with medical deliberation and decision making" (p. 187). Privileging a particular perspective, value, discourse, or expertise in a health ecology can have serious consequences, including prolonged illness or death. As Teston writes, millions of people "live in a persistent state of prognosis" (2017, p. 4). Shifts in a health ecology, enacted by events through objects, can amplify change throughout the various networks, leading to unanticipated results. Thus, health ecologies require somewhat more specialized rhetorical attention different from that normally used to trace ecological associations.

Another reason for their complexity is the material-semiotic nature of the associations in a health ecology. In her study of disease, Annemarie Mol's (2002) ethnographic analysis of atherosclerosis describes how "bodies, vessels, blood" form associations with "drugs, green clothing, knives, and tables" in a larger web of doctors,

patients, instruments, and practices (p. 20). Similarly, in her recent work on medical certainty, Teston (2017) employs the metaphor of “flux” to describe the evidential complexity that is the human body and all the associations necessary for the practice of medicine. For her, the “material-discursive negotiations with matter, movement, and time” are not unusual but rather the accepted ways of how one “does medicine” (p. 2). In the studies by Mol and Teston, we see the how material influences the networked associations of doctors, patients, and medical professionals, as it sometimes creates, but always guides, the cacophony of discourses in medicine.

While rhetoricians often seek ways to increase the agency of marginalized populations through discursive practices, this practice is not always easy in a health ecology. Medical discourse is often more about negotiation and less about articulation (Teston, 2017) when it comes to agency in a health ecology. The concepts of negotiation and articulation come from the related field of Technical Communication and concern the role of the author (Slack, Miller, & Doak, 1993). In the seminal work entitled *The Technical Communicator as Author: Meaning, Power, Authority* (1993), the authors draw from communication theory in order to create a new model of technical communication that privileges agency. The authors take time to discuss the views of “translation” and “articulation.” Under a “translation” view, the primary goal of communication involves the meanings of messages and how power has been negotiated between the sender and receiver:

theorists of the translation view consider the activity of the receiver to be just as constitutive of the communication process as that of the sender. Communication is not a liner process that proceeds from sender to receiver, but a process of

negotiation in which sender and receiver both contribute-from their different locations in the circuit of communication-to the construction of meaning. (Slack et. al, 1993, p. 20)

Thus, according to this position, communication is a negotiated process that takes into consideration the respective agency of the participants. The opposing view of “articulation” understands that identity is socially constructed, often through a struggle, where meaning is disarticulated and rearticulated. This perspective does not recognize the ability of some groups to adequately negotiate during the communication process because of the imbalance of power relations that often occur. Therefore, the communicator’s job as author is to “articulate” the views of those voices with less agency, adding authority and thus leveling the field (Slack et. al., 1993). Unfortunately, there are expert voices, those who may create an imbalance in agency, that are important in health ecologies. Therefore, instead of articulating one voice over another, the competing discourses need to be negotiated through a process of calibration.

Many ecological studies pay less attention to the term “agency,” and more attention to “mapping” or “tracing” the associations among actants. This concentration is most likely the result of ecological thinking’s purpose, which does not focus on the individual rhetor. It does not mean that ecological models are unconcerned with agency. Instead, they are looking at a larger picture, one of ebbs and flows. The problem with this “big picture” outlook is that it becomes difficult to evaluate and measure rhetorical interventions in a health ecology, as opposed to tracing existing rhetorical ecologies. Ecological thinking is good, but we should not forget that the practice of medicine is becoming more specialized and more personalized. When evaluating the “health” of a

health ecology, it is necessary to measure the effect of a given rhetorical intervention and whether it has led to an increased distribution of agency throughout the various networks of events. For this reason, the major focus of my dissertation is to develop a methodology that can measure *changes in a health ecology* after a rhetorical intervention (a rhetorical event) has been introduced.

This dissertation is also about developing a new methodology to study health ecologies that takes into consideration both the larger ebbs and flows of rhetorical events and the tiny eddies of discourse that spill, surge, plunge, and sometimes collapse on individual rhetors during or after rhetorical events have occurred. In doing this work, I ask what is a health ecology and how is it different from other forms of ecological thinking. Implicit in these questions are related issues, including the way I define agency and how it gets distributed in a health ecology, as well the way I define and measure rhetorical interventions. My object of study, the event of reading texts and the construction of narratives that comprise a therapeutic library scheme at a residential treatment center, help contextualize my study. Specifically, I am looking to use my proposed methodology to evaluate both a new text-based therapy (TBT) scheme introduced at the Tampa-based Drug Abuse Comprehensive Coordinating Office (DACCO) and the various rhetorical interventions employed by the therapeutic library for the benefit of the residents.

In this introduction, I orient my study firmly both in the rhetorical situation and rhetorical ecologies. I do this by tracing the origins of the rhetorical situation and its evolution from an isolated tool for evaluation to the development of rhetorical ecologies. I argue this evolution has had a transformational influence on how rhetoric understands

agency and discourse. Next, I introduce the concept of health ecologies as they were originally articulated by Walkup and Cannon (2018). I then expand this concept by distinguishing health ecologies from the more general notion of rhetorical ecologies. I next explain my revisions to Bitzer's original rhetorical situation and how this operationalizes health ecologies. (I will continue to develop these ideas in Chapter 2.) I briefly describe the role of neurorhetorics as a heuristic in my study and how it affects the way I contextualize my proposed methodology. I then describe my site and objects of study.

Differentiating the Rhetorical Situation and Rhetorical Ecologies

The rhetorical situation.

Published in 1968, Bitzer's work describing the rhetorical situation has endured despite coming under scrutiny from a variety of critics. According to Bitzer, a rhetorical situation is defined as

a complex¹ of persons, events, objects, and relations presenting an actual or potential exigence which can be completely or partially removed if discourse, introduced into the situation, can so constrain human decision or action as to bring about the significant modification of the exigence. (1968, p. 6)

Bitzer recognized three elements or "particularities" of the rhetorical situation: exigence, audience, and constraints. An exigence is an obstacle marked by urgency. It requires that something, anything, be done to correct or at least mitigate the problem. Not every problem, however, is an exigence. Bitzer noted that some situations – such as death or winter – cannot be modified. It is this ability to be modified that separates a rhetorical

¹ Bitzer's article (1968) makes reference to "context" (p. 5) and "complex" (p. 6). The term "complex" is addressed since Bitzer actually states that it is part of the definition.

exigence from a problem for Bitzer. Furthermore, an exigence must be modified by discourse. According to Bitzer, a leaky valve fixed by tightening it with a wrench is, in itself, not a rhetorical exigence. Thus, in order for there to be an exigence, it has to be an issue capable of being modified by discourse.

For Bitzer, the audience serves as a mediator of change. Every rhetorical situation requires an audience. The audience does not have to be the intended recipient. For example, the Gettysburg Address still serves as a rhetorical document even though Lincoln may not have intended for 21st-century readers to be moved to action by it. Bitzer distinguishes audience from “mere hearers or readers” (1968, p. 8). The audience must be capable of “serving as the mediator of change” (Bitzer, 1968, p. 8). Finally, Bitzer’s rhetorical situation includes constraints. Constraints are not necessarily negative but instead act to influence the rhetor and the actions taken by the audience. For example, a speaker may move an audience to take up the power of teleportation to reduce traffic congestion, but the inability to achieve this result with our present technology acts as a constraint. While this example is extreme, Bitzer lists some practical constraints, such as “beliefs, attitudes, documents, facts, traditions, images, interests, interests, motives,” and other such influencing factors (1968, p. 8).

Once the rhetorical situation emerges with the appearance of an exigence, an audience, and constraints, Bitzer adds two additional elements as responses: the rhetor and the discourse or text (Figure 1). These are additional elements because Bitzer recognizes that not all rhetorical situations are met with an appropriate response. Bitzer describes the engaged rhetor and discourse as “additional constituents,” even though

he states that the three constituents of exigence, audience, and constraints “comprise everything relevant in a rhetorical situation” (1968, p. 8).

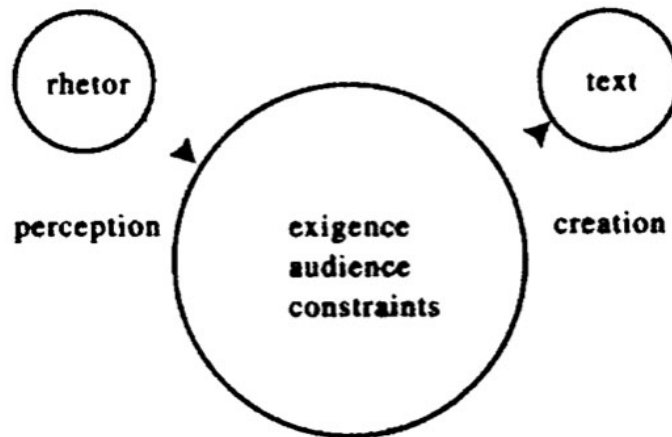


Figure 1. Bitzer's rhetorical situation (Gorrell, 1997, p. 396).

Criticism of Bitzer's rhetorical situation abounds. According to Richard Vatz (1973), Bitzer's situation incorrectly assumes that the rhetor "discovers" the exigence. Instead, Vatz proposes that the rhetor "creates" exigencies for an audience by choosing to speak on a topic. Scott Consigny (1974) attempts to find a compromise between Bitzer and Vatz. Consigny posits that both Bitzer's and Vatz's discussion of the relationship between rhetor and exigence is flawed because they do not take into consideration Aristotle's conception of *topoi*, or rhetorical topics, that lead to invention. For Consigny then, the rhetor does not discover or create an exigence, but instead, manages the problem while trying to find a solution. While these early attempts to revise Bitzer's work are still discussed today, they were not as influential to modern rhetorical

studies as Edbauer's 2005 revision, an event that is sometimes called the "ecological turn" in rhetoric (Ehrenfeld, 2018, p. 41).

Rhetorical ecologies: Privileging the flow of rhetoric.

Edbauer's (2005) treatment of the rhetorical situation is a major revision to Bitzer's model. Her critique is grounded in what she perceives as the rigidity of Bitzer's elements. Edbauer focuses on the flow of rhetoric and how each part of the rhetorical situation shifts from one ontological place to another. In other words, the "elements of the rhetorical situation simply bleed" (2005, p. 9). Edbauer, therefore, proposes the concept of rhetorical ecologies in lieu of the rhetorical situation. In so doing, however, Edbauer is careful to emphasize that she is not rejecting Bitzer's model since "one framework does not undermine the other" (2005, p. 9). Rather, she views her model as an augmentation to the Bitzer schema, something I submit is often forgotten by modern proponents of rhetorical ecologies. What Bitzer calls a "complex" can be conceptualized as an ecology. This dissertation builds on Bitzer and Edbauer's work to explore the concept of health ecologies.

Health Ecologies and Agency

What is a health ecology?

This dissertation privileges what Walkup and Cannon (2018) term "health ecologies." A health ecology has a flat hierarchy. It does not privilege human actors and allows for non-human agency in influencing health decisions. For example, when a consumer attempts to navigate the domestic healthcare industry, she encounters a myriad of actants that affect her ability to make decisions. The standards that classify some drugs as "off label" for particular conditions have the capacity to determine whether she

receives life-saving treatment. Health ecologies are comprised of *events* that distribute agency. A health ecology perspective accounts for this distribution of human and nonhuman actors exercising agency in a health decision-making framework. Walkup and Cannon (2018) introduce their concept of health ecologies in their study of residents in an AOD residential treatment program. In their investigation of mental health literacy at DACCO, Walkup and Cannon focus on those types of ecologies where health information, provider, and the patients' own beliefs formed an expanding network. [Scholars] theorized that these ecologies informed the patient's sense of self, and with the addition of mental health information, empowered the patient toward a new ontology of resistance and resilience. (2018, p. 112)

Thus, as shown in the quote above, it is possible to discern that the initial ecological tracing performed by Walkup and Cannon focuses on those distinct factors influencing the distribution of agency throughout a health ecology. These factors include the interactions between actants and health information, and the complications posed by the introduction of mental health issues. Thus, the initial work by Walkup and Cannon is concerned with traditional notions of agency and the empowerment of the DACCO residents. My dissertation builds upon the initial assumptions in Walkup and Cannon's original study in many ways, but privileges the assumption that there are other important discourses, not just ones of "resistance and resilience." In other words, there are many competing discourses in a health ecology. Each of these competing discourses is different, and depending on the context, each may also be legitimate. There are "multiple subjectivities" that take into consideration the discourses of the patients,

medical professionals, administrators, legal authorities, and policy experts, to name just a few.

Revising the rhetorical situation.

In order to calibrate all of these competing, and at times, legitimate discourses, a new application of agency is necessary as well as a new way of dealing with probability. In other words, when faced with imperfect information in a rhetorical situation, how do we choose the best available option? Will a traditional view of expertise be sufficient when it comes to whose voice is most important (Herndl and Graham, 2013)? As I discuss in more detail later, the constraints in my revised model work to define the relationships in a health ecology, creating a discursive roadmap of the competing voices. **Thus, a health ecology is different from a traditional rhetorical ecology because of the necessary calibration of competing discourses.**

In this dissertation, I follow the same path and augment Bitzer's (1968) rhetorical situation and Edbauer's (2005) rhetorical ecology by revising key elements of both in order to measure the effect of a rhetorical intervention. First, I divide the five elements of the Bitzer's old model into two groups. The first group in my new scheme comprises the "situation elements" of exigences, audiences, and limiting actants, the last a replacement for constraints that reflects Edbauer's contribution to Bitzer's schema. The second group in my new scheme comprises the "intervention elements" of rhetors and discourses. Together, these two groups come together and form a rhetorical health ecology. In Figure 2, I conceptualize what health ecologies might look like by conducting a text network analysis using the Voyant suite of computational tools (www.voyant-tools.org) on Mol's book *The Body Multiple* (2002).

Third, I discard the normative conception of “illness” or “disease” and the often-destructive public discourse related to those terms. Instead, I focus more on a condition’s *salience to* an individual rather than its *presence in* an individual. I prefer the concept of a condition’s salience for two reasons. First, it ontologically neutralizes the performativity of disease, especially when it involves addiction (Graham, 2009; Mol, 2002). Second, it allows me to borrow from the well-established literature on information-seeking behaviors and the Comprehensive Model of Information Seeking (CMIS), specifically those antecedents that affect the way individuals search for health-related information (Johnson, Andrews, & Allard, 2001; Walkup & Cannon, 2018). Loosely defined, a condition’s salience is the level of significance a person places on a condition and its related health information. In other words, salience is how important a specific condition (i.e., opioid addiction) is to a person. In a health ecology, such as the one I study in my dissertation, salience is far more relevant than the identity of a socially constructed disease, especially when one attempts to measure the effects of change over time.²

Fourth, I calibrate the often-competing discourses in a health ecology by privileging neosophistic rhetoric. Unlike other forms of rhetoric, neosophistic rhetoric relies on *alêthia*, a term used by Gorgias to mean relative truth, to construct *eidô*, or empirical knowledge, that is arrived at communally. These two concepts, which will be discussed later in the next chapter, stand in opposition to the essentialist conceptions of absolute “Truth” and *a priori* knowledge (*epistêmê*) championed by Socrates and Plato.

² As will be discussed in more detail later, there is a difference between *disease* and those *symptoms* that may be evidence of a disease. A disease may be considered a thing – something that is open to debate. An object, such as a symptom, is not. Symptoms are embodied by individuals and reflect their personal histories and identities.

A neosophistic rhetoric can allow for competing discourses in a health ecology by acknowledging the legitimacy of conflicting viewpoints and calibrating these discourses based on context.

Finally, I employ a new metaphor in discussing health ecologies, *perfusion*, moving away from Edbauer's (2005) use of "viral" movement to understand how agency flows in a health ecology. According to perfusionists, the term "perfusion" is derived from the French verb "perfuse" meaning to "pour over or through" (www.perfusion.com). I make this move for two reasons. First, the use of a perfusion metaphor seems more appropriate in a health ecology, especially in situations where patients may actually be dealing with a deadly viral infection. Second, I find the use of a perfusion metaphor more conducive to understanding agency as the distribution of change over time. Thus, I define perfusion in a health ecology as a rhetorical method of distribution that privileges symbiotic receptivity in flow. Metaphors, in general, perform an important function in legitimizing medical technologies. Graham's (2009) discussion of Latour's "black boxing" provides an example where PET scans, an important agent in the recognition of fibromyalgia, required "metaphorical references to a nested suite of prior technologies" in order to be accepted by the medical community (p. 388). Specifically, PET scans were referenced to CT scans, which were previously referenced to x-rays, which were previously referenced to (and legitimized by) photography. This metaphorical foundation of "turtles all the way down" allows us to accept new technology by its reference to prior technologies. Thus, having the right metaphor that can be both flexible and stable is important in my dissertation. The reference to the

biological process of perfusion is useful because it is easily pictured, especially when I discuss an ecological flow of agency and discourse.

Neurorhetorics: A New Heuristic for Old Commonplaces

This dissertation employs neurorhetorics as a heuristic, a way to interpret data through theory (Walkup & Cannon, 2018), to investigate how agency and language intersect in a health ecology. This heuristic has two functions as it helps us understand both the *rhetoric of neuroscience* and the *neuroscience of rhetoric* (Jack & Appelbaum, 2010; see also Harris, 2013). In other words, neurorhetorics first examines the persuasiveness or “rhetorical appeal, effects, and implications” of the prefix *neuro* when it comes to studying treatments for behaviors like AOD addiction and the discursive practices related to the neurosciences (Jack & Applebaum, 2010, p. 406). Second, it then seeks to work with and engage those in neuroscience to understand how rhetoric is coded and decoded in the brain, while understanding the potential problems this approach may encounter (Jack & Applebaum, 2010). Generally, a neurorhetorics approach allows researchers to look at old commonplaces, those traditional topics of inquiry first articulated by the Sophists and then systemically described by Aristotle in his treatise *On Rhetoric*, through a new heuristic “lens.” While scholars are free to choose either path in their research, using both in this study provides a heuristic for this unique issue.

Research Site: DACCO Library’s Health Ecology

This case provides one example of using a health ecology to classify books. Specifically, my dissertation stems from a grant-funded initiative for the creation of a library and library services for the women residents of the DACCO facility, a drug

treatment center in Hillsborough County, Florida. The women's residential program is an 88-bed, 8-month treatment facility located at 4422 E. Columbus Drive in Tampa, Florida. DACCO is the largest comprehensive substance abuse treatment center in the region. The library project evolved from course work for my Master's degree in Library and Information Science at the USF School of Information (USFSI). My initial interest stemmed from the fact that the DACCO residents did not have a library or access to library services. The project eventually evolved into a collaboration between the USF's Shimberg Health Sciences Library, the USF main library, the Florida Mental Health Institute Research Library, USFSI, and the Tampa Bay Library Consortium (TBLC). The initial funding for DACCO's library came from an American Library Association Carnegie-Whitney Grant award to investigate the creation of mental health library collection (Shereff, Palmer, & Cannon, 2017). The funding source was a Library Services and Technology Act (LSTA) grant that focused on information access and information empowerment through special services. The LSTA grant targeted library services to individuals of diverse geographic, cultural, and socioeconomic backgrounds, to individuals with disabilities, and to individuals with limited functional literacy or information skills.

At the time of the initial ALA and LSTA grants, the women residents of the DACCO program did not have access to library materials or services, either in the facility or out in the community. While DACCO is a non-secure facility, meaning the residents could leave the program and facility at any time, there were restrictions placed upon them. For example, they did not have access to cell phones, the internet, or any materials that may cause them harm. If they left the facility without permission, they

were expelled from the program. When the DACCO library was first created, the women residents did not have access to reading materials and reference services, and they knew very little about their own health or where to find reliable information that could be used for themselves or their family. The initial mission of the library was to offer library services in a way that supported the educational, recreational, and rehabilitative outcomes of their treatment plans. Reference services were offered in order to allow the residents to investigate any questions they have about their treatment in order to gain empowerment over their recovery. Proper health literacy was an important service offered to the residents. Access to health information is considered critical to consumers and produces better health outcomes. Studies have shown that providing information to consumers increases their involvement in decision making, resulting in better satisfaction with treatment choices. This increased information provides the residents with a sense of self-efficacy, which will increase their belief in the existence of better treatment outcomes. Finally, the DACCO library provided appropriate titles for use in bibliotherapy treatment as an adjunct to the substance abuse treatment program (Shereff, Palmer, & Cannon, 2017).

This study evolved over a period of five years because researchers (and those who graciously guided them) found more questions than answers. Developing a new TBT model as part of a larger treatment scheme was not the original goal of this research. After the initial idea for a therapeutic library in a residential treatment center was proposed in 2013, it was considered a “done deal” and a success story when the library opened during the summer of 2015. The scholarly work and theoretical basis for its treatment model had been established and “completed” during the intervening two

years, creating what was, at that time, the first ever three-track bibliotherapy scheme in the nation (Shereff, Palmer, & Cannon, 2017). Any additional work would come from improving its services and growing its modest collection of 400 titles.

Even though the library seemed successful, being popular with the residents at the DACCO treatment center, there was always a nagging question: why was this working? In Latourian terms, the library had become a black box, where mystical forces operated in a way that helped the residents with their AOD addiction treatment. Books would go in and positive health outcomes would emerge, but the “whys” and “hows” of this therapeutic model remained somewhat of mystery when it came to this population of women addicted to AODs. Why were they reading to get better, and equally important, did their diagnosis matter? As a field, library science can be overly practical. The profession devoted to the organization of information, an ancient endeavor going back to Sumerian times, once focused more on shelving books than solving “the science information problem” through new lines of research inquiry and theoretical development (Johnson, 2018). Even though the field has evolved, there is still a debate within the profession as to whether it is more of a practical profession than a scientific discipline (Budd, 2006; Hjørland, 2018). Despite this outlook (and perhaps a little because of it), the DACCO library continued on with the belief that the three-track system was the best way to deliver TBT services (Shereff, Palmer, & Cannon, 2017).

Originally, DACCO’s bibliotherapy three-track scheme engaged the residents using cognitive behavioral therapy (CBT), affective treatment techniques, and visual-based materials. Bibliotherapy using CBT relied mainly on self-help books that worked to correct negative behaviors by offering alternative, positive actions. Affective

bibliotherapy at DACCO relied upon Young Adult (YA) fiction designed to aid treatment by having the residents identify with a story's character, creating a connection between the circumstances in a story and the resident's own personal issues. Finally, the visual-based materials used at DACCO, such as graphic novels, often utilized both affective and CBT techniques. When DACCO was established, the gains achieved in CBT bibliotherapy illustrated that the most important element in cognitive bibliotherapy was the content of the program and not the individual interactions with a therapist (Cuijpers et al., 2011; Detrixhe, 2010). Bibliotherapy using CBT had been empirically tested the most and thus, for DACCO librarians, it fit the discourse needed to establish bibliotherapy's therapeutic value to the Mental Health Professionals (MHPs) (Brewster, Sen, & Cox, 2010; Cuijpers et al., 2011; Pardeck, 1991). Pardek's (1991) analysis on choosing books was quite instructive when the collection was being developed for DACCO since much of his criteria mirrored what librarians instruct in information literacy (IL). For example, these considerations included the authority of the author on the topic, the type of empirical support offered for treatment claims, the existence of studies testing its clinical efficacy, and a comparative review of other books. Thus, when the DACCO library was established, the librarians approached collection development from more of an IL standpoint than from a research position.

The library science research on using fiction in bibliotherapy was not as plentiful or rigorous as hoped when DACCO was established (Detrixhe, 2010). Much of the affective collection development was based on the work of Betzalel and Shechtman (2010), Shechtman and Nir-Shfir (2008), and Shechtman (2006). These studies were important in investigating the use of fiction for bibliotherapy, but they were not without

their faults. For example, in her work on counseling aggressive boys, Shechtman (2006) discusses the deficits the children exhibited and describes affect disorders with symptoms of emotional arousal, low levels of empathy, and difficulties in self-expression. Using an integrative treatment scheme whereby the patient explores the problem, gains insight, and commits to change, Shechtman (2006) found that using affective bibliotherapy techniques achieved therapeutic change with gains in empathy and insight. Critics of this research, however, found it difficult to replicate since these studies failed to provide the necessary detail about which books were used and in what manner. Despite these limitations, the DACCO research group could not find anything better. Thus, for the DACCO library and its initial collection development policy, this research provided an adequate basis for integrating fiction into the overall scheme.

The final track relied upon during DACCO's collection development included visual-based materials, such as graphic novels. In the simplest sense, graphic novels are long-form comic books, usually 100 pages or more in length. Application of graphic novels in this context allowed those residents struggling with literacy to have access to more materials. Dozens of graphic novels have been published over the last decade, and they address public health topics, such as depression, drug abuse, and PTSD. Public health-based comic books originated in the 1940s, and these earliest public health comics averaged around 12 pages and were aimed at preventive instruction for children. Over the last fifteen years, however, the genre has evolved and public health graphic novels are now commonly 150-pages long and focus more on adult struggles with physical or mental illness (Schneider, 2014). In fact, this change has received the attention of medical professionals who gather and evaluate these materials at the

website *Graphic Medicine*. This group hosts an annual conference to discuss the use of graphic novels and comic books in health, and a majority of the visual material collected for DACCO came from this organization (Palmer & Cannon, 2017).

Much of the initial collection development policy relied on research that indicated graphic novels were an effective tool for people struggling with literacy and communication problems (Schneider, 2005). Since they also have been shown to be effective with populations that have trouble with traditional literacy instruction (Snowball, 2005), the librarians at DACCO thought that these materials would be helpful in the overall plan to deliver mental health literacy services. In addition, since resistance to learning can take many forms, some of which can be seen in populations involved with the criminal justice system, the librarians at DACCO felt that graphic novels offered a useful alternative to the affective bibliotherapy track. In addition, the librarians at DACCO had to establish the graphic novel as a legitimate treatment vehicle. Although concerns about graphic novels have become less frequent, much of the initial research in the collection development policy involving graphics novels addressed the validity of this medium as literature.

Bibliotherapy services at DACCO were aided by the development of a centralized bibliotherapy resource to be used by the MHPs and the librarians. Modeled after successful decision support systems in the medical field, the Decision Support System Catalog (DeSSCat) aided the DACCO librarians in finding the right resource for a resident's bibliotherapy needs. The DeSSCat was the first truly integrated, web-based bibliotherapy discovery tool that offered MHPs and the DACCO residents the information they needed to choose the right book for their treatment plans (Shereff,

Palmer, & Cannon, 2017). This database was designed to be more useful than traditional bibliographies and existing databases in four ways. First, the content used to populate the database was to be created by professional librarians using controlled language and taxonomy developed specifically for this project. Second, unlike existing databases, the DeSSCat was to focus on clinical use by mental health professionals. Third, categorization of the content was more aligned with clinical standards. Lastly, it was to be the only bibliotherapy database to combine affective, cognitive, and visual materials. The DeSSCat was a powerful discovery tool that was searchable and organic in its ability to be quickly updated to reflect new titles and treatment options. The purpose of this database was to better organize books used by mental health professionals, librarians, and the general public and to allow for easier and more refined searching, as well as utilize Web 2.0 functionality. It was designed to incorporate data input and data searching capabilities (Shereff, Palmer, & Cannon, 2017).

The librarians modeled the DACCO library after the library bibliotherapy program operated by the James A. Haley Veteran's Hospital (JAHVA) in Tampa, Florida, under the U.S. Department of Veteran Affairs. The JAHVA assists veterans with both physical and mental rehabilitation, and this most recent group of veterans has brought mental health concerns such as post-traumatic stress disorder to the forefront. Like the other VA hospitals, the JAHVA employed bibliotherapy as both a stand-alone treatment and in conjunction with other therapy methods, and used the VA bibliotherapy resource guide (Department of Veterans' Affairs, 2009) for text selection. The VA's experience in using bibliotherapy to assist veterans in handling mental health issues was a good model for the development of similar services at DACCO. The VA includes mental health facilities

that host patients with a restricted ability to leave, sometimes known as Acute Recovery Centers (ARCs). The DACCO librarians found that the JAHVA operated a successful bibliotherapy program for many of its patients, including those on restriction in its ARC, a population that was analogous to the women residents in DACCO.

The overall scheme of the therapeutic library at DACCO was loosely modeled on the bibliotherapy programs developed in the United Kingdom (Brewster, Sen, & Cox, 2010). Today, the use of bibliotherapy techniques is more predominant in the UK than the United States since in the UK, there is a national policy that promotes wellness and the use of bibliotherapy techniques is consistent with those goals. There are several programs in use in the UK that promote bibliotherapy in public libraries (Brewster et al., 2013). One program, called “Read Yourself Well” (RYW) is a collaborative scheme where libraries, medical professionals, and patients use CBT practices that include mostly self-help bibliotherapy texts. One study of the RYW program found that library-based bibliotherapy was effective in treating mental health problems when compared to other treatment models that did not incorporate reading therapy. Other programs such as “Books on Prescription” provide similar cognitive-based bibliotherapy with equally effective outcomes. The “Reading and You Service” (RAYS) is an affective bibliotherapy program that relies upon fiction and reading groups, and initial data from this model indicates that it is popular with patients and similarly effective (Brewster et al., 2013). Regardless of the model, bibliotherapy schemes in the UK place a therapeutic value on reading and find that it is useful to the practice of medicine.

My dissertation is designed to develop a new methodology for the evaluation of library services in small health information centers that operate in a larger health

ecology. In explaining how her model contributes to the scholarship on the rhetorical situation, Edbauer (2005) posits that ecological thinking encourages us to study the flow of rhetoric within a wider ecology than its individual constituents. In this dissertation, however, I am seeking to evaluate more than the flow of rhetoric. I am also endeavoring to measure the effect of rhetorical interventions (i.e., events) in the wider ecology, including the actions of the audience/rhetor after the interventions have been introduced. Naturally, this process is iterative. Once outcomes have been measured, it is necessary to introduce modifications to the health ecology. In this respect, my revised model is pragmatic in that it seeks to solve an existing problem at the DACCO library. In order to measure these outcomes, it is important to understand each element in the situation and intervention, prior to and after the introduction of the intervention. In other words, this modification of the rhetorical situation allows me to operationalize the DACCO library's health ecology.

Responsive Librarianship and Bibliotherapy

The DACCO library differs from traditional medical libraries in that it operates through a model called *responsive librarianship* (RL), a term I coined in this dissertation to mean *the delivery of personalized library services in response to a rhetorical exigence that produces a modification of the reader's situation* (Cannon & Reese, 2018). Borrowing elements from speculative usability design principles (Rivers & Söderlund, 2016), RL employs the rhetorical situation to classify books in a health ecology by focusing on three major aspects. First, library services are personalized to determine the appropriate text for a reader (see Walkup & Cannon, 2018). Second, services are designed to solve a specific exigence or exigences ascertained through a

health reference interview. Third, librarians try to maintain a reader's sustained level of engagement with texts by measuring the level of agency throughout the health ecology. RL is an alternative to the traditional bibliotherapy schemes currently in use here in the United States and around the world. This alternative approach is useful because the practice of therapeutic reading, often called bibliotherapy, is difficult to investigate. The problem is there is very little agreement in the literature on what bibliotherapy is, how to define it, or even how it works because there are too many definitions and competing explanations for how bibliotherapy operates. This ambiguity leaves those in the mental health field uneasy. The inability to unpack the black box of bibliotherapy creates what Graham (2009) calls epistemological uncertainty that does not lend itself well to a general acceptance in the medical community. RL, on the other hand, is a data-driven scheme that removes the epistemological uncertainty created by the way bibliotherapy is practiced, evaluated, studied, and perceived.

Historically, defining bibliotherapy has been a challenge as Rhea Joyce Rubin alluded to in her influential 1978 book *Using Bibliotherapy: A Guide to Theory and Practice*. With the confluence of disciplines (e.g., information science, literature, psychology) in bibliotherapy practices, different components of it are stressed, leading to a range of definitions. Traditionally, it had been considered a medical technique, with the Library of Congress classifying it with other medical topics (RC489.B48 Subclass RC Internal medicine), and many early writings on the subject also treat it as a medical technique. On the other hand, library practice (perhaps a bit ironically since the field is the one that classified it) considered it part of reader or reference services (Rubin, 1978). For example, one early form of library bibliotherapy appeared in 1931 when

Jennie Flexner of the New York Public Library created book lists for probationers after she interviewed them. Since then, it has been an accepted part of those traditional library services offered by the various types of libraries, and in many places today, it is not uncommon to ask a librarian for a particular book that can address a health issue.

Even though the term ‘bibliotherapy’ was originally coined by Samuel Caruthers in a 1916 magazine article, one of its first formal definitions did not appear until 1941, when *Dorland’s Illustrated Medical Dictionary* defined it as “the employment of books and the reading of them in the treatment of a nervous disease” (Rubin, 1978, p. 1). Later in 1966, the Association of Hospital and Institution Libraries, which was a division of the American Library Association, defined bibliotherapy as the “use of selected reading materials as therapeutic adjuvants in medicine and psychiatry; also, guidance in the solution of personal problems through directed reading” (ALA, n.d.). Rubin (1978) herself defined it as a “program of activity based on the interactive process of media and the people who experience it. Print or non-print material, either imaginative or informational is experienced and discussed with the aid of a facilitator” (p. 2). That same year, Zaccaria et al. (1978) gave three definitions, two of which recognized a collaboration between a professional and a health consumer, and the third which states that “bibliotherapy is viewed as a process of dynamic interaction between the personality of a reader and the literature he reads – interaction that can be used for personality assessment, adjustment, and growth.” Clarke (1988) defined it as “the therapeutic use of books and other materials with individuals or with groups of people” (p. 1). Pardeck (1993) listed several definitions culled from the literature: “a family of techniques for structuring an interaction between a facilitator and a participant...based

on their mutual sharing of literature”; “guidance in the solution of personal problems through reading”; “the self-examination and insights that are gained from reading, no matter what the source”; and “the use of literature and poetry in the treatment of people with emotional or mental illness” (p. 2). Twenty years later, Pardeck (2013) revisited the issue and provided another definition in the *Dictionary of Social Work* as

The use of literature and poetry in the treatment of people with emotional problems or mental illness. Bibliotherapy is often used in social group work and group therapy and is reported to be effective with people of all ages, with people in institutions as well as outpatients, and with healthy people who wish to share literature as a means of personal growth and development. (p. 2)

More recent literature on the subject makes the definition even less clear.

Brewster (2013) defined it as “the use of written materials (fiction, non-fiction, or poetry – typically in book form) as psychosocial support or psychoeducational treatment” (p. 569) and terms it as a “non-medical intervention” (p. 570). Campbell and Smith (2003) referred to it as the “active use of books in psychotherapy” (p. 177). Gregory et al. (2004) defined it as a “form of self-administered treatment in which structured materials provide a means of self-improvement or help to alleviate distress” (p. 275). Fanner et al. (2008) relied upon the Medical Subject Heading (MeSH) definition: “A form of supportive psychotherapy in which the patient is given carefully selected material to read” (p. 238). Chamberlain et al. (2008) used the definition provided by Katz and Watt in 1992: “the guided use of reading, always with a therapeutic outcome in mind” (p. 24). Betzalel and Shectman (2010) defined bibliotherapy “as the use of books in a therapeutic process” (p. 427), and McKenna et al. (2010) defined it as “a form of self-administered treatment

in which structured materials provide a means to alleviate distress” (p. 497). As a final example, MacDonald et al. (2013) relied upon the following as a definition: “The use of written information as an adjunct to medical care” (p. 858).

While much of the literature defines bibliotherapy using either CBT or psychoanalytical processes, there remains a pervasive inconsistency in defining it and explaining how it works. This real-life problem was confronted by the librarians at DACCO. The various definitions were unclear whether the process had to be structured and guided by MHPs for it to be therapeutic. Did the materials have to be literature, and if so, what counts as “literature”? Did the books have to be carefully chosen for a particular purpose? With all of the competing definitions for bibliotherapy, it seemed that every process and every type of material could be included, leading to the problem that if bibliotherapy was everything then it was nothing. Fortunately, what we do know, and what the literature generally agrees on, is that bibliotherapy, what I am now referring to as text-based therapy (TBT), is effective. More importantly for this dissertation, what is consistent in the literature is that TBT is different than other adjunctive or alternative treatments because it is discourse based. Agreement on these points led to a crucial analytical assumption: there did not have to be one definition of TBT since there did not have to be one model. Different models could be incorporated into an overall scheme designed to address different health concerns in a health ecology.

Reframing bibliotherapy as a response to a rhetorical exigence allows this study to embrace the “spaciousness of rhetoric” (Enos, Miller, & McCracken, 2003).

Reimagining bibliotherapy as a text-based therapy model in an overall scheme of responsive librarianship allows me to distance this dissertation from the chaotic

universe of traditional bibliotherapy practices, while still retaining those aspects necessary for its acceptance by the medical community. I made this choice since the alternative, trying to redefine the nature and practice of bibliotherapy, would have added more confusion to the literature.

Starting with a new ontological foundation is often easier. For example, Mol (2002) chooses to introduce a new term, *enactment*, into her discourse on medical ontologies:

When a disease is being done, we may say that it is performed in a specific way. The word “performance” has various appropriate connotations. There may (but need not be) a script available for doing a disease.... But then again, the performance metaphor has some inappropriate connotations as well. It may be taken to suggest that there is a backstage, where the real reality is hiding. Or that something difficult is going on, that a successful accomplishment of a task is involved. It may be taken to suggest that what is done here and now has effects beyond the mere moment—performative effects. I don’t want those associations to interfere with what I want to do here: to shift from an epistemological to a praxiographic inquiry into reality. So I need a word that doesn’t suggest too much. A word with not too much of an academic history. (2002, p. 32)

Developing a new TBT schema free from the ontological and epistemological issues that plague bibliotherapy affords me greater flexibility in developing a new methodology for studying health ecologies. Just as I previously discarded terms such as “illness” and “disease” in favor of salience, moving away from the term bibliotherapy allows me to

focus less on trying to cure a word that “suggests” too much and more on developing a new scheme foregrounded in rhetoric.

Therapeutic events in context.

Thinking in ecological terms allows me to view books as more than just mere texts or stories or simple vehicles for “non-therapeutic” entertainment, as will be described in more detail *infra*. In a health ecology, books become interventions, rhetorical events, which also embody a rhetorical space for discourse. Here is where Edbauer’s (2005) ecological methodology becomes especially germane since it is no longer necessary to shoehorn books into a single site in the rhetorical situation. Books, instead, become fluid and bleed across the rhetorical situation. Books engage in rhetorical circulation because they are not only texts from a rhetor, they are also a space – an agentive event – where discourse occurs between the reader and writer and between the real and implied reader.⁵

Discourse is where rhetoric transforms from an ability (noun) to a process, a verb as explained by Edbauer (2005), where “we might also say that the rhetorical situation is better conceptualized as a mixture of processes and encounters” (p. 13). In other words, I posit that it is in texts *where we do rhetoric*. I propose that this is done is through narrative, the one written by the author in conjunction with the one supplemented by the reader through her lived experiences. Using Edbauer’s (2005) example of a city is useful:

⁵ The implied reader is a narrative concept developed by Iser in 1974. The implied reader is the intended audience for a text. The real reader is the actual individual reading the text. For example, the implied reader for the J.K. Rowling’s *Harry Potter* series is most likely a young adult. Very often, however, the books have been read by adults. Thus, there is in this situation a gap between the implied reader (young adults) and the real reader (adults). It is a process of presupposition we will investigate later (Bruner, 1986).

The contact between two people on a busy city street is never a matter of those two bodies; rather, the two bodies carry with them the traces of effects from whole fields of culture and social histories. This is what it means to say that the social field is networked, connected, rather than a matter of place, sites and home. (p.10)

Using an ecological and narrative perspective, reading a text is never just the simple act of contact between a reader and a writer through a book. Instead, both the reader and writer carry with them a collection of histories, reflecting the various influences past events and cultures have had on their respective lives. As the text is read by the reader, discourse occurs, revealing these “traces of effects.” This discourse, however, transforms from a conversation between two people to one where the boundaries are disjointed and incomplete. Writing becomes “distributed and socially situated” (Edbauer, 2005, p. 13). The discourse now becomes distributed among the author, the real reader, and the implied reader.

Research Questions and Data Collection for Studying DACCO

In order to evaluate my new methodology for studying library services operating in alcohol and other drugs (AOD) health ecologies, I investigated the unique TBT scheme employed by DACCO that treats those addicted to AOD through three models (known as “tracks”) of texts. When the DACCO library was first created, the tracks were non-fiction, empathetic or emotion-producing fiction (affective), and visual (e.g., graphic novels). Employing my new methodology to study TBT in health ecologies is useful because the old three-track scheme represented the multiple ideological foundations, or what I refer to as subjectivities, that were competing at DACCO. These competing

discourses often represented different mental health treatment ideologies rather than flexible treatment options as originally envisioned. For example, the CBT and affective tracks were often suggested to the residents based on the ideological preferences of the MHPs rather than a context-based treatment option. This opinion skewed the model in favor of CBT because most MHPs were trained in this treatment model.

During the course of my research for this dissertation, I had several discussions with the mental health professionals at this center about the TBT services offered by the DACCO library. The MHPs indicated that they were implementing a new policy restricting resident access to fiction materials because they felt these books were too distracting and of low therapeutic value. Furthermore, I conducted a survey that revealed many of the residents did not want to read books that mirrored them or their problems. Instead, the residents overwhelmingly wanted to read books that allowed them to escape from their problems and the world (Cannon, 2018).

This new information led me to reassess the TBT scheme then in use. In order to do so, it was necessary for me to challenge two traditional assumptions that guided the clinical use of TBT at the center: 1) that the cognitive-behavioral therapeutic (CBT) model is superior to fiction-based therapy, and 2) that fiction-based TBT works best through the psychoanalytical processes of character identification, catharsis, and insight. Traditional evaluative models used in information science were inadequate to address this situation for several reasons. First, circulation statistics, those numbers often used by librarians to ascertain the popularity of some library services, were still high. The residents were still using the library because they were an isolated population without any other alternatives. In other words, they had nowhere else to get a book to

read. Second, the MHPs were restricting access to some materials for therapeutic reasons, increasing the circulation numbers of the CBT track. While this occurrence was unfortunate, it was a legitimate response to the way the old scheme was formulated. Unfortunately, there are very few evaluative models that account for the complexities of this situation. Most restricted populations, such as prisoners, implicate a constitutional right to read, and evaluating this model requires a determination whether there is a proper balance between the rights of the prisoners and the concerns of the prison officials (Clark, MacCreaigh, & Zernial, 2006; Vogel, 2009). For my purposes, this model was wrong to use since the DACCO library operates in a health ecology. The DACCO library is not about expanding the right to read (Mccammon, 2016). Instead, it is trying to address the exigence posed by AOD addiction.

Given the new issues that confronted the DACCO librarians, disrupting the current scheme, and those commonplaces associated with it, allowed me to approach bibliotherapy from a different perspective and to ask different research questions – questions that were not confined to the disciplines of information science (IS) or psychology. Instead, the new TBT scheme would be interdisciplinary and offer an alternative to the three tracks then in use at the library and be articulated in a way that would be acceptable to those stakeholders, including the residents, librarians, administrators, and MHPs, using it.

Research questions and a new ecological turn.

Using neurorhetorics as a heuristic disentangles its methodological choice from a single ideology, discipline, or treatment commonplace and instead allows me to recognize that traditional “one size fits all” bibliotherapy models are not always ideal

(Day, 1996). It gives me the freedom to suggest that TBT might also be framed as a rhetorical response to a mental health exigence (Keränen, 2014; Walkup & Cannon, 2018). This neuro rhetorics approach provides a new research warrant that asks: 1) Extending the work of Walkup & Cannon (2018), how is a health ecology different from other ecological models, specifically in an AOD treatment facility context? 2) How can we operationalize health ecologies in order to use them to study a responsive librarianship text-based therapy scheme?

Answering these questions required an assumption that there are treatment situations where behavior modification and psychoanalysis are not ideal, especially when identification with a character leads to negative emotional triggers, an incident that has the possibility of producing a negative mental health outcome. Furthermore, it was also assumed that some AOD addiction issues are not behavioral or developmental in nature. Using the modified rhetorical situation as a way to evaluate the services at DACCO and incorporate them into the larger health ecology networks, I discovered that the old bibliotherapy model was not distributing agency throughout the many health ecologies at DACCO. In other words, there was not a perfusion of change over time. Some residents read a lot of books and some MHPs recommended specific books to their residents, but in many cases, the residents were not fully engaged with all of the library's TBT discourses.

My preliminary study and findings led to the development of the new RL scheme with a new model based on the *application of neuro rhetoric narratology* (NeuroApp), a term coined for a TBT model that *discursively engages a reader's cognitive processes and rhetorically reconstructs their narrative through reading therapy* (Cannon, 2018). By

employing a flexible neurorhetorics approach, I found that I could draw upon the different “flavors” in a particular field (Gruber, 2018) in addressing the exigence situated in the old three-track bibliotherapy scheme. For example, this dissertation privileges the neosophistic view that language (*logos*) is the referent for “reality” and that meaning is subordinate to situation (McComiskey, 2012). It also finds it useful to reframe Bitzer’s (1968) rhetorical situation to study health ecologies. Traditional approaches to rhetoric would most likely not employ the various competing approaches of Bitzer (1968) and Edbauer (2005) simultaneously in research. Institutional disciplines, no matter how “open” they profess to be, still constrain methodological choices (Johnson, 2014). Neurorhetorics, on the other hand, seeks to broaden the theoretical landscape and engage other disciplines, such as information science and neuroscience, in order to construct novel methodologies (Gruber, 2018).

It is acknowledged that there are other heuristics available and that this particular mental health exigence could have been addressed using phenomenology, Actor-Network Theory, material rhetorics, Rhetorical-Ontological Inquiry, or even Publics Theory. Employing neurorhetorics in this particular dissertation was not a rejection of other heuristics (Day, 1996). Instead, it was simply a choice based on the reasoned belief that neurorhetorics was the most useful theory to address these particular research questions (Budd, 2006). In fact, neurorhetorics allowed me to call upon these and other theories to answer questions, fill gaps, and build methodological bridges.

Uncovering the Multiple Realities in a RL Scheme

In this dissertation, I move away from bibliotherapy as a solitary treatment model and towards a health ecology with RL as a treatment scheme that employs different

models, depending on the mental health issue at hand. Instead of talking about a monolithic **bibliotherapy** model, the new health ecology **metaphor** allows me to think of TBT as a perfusion of various forms of context-based **bibliotherapies** throughout the material-semiotic networks at DACCO. Using this new methodology, I can begin tracing the various networked associations of events throughout DACCO's health ecologies. For example, there are exigences in the form of the various mental health issues presented by the residents through their condition saliences. There are various audiences who read the texts with varying degrees of condition salience. There are also the various and interconnected networks of actants in the form of beliefs held by the MHPs and residents, the interests of the residents in some genres of texts, the presence of triggers posed by some those texts, and the various ontologies of AOD addiction that are present, just to name a few.

Reframing my research in this manner, it is now possible to understand why employing the modified rhetorical situation as an evaluation tool is useful for studying health ecologies. For example, the major issue addressed by the intervention elements (rhetor and the text) may not necessarily be the exigence itself but the events that shape, guide, and constrain the textual interventions. Due to the issue presented by the reading interests of the residents at DACCO and the ontological nature of addiction, some of the actants in this health ecology, self-help books that dealt with negative behaviors, are almost useless in modifying the exigence in some situations.⁶

⁶ Data from DACCO suggested that there was a success rate of approximately 50% for those in the residential treatment program. While there has yet to be any study on the efficacy of the program at this time, the general rate of success – or failure – can be loosely correlated to its reliance on CBT.

I hypothesize that the various competing and interlocking events in these health ecologies influence the choice of rhetorical intervention. For example, many of the residents at DACCO were victims of abuse, with a few of these incidents being sexual assaults. Some of the affective titles, such as Laurie Halse Anderson's novel *Speak* (1999), addressed sexual assault and its effect on both the victim and community. From a psychoanalytical approach, such a book might be useful for those in therapy, especially if it reconfigures behavior and personality, but as Judith Butler posits, this result is not always the case (Borg, 2018). Regardless, for a sexual assault survivor, the plot in *Speak* represents a trigger. In this situation, we have to ask whether it is ethical to force a resident to read a book that she does not want to read because she feels it will trigger a negative response. If it is not ethical, then the resident is left with fewer treatment options if we continue to frame TBT as a unitary treatment model and not offer more genres.

Evaluating Narrative Events in a Health Ecology

Language, and its role, is important at this stage. Shifting back to neurorhetorics, this dissertation draws on two complementary theories from the disciplines of rhetoric and psychology: constructionism and constructivism. It is easier to harmonize these metatheories if we remember that Gorgias was a cognitivist and so was Kenneth Burke (Harris, 2013) and so was Jerome Bruner (1986). For Gorgias and Burke, it was important to understand how rhetoric worked in order to do the work of rhetoric (Harris, 2013). In other words, the goal of rhetoric, from a neosophistic point of view, is to understand how our mind processes the various forms of signification so that we may be better at using signification to persuade. At this level, then, metatheories "bleed," and

the line between constructionism and constructivism is less clear. In a way, the issue of TBT may present a new space to perform border work, becoming an interdisciplinary trading zone in order to calibrate the competing discourses in the DACCO health ecology. For example, cognitive psychology, as understood by Bruner (1990), moved too far into the realm of information processing (no doubt, a direct influence by the rise of computing) and away from the study of meaning-making. Neurorhetorics, takes a stance similar to Bruner's, as it problematizes the metaphor of the "computer-brain" and the various "circuits" that control our behaviors, while trying to understand how meaning-making is constructed through discourse – an act of signification. This dissertation draws heavily on both metatheories since the act of reading engages cognition, knowledge construction, meaning making, and discourse.

As stated previously, my proposed methodology is designed to measure changes in a health ecology after a rhetorical intervention has been introduced. One way to measure the change in a health ecology is to measure how well rhetorical interventions are tailored in a way that allows these gaps to react to the rhetorical intervention. For the purposes of this dissertation, the implied reader is the intended audience of the book, with the author, in the rhetorical situation, taking the place of the rhetor. Furthermore, as a health ecology, there can be more than one audience and more than one rhetor. The roles of audience and rhetor can be found in both the real and implied reader, shifting back and forth, as the discourse between these two identities occur (Cannon, 2018). Cognitively, this shifting is possible, and, according to Bruner (2004), it is not unusual.⁷ In fact, it is how we function: "The story of one's own life is, of course, a

⁷ Colloquially, we may say in conversation with others something like "I was thinking to myself" or "I said to myself" when recounting our thought processes before we made a decision or committed some action.

privileged but troubled narrative in the sense that it is reflexive: the narrator and the central figure in the narrative are the same” (Bruner, 2004, p. 693). We read, and then write, our own narratives into the texts we read. When the real reader is not the intended, or implied, reader – *when there is a difference between who we are and who we want to be* – there exists a gap. This gap is not always perceived by the reader, and it is shaped by the constraints presented in the rhetorical situation.⁸ Thus, measuring how well rhetorical interventions distribute agency, for example, the closing of these gaps, is important.

The narrative conversation occurs in most genres, depending always on the rhetorical situation. In the CBT RL track, the discourse between the implied reader and real reader is simple, with the gap between the two being rather small. Of course, this gap size is dependent on the exigence being addressed, the audience reading the text, and the actants shaping the discourse. For example, the experience reading the CBT title *Twelve Steps and Twelve Traditions* (1952) will be different depending on who is reading the book and in what context. If the reader is an individual with a high AOD addiction salience, then that conversation will be easier than the one involving a 12-year-old student with low salience doing a book report for school. In those situations,

This conversation conducted by an internal self is similar to the one between the real and implied reader. We have language that describes this occurrence and, from a neosophistic point of view, it creates a *logos*-based reality – a space where this occurs. A popular example of this occurs in the 1977 movie *Close Encounters of the Third Kind*. In one of the final scenes of the movie, aliens and humans begin a conversation through music. The humans do not linguistically “understand” what they are saying, but instead mimic back what the aliens “say” through tonal “words.” Ultimately, the humans gather enough data in order for the AI to continue communicating, with the computers “taking over” the conversation with the aliens. It could be said in this example that at that point the aliens were communicating with themselves in the same way real and implied readers enter into discourse.

⁸ Since this study is concerned with texts in the form of books, the problem of the rhetor’s diminished role argued by Consigney (1974) is not relevant. The author as rhetor is not the same as a president as rhetor. Under an ecological view, writing is a distributed act that does not focus on “writer, text, and audience” in an isolated context (Edbauer, 2005, p. 12).

where there is a larger gap between the real and implied reader, this discourse takes the form of a negotiation, with resistance and resilience becoming "exchanges" that enter the ecology (Edbauer, 2005; Walkup & Cannon, 2018).

The size of the gap does not necessarily imply a degree of ease when it comes to addressing the AOD salience. In the CBT example above, even though there is a small gap between the real and implied reader of a twelve-step book, that does not mean it is easier for that person to stop using drugs. Instead, there is a small gap in comprehending, what rhetoricians call reading the rhetorical situation, where the reader understands the exigence, the audience, and the actants initiated through engagement with the text. In other genres, for example, those texts where we continuously take information under advisement, there may be a larger gap. In any event, one way my proposed methodology measures change in the DACCO health ecology is by measuring the rhetorical intervention's ability to close the gap between the real and implied reader.

It should be noted that I hypothesize that the discourse between the real and implied reader continues beyond the reading of the text (Burke, 2013). Depending on the rhetorical situation and the particular health ecology, the reader will continue to engage the text, even outside of the book's presence (Burke, 2013). It is a common occurrence, and many people will most likely recount experiences where they are thinking – engaging – a book, even when they are not reading it. For example, readers will ponder a mystery novel during work, school, or other activities, analyzing the information previously held under advisement, trying to figure out "who did it" long after they have stopped reading.

Dissertation Chapters

Literature review.

The literature review for this study is separated into two parts. Chapter 2 will explore in more depth some of the issues that make a health ecology unique and distinguishable from the more general concept of rhetorical ecologies. I begin by tracing the evolution of rhetorical ecologies, their relation to Bitzer's (1968) rhetorical situation, and some of those elements from the situation I find useful for analysis (but otherwise left by the wayside by the literature). By focusing on those ecological distinctions that are dispositive to my analysis, this chapter can then lay the theoretical groundwork for developing a novel methodology to study health ecologies as well as establishing standardized criteria that can be used for measurement in an overall health ecology evaluation scheme. In exploring the related concepts of measurement and evaluation, I focus on how neosophistic rhetoric can be useful in calibrating the competing discourses inherent in a health ecology. In Chapter 3, I place my research into context by tracing some of the networks that can be found in those health ecologies similar to DACCO's, the development of the DACCO library and how it can be visualized in the greater health ecologies of DACCO, and how the library may be reframed as a rhetorical intervention. Finally, I outline some of the actants that can be used to measure the "goodness" of the health ecology and focus on a unique rhetorical intervention that will later serve as an example for assessment.

Methods.

In Chapter 4, I explain this dissertation's methodology and outline my methods. First, I introduce neosophistic methodology. Next, I describe a novel method for identifying

ecological dissimilarities using text analysis and how these differences can be incorporated into an analysis of the rhetorical situation. The purpose of this method is to collect data that can help identify differences between health ecologies and rhetorical ecologies, as well as identify the situation and intervention elements in the rhetorical situation. Then I describe how the initial needs assessment for the library was conducted relating to the development of the collection. Then I detail how I developed, administered, and analyzed a survey regarding residential reading practices and its relation to the rhetorical situation. The survey is important in identifying specific exigences and also helps focus this study on one specific context. I then describe how I conducted a semi-structured group interview of the mental health professionals at DACCO. Finally, I explain my methods for conducting a broader analysis of the library's collection of over 800 titles to test my use of the revised rhetorical situation as a means of evaluating health ecologies.

Results and discussion.

In Chapter 5, I explain the results of my data collection efforts and briefly describe some of my initial impressions of the data's relationship to a health ecology. Specifically, I discuss the data collected from the text analysis comparing different types of ecologies, the initial needs assessment for the DACCO library, the resident survey, the semi-structured group interview of the MHPs, and finally the results of my analysis of the DACCO library's collection.

Summary and conclusions.

In Chapter 6, I discuss how my dissertation is designed to develop a new methodology for the evaluation of library services in small health information centers

that operate as part of a larger health ecology. In addressing my two research questions, I conduct a detailed analysis and apply each of the major elements I identified in my data collection in order to test my assumption that there are useful distinctions between traditional rhetorical ecologies and health ecologies, and whether these distinctions can be used to evaluate a therapeutic library at DACCO.

CHAPTER 2: DISCOURSE CALIBRATION IN HEALTH ECOLOGIES

In my previous chapter, I introduced the concept of health ecologies and explained how I will study a health ecology in the context of an alcohol and other drug (AOD) residential treatment center in Tampa, Florida. I also investigated whether there were useful distinctions between a health ecology and the more general rhetorical ecology that could perhaps be employed in conducting an evaluation of a rhetorical intervention. I demonstrated the need for the new methodology for studying health ecologies that this dissertation will develop, as well as an overall schema for my revised rhetorical situation. I employed neurorhetorics as a heuristic in my study and explored how it affects the way I contextualize my proposed methodology through the introduction of Responsive Librarianship (RL), an alternative bibliotherapy scheme. It was my intention to establish my research warrant, describe the scene of my project, and explain how my dissertation contributes to the field of rhetoric. Specifically, I began to make the case that it is necessary to tease out the concept of a health ecology from the literature on rhetorical ecologies and suggest why it was necessary to *revive* and *revise* Bitzer's (1968) rhetorical situation as an analytical tool. Finally, I enacted a new ecological metaphor, switching from viral to perfusion. This chapter picks up those threads. In it, I explore in more depth some of the issues that make a health ecology

unique and distinguishable from the more general concept of rhetorical ecologies. I begin by tracing the evolution of rhetorical ecologies, their relation to Bitzer's rhetorical situation, and some of those elements from the situation I find useful for analysis (but otherwise left by the wayside by the literature). By focusing on those ecological distinctions that are dispositive to my analysis, this chapter can then lay the theoretical groundwork for developing a novel methodology to study health ecologies as well as establishing standardized criteria that can be adapted for measurement in an overall health ecology evaluation scheme. In exploring the related concepts of measurement and evaluation, I focus on how neosophistic rhetoric can be useful in calibrating the competing discourses inherent in a health ecology. This discussion on measurement and evaluation is foregrounded partly in a brief history of library collection development and the difficulties encountered by pioneers in the field. I do historiographical work in my dissertation to illustrate how the issue of evaluating collections has been a continuing and pervasive problem in the field of library science. I then finish by describing neosophistic rhetoric, including a brief treatment on its history and modern development, and how I employ it in my dissertation.

Rhetorical Ecologies: Revising the Rhetorical Situation

As I explained in my Introduction, the "ecological turn" in rhetoric is often attributed to Edbauer's (2005) development of rhetorical ecologies. While Edbauer's article was not the first to use the term, her broad analysis of rhetorical ecologies in lieu of a rhetorical situation can be considered a watershed moment in the field.⁹ As such, there are many well-received accounts in the literature that outline the history and

⁹ Cooper (1986) did so when writing about writing ecologies in the context of composition studies.

development of rhetorical ecologies, including the edited collection *Tracing Rhetoric and Material Life: Ecological Approaches* (McGreavy, Wells, McHendry, & Senda-Cook, 2018), which gives an in-depth historical analysis of the important predecessor theories in the field. For purposes of my dissertation, however, the work done by Ehrenfeld (2018), Nathaniel Rivers and Ryan Weber (2011), and Teston (2017) are the most relevant because they reflect the field's current understanding of those issues I address in my revised model.

Ehrenfeld's (2018) tracing of rhetorical ecologies is conducted in light of a Rhetoric of Health and Medicine (RHM) analysis of early 20th-century health-related lectures. He begins with Cooper's (1986) discussion of writing ecologies and their web-like associations and their similarity to Hawk's (2007) analogy to an ant colony. This common metaphor is one that shifts from a rhetorical situation's constituent parts to the consideration of those pieces in a larger whole. Woven throughout Ehrenfeld's analysis is the field's move away from descriptions of individual rhetors in a way that "decenters the study of rhetoric, challenging the autonomy of the individual agent" (2018, p. 43). As a result, Ehrenfeld concludes that rhetoric's ecological development was a paradigm shift away from analyses of a rhetor's agency, to one where systems are cocreators, often without the full understanding of the rhetor. In other words, the rhetorical acts of an agent are virtually powerless to change or shape a rhetorical ecology.

Coming predominantly from college composition writing studies, Ehrenfeld (2018) also explains how definitions of agency have also changed from those that focus on an agent's ability to "do something" to a process of "attunement, adaption, and cultivation" by the rhetor (p. 44). While ecological models maintain that the individual

rhetor is still an important object of study, its influence is drastically reduced because of the complexities she must negotiate in the system. Understanding how a rhetor adapts through this new definition of agency becomes the new methodological warrant for the field for tracing all of the associations and actants – both human and material – in an ecology.

Rivers and Weber (2011) also acknowledge rhetoric's focus away from individual writers, acts, and "each particular case," and more towards the fluidity of exchanges in an ecology. Focusing more on public rhetoric and pedagogy, Rivers and Weber investigate how texts circulate in an ecology of "writers, readers, institutions, objects, and history" (2011, p. 189). They also see ecological writing focusing less on the idea of a rhetorical context and more on the conception of "socially constructed systems that are in constant flux" (Rivers and Weber, 2011, p. 192). A situation in flux, therefore, redefines the idea of a rhetorical context since ecologies can be comprised of meta-complex systems: inter-related complex systems that are characterized more by associations than by audience or time. Eschewing the rhetorical situation's discreteness, rhetorical ecologies are fluid and dynamic, with only portions of it being available for study at any particular time.

For Teston (2017), rhetorical ecologies are unpredictable. In her study of medicine and its relationship to disease, Teston contends that medical professionals manage health by attuning to corporeal flux. In other words, medicine can never be exact because it never gets it right. A diagnosis of cancer, for example, is a snapshot of disease at a particular place and a particular time. Disease is not always predictable,

but that probability can be managed through ecologies of tests, instruments, practices, and professionals. As such, for Teston, medicine is a rhetorical practice.

Each of these discussions about the development of rhetorical ecologies distances the literature from traditional rhetorical concepts and Bitzer's (1968) rhetorical situation, resulting in a somewhat unstructured framework of associations and connections. While I definitely do not object to ecological thinking (since I am building on a prior ecological model), it is my contention that many scholars have prematurely rejected Bitzer's model and characterize the rhetorical situation as being constituted by discrete and independent parts. In fact, Bitzer's original description of the rhetorical situation places it in a "complex," something that I suggest equates to a rhetorical ecology. Furthermore, while many scholars reject Bitzer's schema as being reductionist, Edbauer (2005) is clear that her model is not. Instead, her rhetorical ecologies are an *augmentation* to the concept of the rhetorical situation. Edbauer wants to make clear that each rhetorical situation is connected to another rhetorical situation, which is connected to yet another and another. In other words, no situation is isolated. I submit that Bitzer would not object to this characterization of elements "bleeding" into each other. Edbauer's work, I suggest, is a long way off from a wholesale rejection of the rhetorical situation as an analytical tool.

In the three scholarly treatments I discuss above, I focus on those traditional rhetorical concepts that have either been recently rejected or misconstrued by the literature. For each of these scholars, the ideas of rhetor, agency, and context are drastically different in rhetorical ecologies. Rhetors are reactive actants in the maelstrom of associations, and their rhetorical actions are not agentive events. Instead,

they may be considered simple attempts at trying to survive through adaptation. In a way, ecological rhetors are portrayed as being more evolutionary in their actions, “selecting” for certain traits through adaptation, with surprisingly little intentionality. Below, however, I suggest that this “ecological turn” may have gone too far in eschewing Bitzer’s (1968) schema and that the way these concepts have been reframed should be tempered to allow for the study of unique health ecologies in order to develop methods for measuring and evaluating rhetorical interventions.

Health Ecologies: A Unique Object of Study

Studying ecologies of health is not new. Robin Jenson (2015) outlined what she believed were the reasons why ecologies of health should become a focus of inquiry. However, even though she does state that health rhetoric scholarship is methodologically unique, she does not go so far as to call for distinct forms of rhetorical ecologies. In fact, during the research for my dissertation, no scholarship was identified that makes such a call. A search of the literature using the terms “health ecology” and “health ecologies” along with “rhetoric” resulted in only one relevant article: the Walkup and Cannon (2018) study that introduced the concept of health ecologies as a unique rhetorical metaphor.¹⁰

Jenson’s work (2015), however, is instructive. She suggests that ecologies of health can be studied through circulation or percolation models. Both models are foregrounded in time, with the circulation model focusing on those ecological connections over time and the percolation model investigating rhetorical connections in ecologies between or among distinct time periods. While most of the literature used in

¹⁰ The search yielded results in other disciplines related to nutrition, environmental science, and public health. These articles did not discuss health ecologies as a rhetorical concept.

my dissertation relies on a circulation model, there are times in which a more historical look at a specific rhetorical context is instructive. For example, in my dissertation, I situate my research in the context of therapeutic library that provides services to those being treated for addiction. There are times, however, where the history of such treatment, such as the 1950s, becomes important in determining how we got to where we are today. Instead of tracing the history of text-based treatment from 1950 to the present, I look at the health ecologies as they were in the 1930s and 1950s and how different those associations are when compared to those that exist today.

Walkup and Cannon (2018) articulate the idea of “health ecologies” in response to the exigence posed by the delivery of library services in an AOD treatment center. Specifically, they found that librarians struggle to design an intervention to educate the residents about mental health literacy, a core set of skills meant to enhance an information-seeker's behavior when attempting to find information about a personally salient mental health issue. The librarians found that much of the information they had and the library materials available to the residents, often conflicted with the MHPs cognitive-behavioral therapy (CBT) treatment philosophy and their tendency to view addiction in an isolated and binary system. In Figure 3, I visualize the concept of health ecologies, this time using Teston's (2017) book *Bodies in Flux*. I chose her book because of the various ways she traces the networked connections throughout the health ecologies. Using text network analysis, it is possible to visualize the complexities inherent in health ecologies.

and many librarians are trained to conduct such information gathering sessions in American Library Association-accredited MLIS programs. The librarians at DACCO were trained using the Comprehensive Model of Information Seeking (CMIS), a flexible heuristic for data gathering and analysis (Walkup & Cannon, 2018). These interviews were designed to improve the residents' mental health literacy with the goal of improving their ability to make better health decisions. Unfortunately, some residents were hesitant to use information that was not foregrounded in the belief that addiction was a "brain disease" or the result of their own personal failures that could be fixed by socially acceptable behaviors. Therefore, many of the residents saw CBT texts as the only therapeutically-relevant track, with the affective and visual tracks being mere objects of entertainment (Walkup & Cannon, 2018).

Training the librarians to think in terms of health ecologies helped them better understand the concept of AOD ontologies in order to articulate the reason for recommending a specific text. In other words, the librarians were taught not to think in terms of books (a decontextualized over-reliance on the book as object) *but instead to focus on the event of reading and the distribution of agency*. This training also aided the librarians in communicating with several of the MHPs at DACCO, especially those who replaced the MHPs who had worked closely with the original interdisciplinary team that developed the library. Overall, the concept of health ecologies allowed the librarians to articulate to the residents that addiction can vary from individual to individual as well as from place to place. This information allowed the residents to focus on factors they could control, such as increasing their mental health literacy (Walkup & Cannon, 2018).

Walkup and Cannon (2018) focused on the distribution of power and authority throughout the various health ecologies at DACCO. This form of agency was accomplished by empowering the residents “toward a new ontology of resistance and resilience” based on the idea that AOD addiction treatment was often a negotiated practice between patient and provider (Walkup & Cannon, 2018, p. 112). As a result, residents could question the binary nature of addiction, thereby giving them more of a voice in their treatment plans. While this goal was important, it was also crucial that the MHPs not view the library as a source of agitation. The library operated by cooperative agreement with the facility, and any conflict with administrators could result in a drastic reduction of library services or even a decision to close the library. Furthermore, many of the library technicians were young, having less experience than others in such a complicated network of health ecologies. They were not used to navigating the often-competing discourses. In cases of conflict, they would often side with those discourses that were based on contributory expertise. Therefore, this dissertation is seeking to expand the concept of health ecologies first articulated by Walkup and Cannon by making them a unique object of study, separate from the more general conception of rhetorical ecologies. By making this differentiation, it is hoped that a more effective way of calibrating the many competing discourses found in a health context can be developed. In order to do so, however, I submit that it is necessary to develop a new methodology to study, measure, and evaluate health ecologies in order to understand why they are unique.

Measuring Things: Everyday Issues Faced in Evaluation Practices

In *Sorting Things Out*, Bowker and Star (1999) remind us that classification is a naturally human process. It is what we do. It is in our DNA. But there is also something else, a related activity that is equally natural to us and part of our daily lives: measuring. Borrowing from Aristotle, it could be said that measuring is *antistrophos* to classification. As there is no single way to classify something, there is also no single way to measure. Not only do measurement techniques depend on what we are measuring, such as time, distance, or speed, we must also take into account the purpose, the context, and the limitations related to what we are measuring. It is a complicated balancing act that most of us perform instinctively, with very little effort or thought. For example, there are all sorts of tools for measuring distance, and some are quite complicated. George Washington, before he was a general and a president, was a surveyor. He relied on complex mathematical principles such as geometry, trigonometry, and triangulation, as well as the fairly developed tools that included plumb lines and theodolites to survey much of the Virginia territory near his home in Mount Vernon (Flexner, 1974). Surveying took time and great expense, so much so that colonial surveyors, such as Washington, could be expected to make a handsome annual salary equal to that of a lawyer. But a surveyor would not be called upon to measure the space between a doorway and a window to see whether a new couch can fit. A surveyor *could* do it, and it would be extremely accurate, but it would not be practical. A simple tape measure can do the trick.

Thus, a large and unspoken part of this endeavor is determining in each particular case the best available means of measuring (again, borrowing from Aristotle).

Like an information infrastructure, if it is done right, it fades into the background (Johnson, 2014). On the other hand, if it is done wrong, it is fairly obvious. For example, some have argued that much of the recent movie *Solo: A Star Wars Story* was devoted to retroactively repairing the continuity of an erroneous measure of the Millennium Falcon's speed 40 years earlier in *Star Wars: A New Hope*. Originally touted as "the ship that made the Kessel Run in less than 12 parsecs," the Millennium Falcon's supposedly great speed was expressed not in the correct time units but erroneously in distance. It is a quote that has spawned decades of debate, even involving such luminaries as astrophysicist Neil deGrasse Tyson who declaimed that such a reference was utterly inane (Chamary, 2018). Getting measurements right matters for both accuracy and appearances, and the purpose of my dissertation is to create novel measures, foregrounded in rhetoric, that can be used to evaluate a health ecology.

Evaluation can be defined as "the assessment of goodness" (Matthews, 2007, p. 3). It is the consideration of many measures in a network of associations. Evaluation is an intentional exercise that compares "what is" with "what should be" (Matthews, 2007, p. 3). Evaluation also requires judgment and a set of criteria for comparison. Standard models of evaluation rely on traditional models that employ established (i.e., accepted) criteria and the judgment to apply them in the right situation. This approach differs from research that requires methodological rigor. Research, however, may create a methodology for later use as a standard set of evaluative criteria. Establishing this methodology is the purpose of my dissertation.

There are certain attributes of evaluation that make it different from other types of academic research, such as those that investigate rhetorical ecologies. Evaluative

models focus on improvement, whereas research is frequently aimed at description or even prediction. While academic research often provides a certain context for applying its methodology, evaluation is applied to actual situations and is used to correct problems or even make some services better. For example, if we take a text, we may say it has certain attributes that make it useful to study. We use an established methodology to address our research questions. In some research situations, a text may be offered as an intervention and that methodology establishes how the text is introduced into the study. The data and analysis can help us examine what happens after a text is introduced by comparing two groups, one with the intervention and one without. Sometimes these studies can be longitudinal, lasting for months or years. The results of the study are then published and communicated to a larger population.

Evaluation is different than research in its intentions and programmatic outlook. For the purposes of this dissertation, these distinctions are essential. First, evaluation is designed to be iterative and aimed at improving services. Second, it relies on measurement, and while the tools used in evaluations are often the same as those used in research (i.e., surveys), the criteria being measured are generally accepted in the community. Third, evaluation generally has a pre-established and well-defined audience to receive results. Fourth, the results of an evaluation generally trigger action on behalf of the audience. Fifth, more emphasis is placed on the time between evaluation events.

For an evaluation to be iterative, the implementation of any new or improved services should begin relatively soon after the results are communicated, with a new evaluation process beginning again to measure the effectiveness of the new or improved services. For example, Christopher Manion and Richard Selfe's (2012) study

on assessment and writing ecologies presents a case study on college composition pedagogical practices. Even though the authors do discuss various forms of assessment and their case study does last an entire semester, there are no further assessments or revisions to the process. It is more of a descriptive paper than an evaluation. In sum, evaluations are more flexible and responsive than basic academic research, and it is the purpose of my dissertation to give a clear picture of that evaluative process that leads to revision.

Much of the literature on rhetorical ecologies does not permit an evaluation process such as the one I describe above. Generally, this limitation is due to the nature of academic publishing. A study is generally not considered complete until the results have been communicated. Communicating these results can often take months, or in some cases, years. Academic peer review and editorial oversight are institutional processes that have been established to ensure a degree of rigor, reliability, and trustworthiness. There are many examples where that process breaks down, but these are exceptions to the rule. Even when research includes a case study with assessment and outcomes, such as those studies involving first- or second-year college composition courses, the time between data collection and analysis, or even analysis and publication, does not suffice for evaluative purposes.

Traditional Evaluation and Rhetoric: Attunement through Phronesis

Evaluation and measurement can be seen as rhetorical acts in many circumstances because there are so many methodological choices. There is no objective “truth” when it comes to evaluation or measurement; it depends on the

context.¹¹ Sometimes how one evaluates and the choices one makes during the process determine the outcome. When evaluating a library, for example, what one counts and how it is counted are important. Conduct a search for “largest libraries in the world,” and two results appear: the UK’s British Library (BL) and the US’s Library of Congress (LoC). Both proclaim to be the largest in the world – and both may be right. The Wikipedia entry for the list of the largest libraries places the UK BL first with the US LoC second.¹² The problem is the way “items” and “volumes” are counted, among other things. Depending on the formula used for measuring the size of a library, the answer may be different, even for the same library collection. In other words, methods matter (Teston, 2017).

Continuing with this example, we can understand that evaluation is difficult, similar to Teston’s (2017) argument about flux: we are never exact in our descriptions of the body because the body is always changing, and any diagnosis is only, at best, a snapshot of the body in the past. Thus, any prognosis is only a guess, a guess she contends is done through medical attunement with experience and medical technology (Teston, 2017). Library evaluation runs into similar problems. Traditional library evaluation in the United States began with Charles C. Jewett’s 1849 report to the Smithsonian Institution (Johnson, 2009) that sought to determine whether the nation’s libraries were adequate for scholarly work. According to Jewett, there were many obstacles in the American library system. Jewett (1850) came to the conclusion that there were “difficulties apparently insurmountable, and menacing a common

¹¹ It could be argued that the Aristotelian definition of rhetoric is one where a rhetor has an ability to evaluate or measure a situation.

¹² The talk page for the entry (https://en.wikipedia.org/wiki/Talk:List_of_largest_libraries) discusses some of the issues when trying to determine size.

abandonment of the hope of affording guides, so important, to the literary accumulations of the larger libraries of Europe” (p. 3). Catalogs were never accurate because library collections were always growing and changing, thus descriptions became less certain. As a result, the information in any catalog was obsolete the day it was printed because of items subsequently added to the collection. Jewett discussed some of the evidence he found with regards to European attempts at cataloging in a famous passage often quoted in library science journals:

The commissioners, lately appointed by the Queen of England, to inquire into the constitution and management of the British Museum, have, in their report, expressed an opinion decidedly against the printing of the catalogue at all, and principally on the ground that it must ever remain imperfect. One of the witnesses, (the Eight Honorable J. W. Croker,) examined before the commissioners, thus strongly states the case with respect to printing: “You receive, I suppose, into your library every year some twenty-thousand volumes, or something like that. **Why, if you had a printed catalogue dropped down from Heaven to you at this moment perfect, this day twelve-month[s hence] your twenty thousand interlineations would spoil the simplicity of that catalogue;** again the next year twenty thousand more; and the next year twenty thousand more; so that at the end of four or five years, you would have your catalogue just in the condition that your new catalogue is now [the manuscript part greater than the printed part]. With that new catalogue before your eyes, I am astonished that there should be any discussion about it, for there is the

experiment; the experiment has been made and failed.” (Jewett, 1850, p. 4, emphasis added)

Jewett’s comments illustrate the rhetorical nature of measuring a library’s collection – not so much about the persuasive properties of a catalog¹³ but about evaluation and making decisions with imperfect information. As his comments illustrate, creating a catalog is not perfect. It is always going to be imperfect, but instead of deciding never to publish a catalog, proceeding rhetorically with probabilities instead of absolute truths is the best option. This approach is what rhetoric does. It allows us to measure – evaluate – albeit imperfectly, things such as a library’s collection, with the catalog being the best evidence of that library’s holdings at a particular time.

This tenet is a major one of rhetoric, and why, according to Aristotle, it is a useful art: “Further, even if we were to have the most exact knowledge, it would not be very easy for us in speaking to use it to persuade” (1355a12, p. 35). In fact, having exact knowledge is just as unlikely as having a perfect library catalog drop down from heaven.¹⁴ Continuing, Aristotle states,

It is clear, further, that its function is not simply to proceed at persuading, but rather to discover the means of coming as near such success as the circumstances of each particular case allow. In this it resembles all other arts.

For example, it is not the function of medicine to make a man quite healthy, but

¹³ It should be noted that library catalogs are persuasive, and thus rhetorical, texts. So are the various classification schemes in the manner they situate similar information.

¹⁴ Even with the advent of digital library catalogs, they are still imperfect. There is still the necessity of importing a record into the library catalog (usually done by the technical services department). In addition, with the growth of union catalogs and shared resources, there is a greater probability of a catalog having broken links to an item’s record. With all the problems inherent in any digital information infrastructure, a library’s catalog is always going to be imperfect.

to put him as far as may be on the road to health; it is possible to give excellent treatment even to those who can never enjoy sound health. (1355b14)

One way of working with inexact knowledge is accomplished through *phronesis*, which is understood as practical reasoning. For Isocrates, a contemporary of Aristotle, *phronesis* allows for the best possible decision to be made with the information on hand (*Antidosis*, 271), and according to Gerard A. Hauser (1999) in his work on vernacular public discourse, *phronesis* “is not governed by the true/false logic of propositional statements; it is concerned with beliefs and actions that have traction on the moral and pragmatic registers of those who are being addressed and asked to judge” (p. 94). *Phronesis* falls squarely into the realm of those Latourian “matters of concern” for which a solution must be found. It is the basis for opinion which, according to Hauser, is the result of judgment: “It is formed on the basis of evidence interpreted within a frame of reference” (1999, p. 93).

For Teston (2017), medical attuning is also accomplished through *phronesis*. According to Teston, a material feminist practice of *phronesis* exceeds mind-body boundaries to include extrahuman environs. I argue that *phronesis* is a way of being (a body) in the world that is profoundly attuned to material *phainomena* and that to be attuned to such *phainomena* is an openness to — a capacity to be affected-by-and-out-toward — aspects of a world. (2017, p. 178)

Teston’s *phronesis* is firmly rooted in feminist materiality, cognizant of the “history, social positions, region, and the uneven distribution of risk” (2017, p. 179). *Phronesis*, therefore, is more than practical knowledge or wisdom. It is attunement to

“sociality based on incommensurate experience” (Teston, 2017, p. 179). This definition does not mean that Teston’s *phronesis* cannot attune conceivably incommensurable ideas. She proposes that there are real-lived experiences that can never be comparable to those that are privileged and a *phronetic* analysis should be foregrounded in these “precarious” conditions. Thus, practicing care as *phronesis* takes into consideration the worlds of those we treat as seen through the lenses of their cares, concerns, and motivations. In practice, this *phronesis* care model understands that some people *do not* continue their occupational therapy because they *cannot*; that real-life situations like work, or child-care, or transportation means that continuing with therapy becomes a luxury (or embodied privilege), and living with a little pain (or with limited mobility) is a small price to pay when compared to being evicted or going without food until the next paycheck.

Neosophistic Rhetoric and Competing Discourses: Whose *Phronesis*?

The problem with *phronesis*, however, is that there are so many competing definitions. For example, John Sloop and Kent Ono (1997), use *phronesis* to “legitimize” outlaw discourse. They define the term as “loosely shared logics of justice, ideas of right and wrong that are different that, although not necessarily opposed to, a culture’s dominant logics of judgment and procedures for litigation” (Sloop & Ono, 1997, p. 51). Focused on the Other, *phronesis* as “out-law discourse is seen by those who share its logic to be the correct form of judgment” (Sloop & Ono, 1997, p. 51). The problem, then, is that when this dissertation works with probability in health ecologies, *phronesis* becomes a methodological choice that may be inflexible. How I define *phronesis* may determine how I work with probability. This approach may become problematic because

of the nature of those particular health ecologies with all of their competing discourses. There are definitely “outlaw” discourses that need to be heard and choosing a definition of *phronesis* that mirrors those voices would be ideal. Unfortunately, there are other discourses that have legitimate concerns. For example, in addition to outlaw discourse (Sloop & Ono, 1997), there are feminist (Teston, 2017), vernacular (Hauser, 1999), expert (Collins & Evans, 2007), authoritative (Herndl & Licona, 2007), and ontological (Graham, 2009) discourses just to name a few. There are many more to be sure, and the problem arises when these discourses – and their corresponding definitions of *phronesis* – conflict. They may even appear to be at times incommensurable (Graham & Herndl, 2013). The problem then arises: “Whose *phronesis*?”

From a neosophistic view, rhetoric deals with imperfect knowledge through communal truth-making, to create what Gorgias referred to as relative truth or *alêtheia*. Framed in reference to probability (*eikos*), rhetoric’s epistemic process understands that truth is contingent and created through an empirical process of “generally accepted social norms, experience, or even matters of faith” (McComiskey, 2002, p. 59). While Gorgias does talk about *phronesis*, especially in his *Defense of Palamedes*, it is more of a person’s *ethos* and part of an inventional *topoi*. *Alêtheia*, therefore, is grounded in *kairos* – the opportune time. It is relativistic and contextual.

Neosophistic rhetoric is ethical in the way it engages other (sometimes competing, often privileged) discourses. When truth is contingent and uncertain, the actions one takes is coupled with a responsibility for the consequences. This position is contrasted with those who act out of perfect “Truth,” for they can never be responsible for the harm they visit through their actions. Those who act out of certainty are merely

vehicles for the Truth, and any pain associated with these actions is acceptable. Unfortunately, *phronesis* does not necessarily incorporate contingency and uncertainty. More problematic, *phronesis* does not necessarily seek different wisdoms. Returning to Sloop and Ono (1997), for example, *phronesis* can be a different sense of right and wrong – a different sense of justice – but it is still, nonetheless, a *phronesis* that stands in perpetual contrast to another. In other words, the invocation of a *phronesis* always entails the existence of another competing *phronesis*. This approach is similar to how Jenny Rice (2012) describes truth and the problem with *logos*: for every correct answer, there is also another right one. There is no monopoly on truth or on *phronesis*.

I argue here that my neosophistic theory highlights the constraints in a health ecology and is therefore a better vehicle for calibrating the circulating competing discourses due to its interplay of *alêtheia* (relative truth), *eidô* (communal knowledge), and *kairos* (opportune moment)¹⁵ to create an ethically constructed network of associations through which actants engage, often through a process that Bruner (1986) called “presupposition.” According to Bruner, presupposition is “an implied proposition whose force remains invariant whether the explicit proposition in which it is embedded is true or false” (1986, p. 27). In discourse, this perspective means that there is a community (whether two or two million discoursants) preconstructed to understand more than what is in the text, be it codes, tropes, or language markers. When presuppositions are used, they are easily unpacked by the rhetor and the audience. It is an important concept that we will return to shortly.

¹⁵ As McComiskey (2002) argues, universal truth is not bound by space or time. There is no wrong time to say something if it is based in universal truth, nor is there a wrong place to say something because a universal truth is always privileged.

While critics may argue that democratically arrived-at decisions do not necessarily imply that they are ethically correct, I counter here that *eidô* and democracy do not always equate – nor should they. *Eidô* can be arrived at through a democratic procedure, but it does not have to happen that way, because of the temporizing and calibrating influence *alêtheia* has on the process. I am not advancing the argument that there is no need for other discourses, such as Teston’s (2017) feminist materialistic *phronesis*.¹⁶ Instead, I am arguing from the position that the neosophistic rhetoric articulated here can never emerge from a place of privilege. Neosophistic calibration, therefore, is foregrounded in a relativistic truth where no discourse is privileged, social positions are unstable, and knowledge is communally constructed, leaving open the possibility that the arrived-at truth may be the minority held, but socially accepted position.¹⁷

In order to better understand how neosophistic calibration may offer a better alternative to *phronetic* attunement, I find that it may be useful to delve deeper into an examination of how *alêtheia* is constructed through language. A neosophistic view does not see language (*logos*) merely as a tool to communicate meaning. Instead, language creates reality, and knowledge is developed empirically and communally through discourse (McComiskey, 2002). There is no single “Truth” waiting to be discovered in the Socratic sense. Neosophistic “truth” is relative, fluctuating, and changing, always

¹⁶ Susan Jarret’s *Rereading the Sophists* (2002) is an example of feminist neosophistic theory. According to McComiskey, however, her neosophistic theory is “a negative dialectical methodology, one in which oppositions of dominant discourse are simply reversed rather than destroyed” (2002, p. 74). My analysis relies on the relationship among *alêtheia*, *eidô*, and *kairos*. Jarret relies on *nomos* and its relationship to *phusis*.

¹⁷ Since truth is unstable and contingent, I must constantly hold my information under advisement. In other words, under a neosophistic ethic, I should always be prepared to accept that I may be wrong.

dependent on the situation. As was stated earlier in the introduction, our language as a system (*logos*) is the referent for “reality” and that *meaning is subordinate to situation*.

This framework is not as shocking as it sounds, and as Bruce McComiskey (2002) explains in his treatment of Gorgias and sophistic rhetoric, it was entirely consistent with the Athenian notion of democracy under which sophistic thought flourished. Gorgian theory is culled from his extant writings, most notably from *On Non-Existence*, the *Encomium of Helen*, and the *Defense of Palamedes*. As a whole, Gorgias’ theory of rhetoric understands that human activity is governed by probability rather than truth. In other words, what we do is often represented by multiple different viewpoints, and decision-making is not based on an external “Truth” but governed by a reasoned choice among a variety of perspectives.

Gorgias’ idea of language constructing reality was a reaction to the pre-Socratic notion that the study of language was not as important as studying other things, such as existence or objective Truths (McComiskey, 2012). Understanding what Gorgias was refuting helps us understand his writing, and his teachings were a response to what we now call Eleatics. The early theory of Eleatics can be traced to Xenophanes of Colophon, Parmenides, and Zeno (Poster, 1994). In explaining Eleatic thought, Poster synthesizes three extant fragments of Xenophanes:

Things are not revealed to humans by the gods – they are discovered by long seeking. No person knows everything about the gods – including Xenophanes himself – but one may, through the process of writing – succeed in saying what is completely true. The truth lies, not in the things themselves as said literally, but rather in opinions that are similar or parallel to reality. (1994, p. 286)

Melissus of Samos later inherited the Eleatic school of thought from Parmenides and Zeno and extended the argument to its logical, if not extreme, end: "This argument, then, is the greatest proof that it is one alone; but the following are proofs of it also. If there were a plurality, things would have to be of the same kind as I say the one is" (Makin, 2005, p. 264). Continuing this thought about truth and reality, Melissus argues against that which is perceived against that which is real:

We said that there were many things that were eternal and had forms and strength of their own, and yet we fancy that they all suffer alteration, and that they change from what we see each time. It is clear, then, that we did not see aright after all, nor are we right in believing that all these things are many. They would not change if they were real, but each thing would be just what we believed it to be; for nothing is stronger than true reality. But if it has changed, what is has passed away and what is not has come into being. So then, if there were a plurality, things would have to be of just the same nature as the one. (Makin, 2005, p. 264)

As stated then, Eleatic thought did not trust the senses. Since what was sensed changed, it could not be reality. Instead, reality was something external to our senses that was to be discovered by pure thought. In other words, "whatever is exists and cannot not exist" (Schiappa, 1997, p. 19). Reality was therefore eternal, unlimited, and unitary. This mode of thought served as a rebuttal to the preliterate mythologizing society and its belief in reactionary gods as the ontological basis for existence. As such, Eleatic thought was influential in fifth-century BCE Greece and comprised one of the first epistemological "turns" in Western society.

In his most important work on rhetoric, *On Non-Existence*, Gorgias offers his famous trilemma that constructs his ontologically skeptical nature of reality and his relativistic epistemology in response to the Eleatic (and later pre-Socratic) notion of an essentialist (or foundationalist) reality:

First and foremost, nothing exists; second, that even if it exists, it is inapprehensible to man; third, that even if it is apprehensible, still it is without a doubt incapable of being expressed or explained to the next man. (Sprague & Diels, 2001, B3.65)

Gorgias' first element in his trilemma was the longest and refuted the Eleatic belief in an eternal, unlimited, and unitary reality. In other words, it challenged the idea of a boundless "One" relied upon by the Eleatics (Sprague & Diels, 2001, B3.66). It does so through an ontologically skeptical analysis of creation. While it may read as a trifling academic exercise, upon closer examination, it is apparent that the issues Gorgias addressed are those still debated today in the natural sciences such as physics and cosmology.

"Nothing exists" does not necessarily mean that we are living in a universe where there is nothing. Critics of Gorgias often take this literally without reading through his explanation which, if understood in context, is quite simple. Both the Eleatics and Sophists understood the problem with our senses. The Eleatics, in response, created an external reality – a "true reality" – separate from that we perceive. The Sophists, and Gorgias in particular, rejected that solution and instead accepted the reality perceived by our senses with the caveat that we all perceive it differently.

Thus, thinking in terms of creation, Gorgias analyzes the issue in terms of “existent” and “nonexistent” as the only choices in a binary. This binary was used by the Eleatics to create the one true form, but for Gorgias, it was implausible¹⁸ because to begin with, nonexistence does not exist by its very nature. For example, if we think of an apple and not seeds or trees or germination, etc., then an apple cannot be a non-apple. Furthermore, it cannot be in both existence and nonexistence. Again, an apple cannot be both an apple and not an apple. Next, our reality cannot exist because it can only be everlasting or created. It surely cannot be both, and it cannot be created since that means it would have to come from nothing, which is impossible. In other words, an apple cannot come from a non-apple. It cannot be eternal because that would mean it is without limits and boundless. Something without limit and boundless is everywhere (or everything).¹⁹ If it is everywhere, it cannot be contained. Thus, it has no position, no fixed place where it belongs. To exist means to be somewhere. An apple has to be somewhere to be an apple. Thus, apples are not eternal. Finally, reality cannot be “one” because to exist, it must have size. To have size means it can be divided, and if it can be divided then it is not unitary. It is not “one” as envisioned by the Eleatics. And since it cannot be “one” it cannot be many, since the many is made up of the addition of “ones.” But if there is no “one,” there cannot be a many. Hence, according to Gorgias, “nothing exists” (Sprague & Diel, 2001, B3.76). Why is this first trilemma important, other than being fodder for the occasional cocktail party? According to McComiskey (2001), Gorgias is trying to establish a relativistic epistemology to refute what he calls an

¹⁸ In Sprague (2001), Gorgias uses the term “absurd.”

¹⁹ Another example would be an inaccurate definition of rhetoric being all discourse. If all discourse is rhetoric, and therefore rhetoric is boundless, then it is really not rhetoric. It is just discourse.

essentialist (single) ontology. By deconstructing the idea that “whatever *is* exists and cannot *not* exist,” Gorgias can move on to his second and third parts of his trilemma that deal with what we actually perceive reality.

The second part of the trilemma, “that even if it exists, it is inapprehensible to man,” is a response to the Eleatic belief that “Things are not revealed to humans by the gods – they are discovered by long seeking.” In other words, to the Eleatics, we do not perceive the one true reality, we conceive it in our mind through thought. For Gorgias, this view is unworkable because it is impossible to differentiate what is real and unreal in our mind, and if our senses are not to be trusted, there is no objective standard of truth. For example, I can conceive in my mind both an apple and a winged horse that flies through the sky. In my mind I can make both seem real. Just because I have not seen a flying horse does not mean they are not real. There are plenty of things I have not seen, and thus I cannot be a referent for myself.²⁰ Also, the opposite is true. If I can conceive of a flying horse, it would be absurd to think that is true. Thus, my internal realities cannot be the referent for those external realities. Through this second trilemma, we can understand how normativity works. It is often said that tyrants love

²⁰ Neosophistic thought, in the situation of a flying horse, would look again to communal truths. We, as a society have not seen flying horses, so to us, they do not exist. As a corollary, however, we have to understand that our beliefs are relativistic, uncertain, and based on probability. Robert Scott’s essay, “On Viewing Rhetoric as Epistemic” (1967), makes the argument that this is why sophistic rhetoric is ethical: If one can act with certainty of truth then any effects of that action can be viewed as inevitable, that is, determined by the principles for which the individual is simply the instrument; the individual acting is not responsible for the pain, for example, that his actions may bring to himself or to others. The man who views himself as the instrument of the state, or of history, or of certain truth of any sort puts himself beyond ethical demands, for he says, in effect, “It is not I who am responsible.” On the contrary, one who acts without certainty must embrace the responsibility for making his acts the best possible. He must recognize the conflicts of the circumstances that he is in, maximizing the potential good and accepting responsibility for the inevitable harm. If the person acts in circumstances in which harm is not an ever-present potential, then he is not confronted by ethical questions. . . . To act with intentions for good consequences, but to accept the responsibilities for all the consequences insofar as they can be known is part of what being ethical must mean. (pp. 16–17)

Socratic thought because an otherwise subject conception of reality can be made objective by appealing to “higher truths.” Sophistic thought, on the other hand, refutes this argument and appeals to democratic notions of truth. In evaluative terms, it means we must understand different viewpoints and how they operate in any given ecology. Again, we can use Edbauer’s (2005) example of a city to see how this relativistic epistemology operates:

The contact between two people on a busy city street is never a matter of those two bodies; rather, the two bodies carry with them the traces of effects from whole fields of culture and social histories. This is what it means to say that the social field is networked, connected, rather than a matter of place, sites and home. (p. 10)

Thus, our external realities are relativistic because our internal realities are multiple. Neosophistic rhetoric helps us recognize that in any human activity, and specifically in the case of this dissertation, there are going to be various conceptions of what is a best option, a Best Practice, or a Gold Standard.

The third part of Gorgias’s trilemma, “that even if it is apprehensible, still it is without a doubt incapable of being expressed or explained to the next man,” argues that external realities remain external, even when we perceive and try and communicate them because of the nature of *logos*. It can be argued that here is where Gorgias is doing his most important work. For other modes of thought, language was merely a tool, a way to explain in a one-to-one manner what was observed. Any study of language, therefore, was secondary to the study of existence. As a sophist, however, Gorgias saw the value of language. To him, language was the primary concern. In fact, Gorgias flips

the order by stating that “logos is not a representation of the external [to *ektos*], but the external becomes the signifier [*mênutikon*] of logos” (B3.85). In other words, our internal realities are the true expressions of existence, and those external realities become mere references for the internal. In sophistic thinking, this perspective makes sense since there can never be an objective reality. Truth is always contingent and subject to *kairos*. In sophistic terms, timing is important when constructing knowledge or engaging in discourse. From an essentialist standpoint, however, there is no opportune time since the Truth can (and should) be spoken at any time. Knowledge for an essentialist (such as Plato) is *a priori*, it waits only to be discovered. For Gorgias, sophistic knowledge, *eidô*, is empirically constructed through communal discourse using rhetoric.

Gorgias’ work has been criticized as mere word play. In context, however, it is properly understood as a response to the work of Melissus, in both style and even with the title of Gorgias’ work being a variation of the one used by Melissus (Schiappa, 1997). In proper context, therefore, what we see is Gorgias’ response to a competing mode of thought in a way that is both a mirror of the Eleatic and later pre-Socratic style and yet thoroughly sophistic. Gorgias’ rhetoric²¹ was also a pragmatic reflection of the various cultures he visited during his travels (McComiskey, 2012), and it is this pragmatism that is seen today in neosophistic practice. These two opposing views on reality exist today as competing epistemological paradigms. There are those who believe that reality is something that simply “exists” – if they can study it, it exists. Others take an opposing view, that reality is relative. Two people can view the same object or read the same text and come away with two entirely different experiences. In

²¹ Rhetoric is used here to refer to a particular mode of thought, even though the term was not applied to a particular style until later.

other words, these two people can actually perceive the same thing differently with both being right in their conclusions about what they perceive. The first paradigm believes in an objective reality (relativist or empiricist), while the second believes in a subjective reality (relativist).

So, if there are a variety of ways to use and evaluate knowledge, then how should one choose the best option? My neosophistic rhetorical theory understands that a health ecology is often defined by its constraints and, therefore allows for the calibration of all of the competing discourses circulating throughout. Communally constructed knowledge is contextual and contingent based on the present state of the information circulating. This position does not mean that there cannot be Best Practices or a Gold Standard in knowledge centers. Instead, these concepts can be considered part of the epistemological process – *evidence of communal truths that can be taken into consideration*. They are not the answer to the question, “What is best?” Instead, they are part of the equation – part of the question – in asking, “what is the best at this time?” For example, in a library evaluation of a collection (i.e., a collection strength measurement), there is generally a Gold Standard – a core collection of titles that a particular library should have. But it would be folly to think that this core collection is static, since knowledge is continuously being created and new texts are written that can supplement, or even supplant, those books considered the Gold Standard for a collection. These standards become part of the health ecologies when studying a medical library, a concept I examine in more depth in the next chapter when I contextualize my new methodology.

CHAPTER 3:

ECOLOGICALLY EVALUATING THERAPEUTIC LIBRARIES

In the previous chapters, I outlined some of the literature regarding rhetorical ecologies and the development of health ecologies by Walkup and Cannon (2018). I also discussed the major differences between the two and how the competing discourses circulating in health ecologies can be calibrated using neosophistic rhetoric. In this chapter, I place my research into context by tracing some of the networks that can be found in those health ecologies similar to DACCO's, the development of the DACCO library and how it can be visualized in the greater health ecologies of DACCO, and how the library may be reframed as a rhetorical intervention. Finally, I outline some of the actants that can be used to measure the "goodness" of the health ecology and focus on a unique rhetorical intervention that will later serve as an example for assessment.

AOD and Treatment Health Ecologies: Multiple Ontologies and Discourses

I am studying the DACCO library to contextualize the modified rhetorical situation and to expand the model of health ecologies first articulated by Walkup and Cannon (2018). As part of the larger DACCO health ecologies, the library offers an excellent opportunity to see how human and nonhuman actors interact in ways beyond the traditional notion of people and reading. The DACCO library contains a variety of

actants including the residents, librarians, texts, TBT tracks, and narrative space, just to name a few. The relationships among these actants are interesting because of the dynamic way they circulated throughout the DACCO health ecologies. For example, if we trace the act of reading (or the text being read), we see that there is a relationship between the resident/reader and the text. There is also a relationship between the author and the resident, which then, through the process of perfusion, travels beyond reader/text to create interactions with MHPs, treatment philosophies, physical spaces in DACCO, group counseling sessions, and other residents.

Using the model of health ecologies helps us understand that these interactions are not solitary and that the rhetorical event of reading is an intervention designed to solve a problem. Here the rhetorical situation becomes useful in my dissertation for evaluation purposes. By thinking in terms of exigence, I can determine the best evaluation option by analyzing the problem I am trying to solve, the audience I am trying to move to action, and the *events* that influence my choices. Neosophistic thought comes into play here. Instead of thinking in terms of “uniformity” with one standard text collection and one standard form of text-based therapy, a neosophistic, relativistic epistemology understands that library services need to be personalized as they are dependent on the situation and the state of the various health ecologies at that particular time.

As I have done in the previous chapters, visualizing health ecologies can aid in tracing the various networks of associations unique to the field of medicine. Furthermore, it is possible to trace those associations found in AOD health ecologies. For example, in Figure 4, I have visualized an ethnographic study of addiction treatment

by E. Summerson Carr (2010) in her book *Scripting Addiction*. In this book, Carr investigates the daily interactions and negotiations between counselors and clients, as well the exchanges that occur in this unique model of health ecologies.

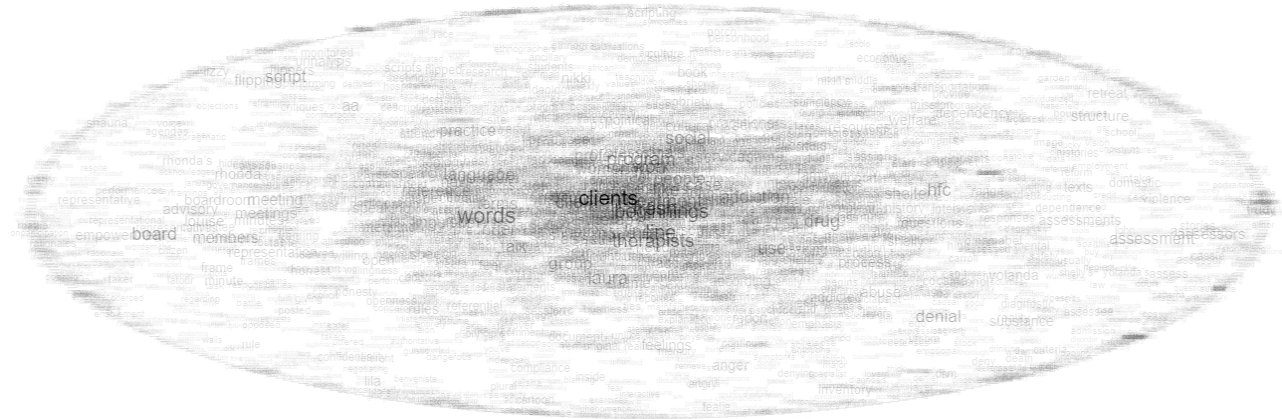


Figure 4. Visualization of addiction and treatment health ecologies.

This exhaustive study provides me one opportunity to study how AOD addiction is enacted, to borrow Mol's (2002) term, through a multitude of actants. While disease is not as relevant as its salience, a concept I argued in my introduction, how the everyday perception of addiction facilitates those relationships in health ecologies is, especially when it interacts with ecological agency as change over time. As discussed in Walkup and Cannon (2018), the multiple ontologies of addiction give it greater perfusion throughout the network of health ecologies because it is a shifting concept in a dynamic environment. To use a rhetorical term, addiction's multiple ontologies give it greater *amplification*, allowing it to travel further throughout the network.

Paired with each addiction ontology is a specific set of discourses. Thus, when I discuss the necessary calibration that must be done in a health ecology, as opposed to the more general model of rhetorical ecologies, it is the example given by those

discourses related to addiction that I find the most useful. As discussed by Walkup and Cannon (2018), the definition of addiction is not stable, even among those normative disciplines that seek answers through an empirical-discursive ontology. Many of these differences arise from ideological, epistemological, and methodological disputes (Miller, 2011). According to Karasaki et al. (2013), there are at least five different definitions and four conceptual models of addiction (pp. 195–196). These definitions rely on a binary paradigm that separate people from drugs (people/drugs) and addiction from sobriety (addiction/sobriety). For example, cognitive-behavioral treatments (CBT) defines addiction as “an irrational thought process or behavioral pattern produced by conditioning, social learning, stimulus and reward, and positive and negative reinforcements” (Karasaki, 2013, p. 195). Psychoanalytic discourse defines addiction as a response to “unconscious emotional needs arising from early life experiences” (Karasaki, 2013, p. 196). Pharmacological theories define addiction as a brain disease or instances where the pleasure/pain centers of the brain become “hijacked” by the AOD (Fraser, 2015b, p. 40). Social models define addiction as constructs of history and culture and “emerge from the interaction of drug, individual, and environment” (Karasaki, 2013, p. 196). Finally, the biopsychosocial model defines addiction as a synthesis of all the models above. If we imagine each model as a collection of discourses, different in their outlook on treatment, then it is possible to imagine the multitude of discourses related to addiction alone. Figure 5 illustrates the distribution of addiction throughout the AOD health ecologies. This visualization encapsulates why I believe health ecologies should be considered distinct from rhetorical ecologies.

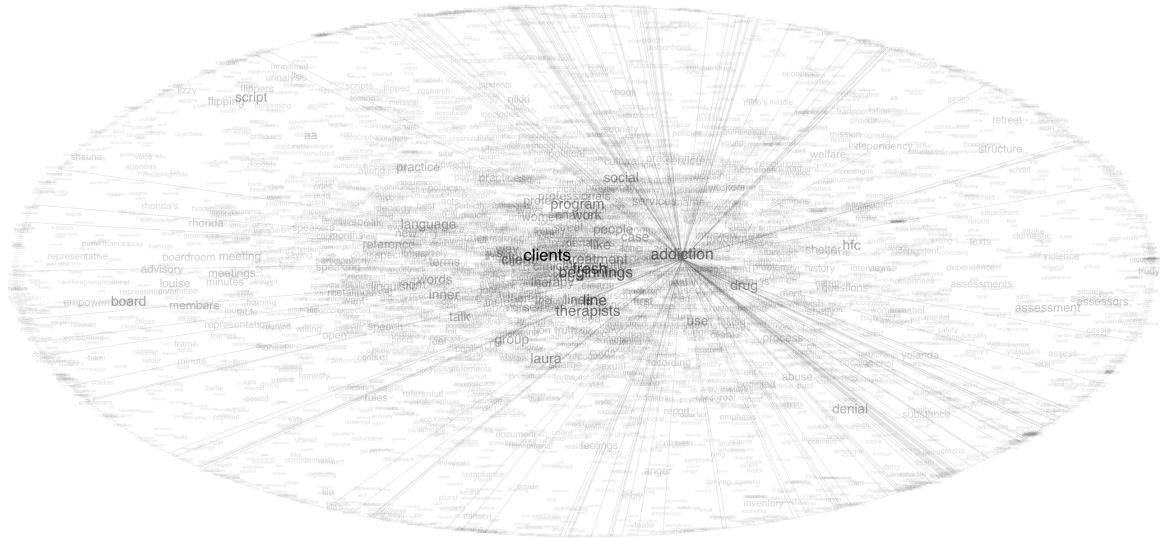


Figure 5. The distribution of addiction in health ecologies.

As shown in this visualization, the term “addiction” shares the center spot of this network analysis with terms such as “treatment” and “clients.” If we unpack the significance of the term addiction, we understand that it is a term of identity (addiction as a socially constructed identity of a client) and medical term (addiction as a disease diagnosis and as a stage in medical treatment). Thus, the discourse relating to the term addiction can be enacted by different actants in a health ecology, such as clients undergoing treatment and mental health counselors who are responsible for constructing a treatment plan. I am not trying to argue that traditional ecologies do not also have this issue. What I am stating is that, unlike the traditional rhetorical model, there is not necessarily a “right or wrong” discourse, a notion that becomes complex when we visualize the various relationships a term like “addiction” has in a health ecology.

Development of the DACCO Library: From Concept to Health Ecologies

The librarians modeled the DACCO library after the library bibliotherapy program operated by the James A. Haley Veteran's Hospital (JAHVA) in Tampa, Florida, under the U.S. Department of Veteran Affairs (VA). The JAHVA assists veterans with both physical and mental rehabilitation, and this most recent group of veterans has brought mental health concerns such as post-traumatic stress disorder to the forefront. Like the other VA hospitals, the JAHVA employs bibliotherapy as both a stand-alone treatment and in conjunction with other therapy methods and uses the VA bibliotherapy resource guide (Department of Veterans' Affairs, 2009) for text selection. The VA's experience in using bibliotherapy to assist veterans in handling mental health issues was a good model for the development of similar services at DACCO. The VA includes mental health facilities that host patients with a restricted ability to leave, sometimes known as Acute Recovery Centers (ARCs). The DACCO librarians found that the JAHVA operate a successful bibliotherapy program for many of its patients, including those on restriction in its ARC, a population that is analogous to the women residents in DACCO.

The overall scheme of the therapeutic library at DACCO was loosely modeled on the bibliotherapy programs developed in the United Kingdom (Brewster, Sen, & Cox, 2010). Today, the use of bibliotherapy techniques is more predominant in the UK than the United States since in the UK, there is a national policy that promotes wellness, and the use of bibliotherapy techniques is consistent with those goals. There are several programs in use in the UK that promote bibliotherapy in public libraries (Brewster et al., 2013). One program, called "Read Yourself Well" (RYW) is a collaborative scheme

where libraries, medical professionals, and patients use CBT practices that include mostly self-help bibliotherapy texts. One study of the RYW program found that library-based bibliotherapy was effective in treating mental health problems when compared to other treatment models that did not incorporate reading therapy (MacDonald et al., 2013). Other programs such as “Books on Prescription” provide similar cognitive-based bibliotherapy with equally effective outcomes. The “Reading and You Service” (RAYS) is an affective bibliotherapy program that relies upon fiction and reading groups, and initial data from this model indicate that it is popular with patients and similarly effective (Brewster et al., 2013). Regardless of the model, bibliotherapy schemes in the UK place a therapeutic value on reading and find that it is useful to the practice of medicine.

The models described above should not be considered unusual since the metaphor of book as medicine is as old as the book itself. According to the Greek historian Diodoros Siculus, in his monumental work *Bibliotheca Historica*, there was a phrase above the entrance to the royal chamber where books were stored by King Ramses II of Egypt in Thebes. Considered to be the oldest known library motto in the world, it read, “House of Healing for the Soul.” This idea that books were thought as therapeutic should come as no surprise to bibliophiles. Galen, the philosopher and physician to Marcus Aurelius of Rome, maintained a medical library in the first century. It was used not only by himself but by the staff of the *Sanctuary Asclepeion*, a Roman spa famous for its therapeutic waters and considered to be one of the first hospital centers in the world (Basbanes, 2001). Additionally, as far back as 1272, the *Koran* was prescribed reading in the Al-Mansur Hospital in Cairo as medical

treatment (Rubin, 1978). In the early nineteenth century, Dr. Benjamin Rush favored the use of literature in hospitals for both the “amusement and instruction of patients” (McCulliss, 2012), and by the middle of the nineteenth century, Dr. Minson Galt II wrote on the uses of bibliotherapy in mental institutions, eventually leading them to become an important part of European psychiatric institutions.

After the term bibliotherapy was coined by Samuel Crothers in an August 1916 *Atlantic Monthly* article, it eventually found its way into the medical lexicon (McKenna et al., 2010). By the 1920s, there were training programs in bibliotherapy. One of the first to offer such training was the School of Library Science at Western Reserve University, followed by a program at the University of Minnesota School of Medicine (McCulliss, 2012). Hospital librarians were at the forefront of bibliotherapy development. E. Kathleen Jones, the editor of the book series *Hospital Libraries*, was the library administrator for the McLean Hospital in Massachusetts. Her influential work was first published in 1923, and then updated in 1939, and then 1953. Pioneer librarian Sadie Peterson Delaney used bibliotherapy in her work at the VA Hospital in Tuskegee, Alabama, from 1924 to her death in 1958. Elizabeth Pomeroy, director of the Veterans Administration Library Service, published the results of her research in 1937 on the efficacy of bibliotherapy at VA hospitals (McCulliss, 2012). The United Kingdom, beginning in the 1930s, also began to show growth in the use in of reading therapy in hospital libraries. Charles Hagberg-Wright, librarian of the London Library, speaking at the 1930 British Empire Red Cross Conference, spoke about the importance of bibliotherapy as part of “curative medicine” in hospitals. In addition, reports from the

1930 Public Health Conference about bibliotherapy were included in the British journal *Lancet* (Clarke, 1988, p. 2).

With hospitals taking the lead, bibliotherapy principles and practice developed in the United States. In the United Kingdom, it should be noted, some felt that bibliotherapy lagged behind the US, and Joyce Coates, writing in the *Library Association Record*, felt that “the possibilities of bibliotherapy have yet to be fully explored” (Clarke, 1988, p. 3). In 1966, the Association of Hospital and Institution Libraries, a division of the American Library Association, issued a working definition of bibliotherapy in recognition of its growing influence. Then in the 1970s, Arleen McCarty Hynes, a proponent for the use of bibliotherapy, created the “Bibliotherapy Round Table” which sponsored lectures and publication dedicated to the practice. Today, there is an active section of the American Library Association on the use of bibliotherapy (ALA, n.d.) and the VA publishes a bibliotherapy bibliography to be used in all of its hospitals (Shereff, Palmer, & Cannon, 2017). Today, it is accepted that integrating books into therapy can reduce treatment costs, increase the effectiveness of therapy, decrease time spent in treatment and the stigma associated with it, provide access to therapeutic services for those who would not be able to afford them, and empower consumers with a sense of control over their treatment and condition (Brewster, 2017; Cannon, 2018; Shereff, Palmer, & Cannon, 2017; Walkup & Cannon, 2017).

Early research explored text-based therapy as a treatment tool for a range of mental health conditions such as depression, deliberate self-harm, obsessive-compulsive disorders, bulimia, insomnia, anxiety, panic disorders, and related conditions (Chamberlain et al., 2008; Gregory et al., 2004; McKenna et al., 2010). Most

studies focus on cognitive texts such as self-help books. Cognitive texts are often written for a therapeutic purpose and can either create or complement a treatment plan. Studies using cognitive texts are easily replicable, and often the evidence supports their efficacy. Most texts in this genre are foregrounded in the assumption that many mental health conditions can be treated through behavior modification. For example, cognitive-behavioral therapy (CBT) focuses on modifying dysfunctional behaviors through therapy that offers alternative strategies for dealing with negative issues, and many self-help texts follow this treatment modality.

The Freudian psychoanalytical model differs from CBT in that it often focuses on childhood development and personality traits. According to bibliotherapy pioneer Caroline Shrodes (1960), psychoanalytical bibliotherapy “is grounded in the theory that there is an integral relationship between the dynamics of personality and the nature of vicarious experience” (p. 311). The current practice of fiction-based bibliotherapy is often foregrounded in the psychoanalytical principles first articulated by Shrodes in her oft-cited 1950 dissertation that rely on the mechanisms of identification, catharsis, and integration. This process requires an interaction between personality and text through the reader’s identification with either a character or situation in a story.

Visual-based bibliotherapy is a newer form of treatment that is gaining in popularity (Shereff, Palmer, & Cannon, 2017). Scott McCloud’s authoritative work on the comic and graphic novel genre identifies the processes of *breakdown* and *closure* that perform narrative work useful in therapeutic situations such as trauma (Leone, 2018). For MHPs, the graphic novel allows for narrative reconstruction through the visualization of situations that mirror those suffered by those in therapy. Often shorter and easier to

read, the graphic novel can complement treatment plans and allow a broader reader demographic to participate in bibliotherapy.

After my initial data for my dissertation was collected and analyzed, a new model was developed as a way to respond to some of the issues discussed throughout this dissertation. Called *responsive librarianship*, I coined the term during this study to mean *the delivery of personalized library services in response to a rhetorical exigence that produces a modification of the reader's situation* (Cannon & Reese, 2018).

Borrowing elements from speculative usability design principles (Rivers & Söderlund, 2016), responsive librarianship is foregrounded in the rhetorical situation and focuses on three major aspects. First, library services are personalized using the Comprehensive Model of Information Seeking (CMIS) as a guide in asking questions to determine the appropriate bibliotherapy text. Second, services are designed to solve a specific exigence or exigences ascertained through a reference interview. Third, librarians try to maintain a reader's sustained level of engagement with bibliotherapy texts. Visualizing the DACCO library health ecologies and the relationship of its TBT scheme to other actants were done through a text network analysis of the literature on this project. As shown in Figure 6, the DACCO library shares many of the same actants and associations shown in figures 4 and 5. Near the center, however, is the library itself. Similar to the AOD ecologies based on Carr (2010), we see residents (i.e., the "clients" in Carr) in the core, but not the focus of attention. Instead, what we visualize is a relationship among other actants such as bibliotherapy, information, technology, and treatment. Tracing these relationships, therefore, is important if we are to understand how to evaluate a rhetorical intervention in health ecologies.

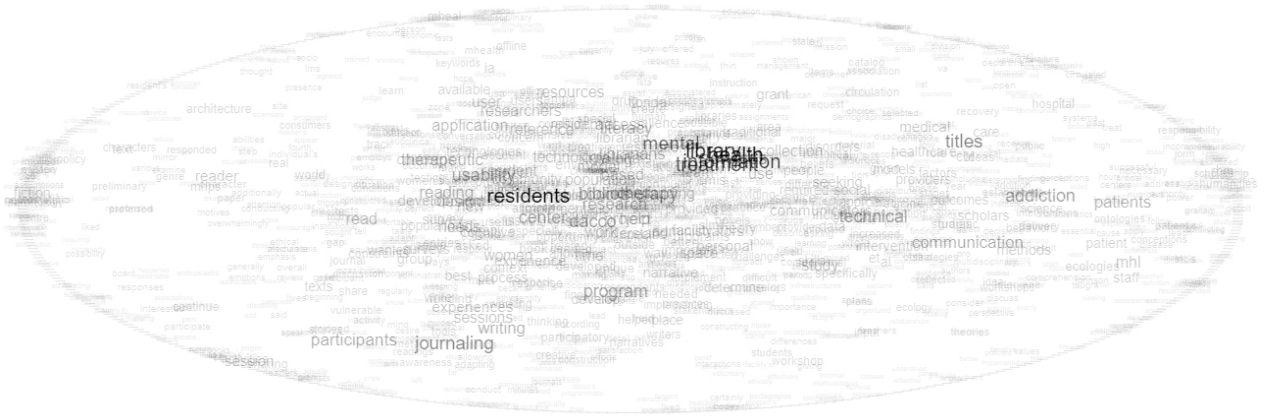


Figure 6. A visualization of the DACCO library health ecologies.

A TBT Model in Context: Tracing the Rhetorical Event of Genre Reading

Contextualizing my new research model would be a challenge in any network of health ecologies because of their size and complexity. Finding a suitable portion of the DACCO health ecologies to study, therefore, was important. During initial data analysis for my dissertation, I was fortunate to develop a new model for TBT that might be able to address some of the issues I encountered both with the residents not wanting to read books with triggers and with the MHPs not wanting books to become a distraction during group therapy (Cannon, 2018). This new model was also prompted by the limitations posed by the traditional behavioral, psychoanalytical, and visual models of text-based therapy. This approach is what I previously introduced in Chapter 1 as *NeuroApp*, the term for a TBT model that engages a reader’s cognitive processes and rhetorically reconstructs their identity through reading therapy (Cannon, 2018).

By applying my new methodology to this one portion of the DACCO library health ecologies, I hope to evaluate its usefulness as a tool for studying health ecologies. Key to implementing my revised methodology is understanding how this new model works.

Tracing the differences among the four tracks is important because each one is inured with its own set of discourses. For example, I hypothesize that the networked associations for the CBT track will be much different than those belonging to the NeuroApp track. CBT texts are didactic, comprised of truth-statements that leave little room for interpretation. The exigence addressed by them are behavioral issues that must be identified by the reader. Many times at DACCO this identification is achieved through the aid of a MHP in one-on-one counseling or in group therapy. CBT is very popular and successful, and the discourse produced by CBT texts, while simple and straightforward, does have its problems (Walkup & Cannon, 2018).

In doing preliminary preparation for my dissertation, and as part of an IRB (#Pro00027455), I had an opportunity to sit in and observe a local AOD recovery meeting. These recovery meetings are for people who recently finished treatment. Relying on CBT principles, the participants of this meeting started off with a prayer related to their addiction, followed by an introductory statement by the group facilitator, and then proceeded with personal narratives related to the night's topic. As discussed by Walkup & Cannon (2018) and consistent with this recovery meeting, there was a lot of problematic identity work being done by the group, with those in positions of power and authority pressuring those with less power and authority to adopt different identities. Any resistance by those with less power was often met with statements like "That's addict thinking," or "You're an addict." This dynamic is consistent with CBT techniques which often require the person to assume an identity (e.g., "addict") and a set of behaviors (e.g., "addict thinking"), reifying the stigma often associated with those in

treatment. Preliminarily, we can see some of the complicated discourses that accompany CBT TBT.

On the other end of the TBT spectrum, the NeuroApp track implicates a different collection of network associations. Even though the NeuroApp track employs a different – and perhaps reduced – type of therapeutic intentionality, it is no less complicated. This distinction is due to its duo-discursive nature, dividing it into two parts. The neurorhetoric part deals with that branch of rhetorics most interested in how the prefix *neuro* is used to construct, describe, and embody our world. It is related to what Lisa Keränen (2010) describes as the way “language affects scientific processes and understanding” (p. 23) and the way David Gruber (2018) uses rhetoric to show “how the social and symbolic are embedded in neuroscience research” (p. 279). The narratology part is most interested in how world making is constructed through rhetoric-based discourse – specifically, those stories we tell about ourselves (Bruner, 2004). Bruner’s (1990) narrative theory was one of the first psychological models that explored how the way we talk about ourselves can change and control our lives. This conception of narratology also links Bruner’s theory with those in the cognitive sciences who investigate how different genres of texts affect cognitive processes (Mar et. al., 2006). Narratology is similar to both the CBT and the psychoanalytical models when it comes to investigating how reading affects us. It differs, however, in how treatment goals and outcomes are articulated and achieved. Since it does not rely on behavior modification or identification, it can be performed with very little intentionality. In other words, the reader does not have to commit to a particular therapeutic philosophy, only to the act of reading a particular genre itself.

Advances in neuroimaging techniques have found that reading fiction can improve an individual's social-cognitive abilities by improving or even repairing those neural networks responsible for empathy and understanding (Tamir et al., 2016; Kidd & Castano, 2013). These networks regulate an important social tool we call the Theory of Mind (ToM) (Bruner, 1990). This ToM regulates our ability to operate in complex social structures, and its development in humans marks an important milestone in our evolution. ToM allows us to “read the minds” of others, to understand the emotions, motives, and actions of people by creating states of mind (Zunshine, 2006). Without a ToM, the semiotic all but disappears and our ability to interact comes only from the literal. ToM operates in many ways, not just through visual observation but also through language. As the most powerful tool for constructing both reality and empathy while organizing experience, it is important to understand the language and narratives we use to develop our ToM. Cognitively, there is no difference between speaking and reading when it comes to ToM. Studies of those with cognitive impairments and brain damage show that understanding fiction and understanding people deploy the same ToM mechanisms (Zunshine, 2006). Cognitive narratology investigates how fiction “cheats the system” by making the cognitive mechanisms in our brain “believe” that they are in the presence of those material objects that are the subject of ToM “processing” (Burke, 2013; Zunshine, 2006). Kidd and Castano (2013) have studied the effect of reading and suggest that those texts that “unsettle readers’ expectations and challenge their thinking” (p. 377) have the greatest degree of influence on ToM. For Bruner (1986), these texts are those that “initiate and guide a search for meanings among a spectrum of possible meanings” (p. 25). For both Kidd

and Castano as well as Bruner, the texts that challenge the reader most are those traditionally considered “classics.”

Both Brewster (2017) and Zunshine (2006) posit an alternative genre: the murder mystery/crime novel. For Brewster, her study found that those with mental health issues preferred the crime novel as a vehicle of escape. Unfortunately, this genre has often been looked down upon, and those who read crime novels and mysteries are viewed as having poor literary taste. Thus, many of those who do read the mystery/crime genre often do not publicly acknowledge this fact. This perspective leads to what Brewster calls an “aesthetic meta-response” where the reader’s response to a text conflicts with the social expectations toward that text, leading to emotions such as regret and guilt. While Brewster examines the reader’s response and privileges the mystery genre’s mobilization of “escape,” Zunshine delves into the narrative characteristics of the genre and its effect on ToM. Here, the detective novel does more than allow the reader to engage a dangerous situation from a safe space. Because these stories purposefully mislead us, they exercise our metarepresentational abilities by storing information under advisement until we can reevaluate its veracity. This process is the hallmark of ToM where, in the real world, we constantly read minds by looking for pieces of information, make working assumptions based on what we have, and delay a final decision until we are satisfied that all the pieces fit (Cannon, 2018).

This approach is one way in which literature, the texts which are some of the objects of study in this dissertation, can be thought of as neosophistic rhetoric. Each reader engages a text in a different way. There is no single “Truth” when it comes to a text since language is socially constructed and – harkening back to Edbauer’s rhetorical

ecologies and the metaphor of the city meeting – each reader comes to a text with a history that defines how that *logos* is articulated. When the residents at DACCO answered the survey about their reading preferences, they were not just answering questions about books. They were informing the librarians about which texts fit best into their *logos*, their own particular language system. From a neosophistic perspective, the language used by the residents was an objective vehicle for communication – it was not just the means for communicating meaning. Instead, when the residents read the books and answered surveys about those books, they created meaning – a reality – that was imbued with their past experiences. What was in the texts was not reality. Since there can never be any perfect knowledge or universal truth in communicative situations (McComiskey, 2012), what they felt, processed, and rewrote according to their own experiences was the actual reality in a Gorgianic sense – a reality relative to their own situations (Burke, 2013).

At DACCO, these wound up being very real issues, not just academic exercises. The driving force behind CBT is its didactic nature – the truth statements about behavior modification and negative acts that are discovered by the reader. CBT believes in a universal standard for behavior – a universal truth statement – and those behaviors that deviate must be modified. Psychoanalytical bibliotherapy is similar in that it is premised on personality and development – that there is one ideal personality and those that are not ideal are “deviates” from the norm. Psychoanalytical bibliotherapy requires the reader to identify with the character in a story, a character that operates as a “True Form” in a Socratic sense.

A narrative approach to TBT, on the other hand, does not believe in a universal truth – in texts or in the real lived experiences of those seeking treatment. It understands that narratives are flexible and unstable, with reality and truth being relativistic concepts. Thus, when the MHPs discouraged the use of affective texts, finding them distracting and of low therapeutic value when compared to didactic texts, they are enforcing an epistemological paradigm to the exclusion of another. In Kuhn's terms, the MHPs have created incommensurable bibliotherapy treatment paradigms. The concept of multiple text-based treatments (as discussed in the previous chapter), on the other hand, resolves this incommensurability debate by using the rhetorical situation as an analytical tool – a tool that privileges *kairos*. It moves the debate away from “matters of fact” towards those “matters of concern” most important to the MHPs (Walkup & Cannon, 2018). Instead of reading affective texts that promote group discussion (Pierce, 2015) and possibly disrupt some therapy sessions, neurorhetoric narratology responds to the concerns of the MHPs by providing texts that operate internally on specific cognitive functions without the need for verbalization. The neosophistic conception of relativistic truth and Bruner's narrative theory are inextricably intertwined at this point, as each schema performs an ontological and epistemological negotiation with the other. The gap between the real reader and the implied reader (Iser, 1974) is a rhetorical space where neurorhetoric narratology is recruited to do TBT work. Change over time occurs as a text is read, repairing those portions of the brain that contain our metarepresentational abilities. Here, we can possibly suggest that the traditional psychoanalytical bibliotherapy processes of identification, catharsis and insight be replaced using Bruner's (1986) processes of

presupposition, subjectification and multiple perspectives. Thus, instead of requiring the reader to identify with a character, in effect becoming part of the text, the proposed process is more agentic: the reader “rewrites” the text as her own (Cannon, 2018).

Here, presupposition is an implied proposition that the reader completes. They are similar to textual “holes” that the reader fills in with her own thoughts or experiences. Thus, presupposition is a process started by the writer, but completed by the reader. In the mystery/thriller genre, this device is common, used by the writer, to create assumptions or even an unreliable narrator. Next, through subjectification, the text becomes actualized by the reader. It begins with the story itself, where the real world is subsumed by the text’s protagonist. In other words, we as the reader never know the “real” world through the text, only that which exists in the text. This strange world is made less strange by the reader’s own experiences, an unconscious, internalizing process that “rewrites” the text. Mysteries and thrillers often supply this world for the reader through the construction of “motives,” reasons why something (like a murder or terrorist bombing) occurs. Using these motives, different types of information (i.e. correct, incorrect, or incomplete) are then fed to the reader. Finally, through multiple perspectives the reader experiences pieces of the text’s reality through multiple prisms that must be synthesized by the reader. This device is common in crime novels where the reality of the situation is incomplete. Narrative items, such as facts, motives and suspects, all shift in relation to the information provided (Cannon, 2018).

Thus, what is occurring is a rhetorical process where the resident, as the real reader, negotiates herself into the text, not as a character but as a “subjunctive”

participant where she rewrites the story by filling in the narrative holes using her own experiences. In a NeuroApp model, the gap closes through a discursive transformation where the real reader becomes the implied reader, creating a new autobiographical narrative (Burke, 2013). With each new text, this gap between the real reader and the implied reader begins perceptively smaller until a new autobiographical narrative is constructed (Cannon, 2018). The challenge for this study, however, is determining the best way to operationalize these processes. This operationalization comes from the ability to trace and then measure the networked associations for all four tracks. Focusing on the NeuroApp track, however, allows me to achieve the necessary granularity since it may be the most complicated discourse collection to trace.

In the next chapter, I discuss my methodology. Chapter 4 focuses on data collection through surveys and circulation evidence. It also incorporates the prior data collected by the DACCO librarians. It focuses on the text analysis necessary to identify the constituent parts of the DACCO library health ecologies and why they are different from general ecologies. Finally, I explain how text analysis can be used to develop a novel methodology for addressing a specific rhetorical exigence.

CHAPTER 4: RESEARCH METHODS

In Chapter 1, I discussed the concept of the rhetorical situation, its evolution into the rhetorical ecology, and the revisions to these models for the purpose of evaluating health ecologies. Next, in Chapter 2, I explored some of the issues that make a health ecology unique and distinct from the more general rhetorical ecology. There I focused on the work of Walkup and Cannon (2018) and the exigence posed by the delivery of library services in an AOD treatment center. Their 2018 study found that health ecologies exhibited many different and competing voices and that it was necessary to calibrate these voices in order to evaluate rhetorical interventions. This assumption by Walkup and Cannon was based on the fact that in a health ecology, medical opinions are privileged and often leveraged to achieve a desired therapeutic result (Day, 2000). For example, the MHPs at the treatment center found a medical reason to limit access to certain genres on the basis that they were disruptive and not advancing the treatment goals of the residents. This privileging of medical science over information science had altered the agency of the library, requiring a revision in the library's collection development policies.

In Chapter 3, I placed my research into context by discussing some of the health ecologies similar to and connected with the DACCO library. There I focused on the

rhetorical intervention introduced into the DACCO health ecology by describing its library. Specifically, I examined some of the processes – and evaluative access points – that take place in a therapeutic library. By focusing on the AOD rhetorical situation, I was able to discuss some of the various genres and how each type of text could be thought of as a way to address a certain exigence.

In this chapter, I explain this dissertation’s methodology and outline my methods. Chronologically, my study of DACCO began with the Needs Assessment survey conducted in 2016. Next, between May 2017 and February 2018, I conducted a resident survey of reading preferences. Then, in June of 2018, I conducted a semi-structured group interview of the MHPs who worked as counselors at DACCO. Next, during the summer of 2019, I conducted a textual analysis of both traditional rhetorical ecologies and health ecologies. Finally, in August of 2019, I completed a detailed analysis of the DACCO library collection. In this chapter, I follow a similar progression, except I choose to first introduce neosophistic methodology. Then, breaking from chronology for a moment, I choose next to describe my text analysis method for identifying ecological dissimilarities, and how these differences can be incorporated into an analysis of the rhetorical situation. I use a text analysis in my dissertation to collect data that can help identify differences between health ecologies and rhetorical ecologies, as well as identify the situation and intervention elements (rhetor and text) in the rhetorical situation. I then follow my data collection chronology and discuss the Needs Assessment survey. Next, I introduce a survey regarding residential reading practices and its relation to the rhetorical situation. The survey is important in identifying specific exigences and also helps focus this study on one specific context. Finally, I explain my

methods for conducting a broader analysis of the library's collection of over 800 titles to test my use of the revised rhetorical situation as a means of evaluating health ecologies.

A Neosophistic Methodology

What does a neosophistic methodology look like? Broadly, neosophistic theory is pragmatic, unconcerned with the historical interpretation of ancient sophistic writings for its own sake. Rather, neosophists look to the Sophists to solve real-world, contemporary problems. Recall my prior analysis of neosophistic structure and how it relies on *alêthia*, a term used by Gorgias to mean relative truth, to construct *eidô*, or empirical knowledge that is arrived at communally, all in a particular *kairos*, or opportune time. Thus, a neosophistic methodology deals with imperfect knowledge through communal truth-making, to construct a relative truth or *alêtheia* (relative truth). Framed in reference to probability (*eikos*), rhetoric's epistemic process understands that *alêtheia* is created through an empirical process of weighing *eidô* (communal knowledge), and *kairos* (opportune moment).

Text analysis can be thought of as being a neosophistic analytical method. One foundational tenet of neosophism is that truth is always contingent, subject to change, and based on the current knowledge at hand in a particular context. A neosophistic methodology, therefore, focuses on those competing discourses circulating throughout health ecologies and relies on the interplay of *alêtheia*, *eidô*, and *kairos* to analyze a specific network of associations through which actants engage. Text analysis operates in a similar manner. It does not deal with absolutes. Instead, it is more concerned with probabilities, and the addition of more data can lead to a different result by changing the relationship among datum. Encountering different results does not mean that the initial

analysis was incorrect before the additional data was added. Rather, the analysis produced the correct outcome based on the information at the time. Varying outcomes are the hallmark of neosophistic rhetoric, where there is an epistemic relationship between *alêtheia* and *eikos*, or probability.

It should be made clear that the neosophistic meta-theory described within is different from traditional Relativism or Subjective Relativism. According to LIS scholar John M. Budd (2001), the relativist position is internally inconsistent. He posits that relativists believe that all knowledge is socially constructed, and because of this belief, there can be no construction of the natural world. At the same time, Budd continues, relativists believe that “a single ideology is possible” (p. 129). Budd’s Relativism, however, sounds more like my prior discussion of *phronesis* in Chapter 2, where competing definitions of practical reasoning can create those inconsistencies between knowledge and ideology.

I concede that Budd is correct in his description of Relativism’s relationship to language, and the central role of language in Relativism is nearly the same as in neosophistic thought. Regardless of Budd’s argument, however, the neosophistic theory espoused here in my dissertation posits that knowledge is empirical and not subjective because it is arrived at communally. While this position may seem absurd with respect to such disciplines as physics or archeology, the construction of knowledge through *eidô* is actually how much of science is done. If we understand the goal of science to be a description and explanation of nature, then the process of “doing science” is something that is done communally. While much of the discourse in science can be considered Positivistic and Socratic in its search for “Universal Truths,” an equally

legitimate argument can be made that science is also a neosophistic endeavor. For example, much of what we know today about quantum theory may or may not be wrong according to Manjit Kumar in his 2009 history of the development of quantum theories (Kumar, 2009). In 1922, Niels Bohr won the Nobel Prize in Physics for his description of the atom, with its iconic depiction of electron particles orbiting around a nucleus. This picture of the atom, one that most people know today, is most likely wrong. Erwin Schrödinger later theorized that electrons are not “particles,” rather they are waves, not fixed in orbits, but moving in probability clouds. One can never truly “know” where an electron is at any one time. Instead, we may use the wave function to determine the highest probability where an electron may be at a given point in time. For quite some time, both were right. It depended on who one followed: Schrödinger was an adherent to Einstein, who despised the Bohr quantum theory, otherwise known as Copenhagen Interpretation (Kumar, 2009). The Copenhagen Interpretation remained the dominant theory for much of the 20th century, but physics scholars are now rethinking its viability (Weinberg, 2017). In fact, a recent poll of physicists, philosophers, and mathematicians at a physics conference indicates that there are roughly five different theories and much disagreement about the proper interpretation of the quantum theory (Schlosshauer, Kofler, & Zeilinger, 2013).

The point of this example is not to dismiss or besmirch empirical science. Instead, I offer this example to illustrate science’s communal nature. People – very smart people – can disagree about things that we normally would not think of as being open to debate. We are taught the Bohr model because it is the easiest – a sort of Zipf’s Law for science education (Anderson, 2016). In truth, however, there is far less

consensus on how our universe works. Ask any physicist about this lack of consensus and they will acknowledge it, even though it makes them uncomfortable (Hossenfelder, 2018). This uncertainty is what makes neosophistic theory different: as a meta-theory, it not only acknowledges a lack of consensus, it accepts it.

According to Cressell (2007), there is no “right” way to do research. Using a neosophistic approach, such as the one I outline here in my dissertation, is just one method. There are many different methods I could have employed in order to support my hypothesis that health ecologies are distinct from traditional rhetorical ecologies. For example, an ethnographic study comparing my data from the DACCO health ecology to a study concerning a more general rhetorical ecology would have been acceptable. From a sophistic point of view, however, this methodology seems too binary and absolute. A sophistic methodology is looking at data in relation to other data. It is not looking to pass judgment on a textual genre in a health ecology. Instead, what I am trying to do is devise a methodology that can be used to evaluate certain health ecologies, and it is my contention that there are real differences among ecologies but only in relation to each other.

Textual Analysis of Ecologies

To determine whether there was a difference between traditional rhetorical ecologies and health ecologies, I decided to conduct an exploratory analysis of the features in scholarly texts about both of these subjects. I decided to rely on computational tools from the Digital Humanities for analyses of literary texts. I focused mainly on stylometry, which uses quantitative methods to investigate certain stylistic features found in literary texts (Hoover, 2008). David Holmes (1998), in his detailed

history of stylometry, traces the use of this method to Augustus de Morgan who first proposed that questions of authorship may be addressed by examining the use of “longer words” in 1851 (p. 112). Thomas Mendenhall later attempted in 1887 to use stylometry to settle the debate concerning the true authorship of works traditionally attributed to Shakespeare. Although Mendenhall found the use of word length inconclusive, the overall concept was determined useful enough to be utilized again in 1932 by both G. Udney Yule and George Zipf. These two researchers, however, focused on different language features and found that there were lexical relationships useful in differentiating one text from another. Eventually, the linear relationship discovered by Zipf became known to be “Zipf’s Law,” which states that in a given sample of words, the frequency of any word is inversely proportional to its use in relation to other words (Holmes, 1998). In 1959, Cox and Brandwood used stylometry to ascertain the order of Plato’s works, finding that the structure of Plato’s earlier works differed from those he wrote later in a recognizable pattern. In the 1960s, stylometry was used to try and solve another literary mystery, the author of each text comprising the *Federalist Papers*. The work by Mosteller and Wallace (1964) used probabilities to determine who, either Hamilton or Madison, was most likely the author of a particular tract. The authors found that the historically disputed texts all belonged to Madison, a view held by many scholars at the time. This work helped give the methodology much needed credibility (Holmes, 1998).

Stylometry focuses on those features in a text that differentiate it from another text. In other words, it determines how many times r term appears in a text. Then, using different statistical equations depending on the research context, e.g., distance

measures such as Burrows's Delta or Cosine Delta, it provides some assumptions about the text in relation to another text or texts (Evert, et al., 2017). The primary application used for this study was the *R* statistical environment running the *stylo* package. The *stylo* package is a powerful analytical tool for text analysis that has been used successfully for authorship attribution studies (Eder, Rybicki, & Kestemont, 2016). What makes *stylo* appealing is that in addition to these statistical routines, it also allows one to use various text distance measures, avoiding the one-size-fits-all analysis. Instead, it allows for different types of analyses based on the research context. Due to the flexibility of *stylo*, there is no need to move from one *R* package to another.

Operating in *stylo* is easy, but it is still important to understand the different “flavors” of statistics and distances. The four major statistical options used in this study are Principle Component Analysis (PCA), Multidimensional Scaling (MDS), Hierarchical Clustering, and Bootstrap Consensus (Eder, Rybicki, & Kestemont, 2016). Each analysis provides a different way to visualize relationships between or among texts. PCA is not a true measure of distance when operating in *stylo*. Instead, PCA looks for ways that differentiate one text from another. The PCA algorithm “rotates” the text in a way that makes the most distinguishing features stand out and then compares those features to similar ones in the other texts. Metaphorically, we can think of it as a way of looking at an object, such as a piece of pottery. From one angle, the front for instance, we might not be able to identify it very clearly. But as we rotate it, we might be able to see a handle, a lid, and even a spout, allowing us to identify it as a teapot (Eder, Rybicki, & Kestemont, 2016). Multidimensional Scaling takes a set of dissimilarities in the most frequent words (MFW) of the texts being compared and visualizes a set of

points such that the distances between the points are approximately equal to the dissimilarities (Eder, Rybicki, & Kestemont, 2016). Hierarchical clustering (“cluster analysis”) simply groups the dissimilarities according to the distance measure being used. The closer the text is to zero on the chart is an indication of its distance from the mean (Eder, Rybicki, & Kestemont, 2016). With Bootstrap Consensus Tree (BCT), a validation of the cluster analysis dendrogram is performed by re-running the clustering algorithm over multiple iterations for many different MFW values and produces a result when a certain percentage of the underlying trees are in agreement: “The results become stable when one divides the list of MFW in non-identical, yet potentially overlapping frequency bands and analyzes these independently from each other” (Eder, Rybicki, & Kestemont, 2016, p. 114; Evert, et al., 2017).

Understanding which distance measure to use is important in *stylo*. For example, Burrows’s Delta is a powerful analytic tool, but its use is dependent on the context. Specifically, some have observed that Burrows’s Delta is useful, but genre must be controlled for in the analysis (Argamon, 2008). Explaining how distance measures works begins with Euclidean Distance, which simply calculates the “straight line” distance between vectors and is akin to the old saying “how the crow flies.” Manhattan Distance is the sum of the absolute differences of their coordinates on a graph. If we use a cityscape as an example, it is like traveling from Point A to Point B, navigating city blocks. Finally, the Cosine Distance corresponds to the angle between the vectors (Evert, et al., 2017).

Basic distance functions, such as Euclidean and Manhattan, measure distances between features. When we are confronted with textual distances, however, basic

functions are insufficient. While the ranking of the most frequent words in a text is ideal in a stylometry analysis, the difference between the actual frequencies between the third and fourth most frequently used word, for example, may be in the hundreds. As such, text measurement requires feature normalization (Jannidis, et al., 2015). In *stylo*, the functions we use rely upon the z-score. The z-score introduces the mean for each word in the text and its standard deviation in order to reduce the influence of high frequency words.

For this portion of my dissertation, I compared 10 separate texts that were divided between rhetorical ecologies and health ecologies. There were three rhetorical ecology texts. The remaining seven texts were divided between health ecology texts and AOD ecology texts (to determine if the analysis could get more granular). All texts were converted to a text (.txt) format with UTF-8 coding using the MS Windows text editor. The files were named in a way that allowed *stylo* to differentiate among them in the various visualizations by color, borrowing somewhat from the suggested format mentioned by Eder, Rybicki, and Kestemont (2016). For purposes of this study, however, the first portion of the filename referred to the text's genre, followed by an underscore, then an abbreviation of either the text's author, title, or topic. (Some texts had more than one identifying tag after the genre.) Thus, health ecological texts began with "health_" and rhetorical ecological texts began with "rhet_".

Three routines were run (BCT, Cluster Analysis, and MDS) using Cosine Delta and 20% culling. Cosine Delta was chosen based on the consistent opinion of the literature finding it a strong distance measure, especially when dealing with genre analysis (Evert et al., 2017). The reason for the three different analyses was to provide

enough comparative data in order to formulate usable assumptions about the texts as possible. A separate network analysis was run in Gephi using the data from *sty/o* (MDS) in order to provide a visualization of the network results.

Needs Assessment Survey

In order to determine the needs of the service population at DACCO an initial survey of the residents was taken on March 1, 2016. The survey was administered to 43 residents. The questions on this survey related to the types of books the residents wanted to read, the reference services they desired, and the configuration of the physical space. The questions on the surveys were informed by the Substance Abuse and Mental Health Services Administration, and those resources recommended for providing substance abuse treatment services for women. These questions inquired about medical resources, health promotion, psychoeducation resources, gender-specific needs, cultural and language needs, and life skills. The responses to the survey were reviewed for answers related to collection development (Shereff, Palmer, & Cannon, 2017).

Resident Survey

I also conducted a survey of the women residents at DACCO for the purpose of revising the existing collection development policy. The online survey was administered to the residents of the DACCO AOD between May 2017 through February 2018, in the library during normal operational hours. In all, 59 residents took the survey. Although surveys are commonly administered in libraries to evaluate service delivery and are generally not subject to IRB requirements, an IRB application was submitted as a caution. The Board agreed that such surveys did not fall under the purview of IRB

procedures. The details of this library and the services provided are explained in detail elsewhere (Cannon, 2018; Shereff, Palmer, & Cannon, 2017).

To test the survey design, the preliminary results of this survey were hand coded and sorted using an inductive constant comparison method (Fraser, 2016). The first step was informed by the literature on bibliotherapy and Theory of the Mind (ToM). This step involved assigning thematic codes to the data collected in the surveys. Next, similar codes were grouped to identify salient patterns and themes. Using these themes, a preliminary coding framework was developed.

Semi-Structured Group Discussion

In order to develop data from the mental health professionals at DACCO, a semi-structured group interview of the MHPs occurred on June 6, 2018. During this interview, the MHPs were asked about their overall attitude towards the library, the books, the services, and the procedures. Each response by the MHPs produced follow-up questions or additional comments by other MHPs. Responses were recorded by hand.

Evaluation of DACCO Library Collection

The analysis of the DACCO library collection was conducted in three steps. First, the original collection from June of 2016 was analyzed, and the different tracks of books were identified, including books for the NeuroApp track. Next, the first 18 months of the library's circulation data were analyzed for texts related to the NeuroApp track. These data were then compared to the final report submitted to the Florida Department of State, Division of Library and Information Services after the initial grant period was completed (LSTA grant project #15-LSTA-B-03). Specific information about

performance measures, performance metrics, and performance standards were used as an initial heuristic for the circulation data.

Finally, the DACCO library's current collection was analyzed using information retrieved June 30, 2019. The DACCO library's collection is currently housed on Liblb (www.liblb.com). Liblb is a personal and small library management system (LMS) that was chosen for its flexibility and ease of use. The initial identification of texts for assessment and evaluation²² was done following Johnson (2018) and Matthews (2007), as well as recent Demand-Driven Acquisition (DDA) studies by Walker and Arthur (2018) and Arthur and Fitzgerald (2019). In order to do so, the LC classification number for each text was used as a way to ascertain whether there were four identifiable tracks of TBT titles present. These were also checked against the tags listed in Liblb. Specific identification of those texts belonging to the NeuroApp track was completed for the analysis.

²² According to Johnson (2004), there is a difference between assessment and evaluation.

CHAPTER 5: RESULTS AND DISCUSSION

Textual Analysis of Ecologies

Results.

Textual analysis provided useful findings for studying my proposed method for evaluating health ecologies. It was hypothesized that a text analysis would be able to differentiate between health and traditional ecologies. After running the various statistical routines through *stylo*, I was able to support my assumption that there is a discernable, discursive distinction between the ecologies. There was a division between the traditional rhetorical ecologies (shown in green) and the health ecologies (shown in red). These divisions were not the only ones, however, as *stylo* was able to find other distinctions as well. Moving from left to right on the dendrogram, the texts began as two major groups. These text groups were then divided again, producing four groups. The top group contained health ecology works by Teston's *Bodies in Flux*, Graham's *The Politics of Pain Medicine*, and several journal articles and chapters by the Science and Technology Studies (STS) scholar Suzanne Fraser who studies addiction and treatment. The next major group was composed of the three traditional rhetorical ecological works: *Distant Publics* by Jenny Rice, *Digital Detroit* by Jeff Rice, and *Democracy's Lot* by Candace Rai. The last major group were three more health ecology

texts: a collection of articles and chapters related to DACCO, journal articles by bibliotherapy scholar Liz Brewster, *Scripting Addiction*, Carr’s monograph, and various recent articles in the International Journal of Drug Policy (IJDP) on addiction and treatment in the United States. It should be noticed that this last group was further divided into two groups, with the DACCO and Brewster texts in one, with the Carr and IJDP texts in the other.

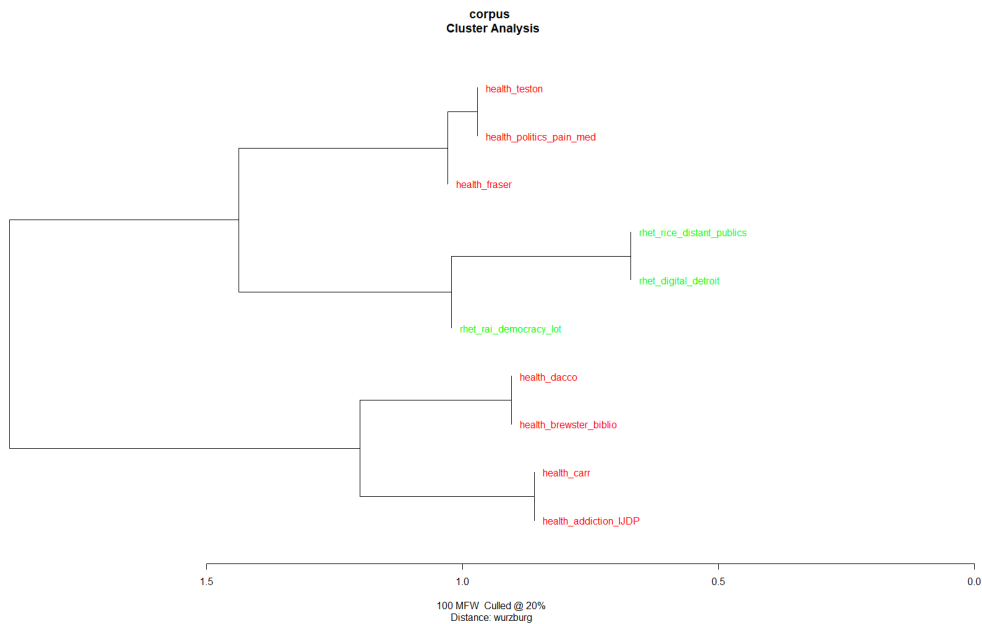


Figure 7. Cluster Analysis using Cosine Delta.

Figure 8 shows the results of the Bootstrap Consensus Tree analysis with a distinction between the traditional rhetorical ecologies and the health ecologies. The groupings were somewhat similar, but they also exhibited important differences. First, the three traditional rhetorical ecological texts are grouped together, still supporting my original assumption that health ecologies are distinct. Next, moving clockwise, both the

Teston and Graham texts are grouped together. The third grouping contains the DACCO and Brewster texts. Finally, the last group contains the Carr, Fraser, and IJDP texts, with the Fraser and IJDP texts closer together.

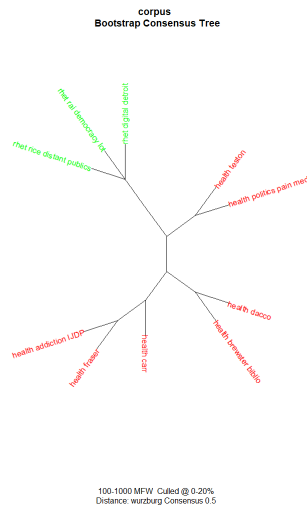


Figure 8. The results of the BCT analysis.

Figure 9 shows the results of the MDS analysis with the main division between health and traditional ecologies remains intact. Of interest were the proximity of the DACCO and Brewster texts as well as the Fraser and Teston texts.

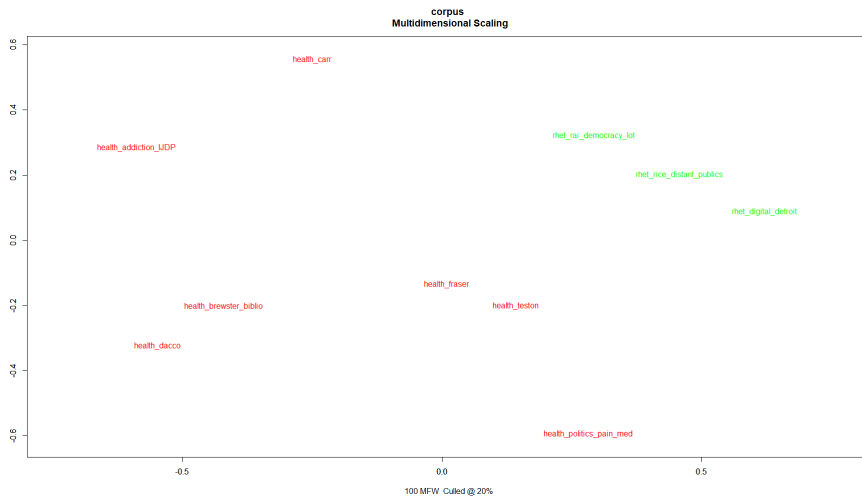


Figure 9. The results of the MDS analysis.

Figure 10, constructed in Gephi, is a network analysis visualizing the relationships among all of the texts using two main attributes: nodes and edges. The nodes are where the texts are located in relation to other texts. The edges are the connections between the texts. It should be noted that the distance among the texts is not represented by their location in a two-dimensional space (i.e., on a Cartesian graph) but in the thickness of the edges. Thus, a thick edge, such as the one between the Brewster and DACCO texts, represents a closer statistical distance than the one between the Teston text and the Digital Detroit text. Figure 10 is consistent with the other visualizations in figures 7-9, with a distinction between the health and traditional rhetorical ecologies shown not only through the thickness of the edges but also through the two different colors imposed by Gephi's algorithm.

Discussion.

Figures 7, 8, 9 and 10 support the assumption I made after a close reading of the texts, that there is a textual difference between health and traditional rhetorical ecologies. While one could argue that I am just measuring the distance among the various authorial styles and not the objects of their studies themselves, a neosophistic methodology does not make that distinction. In other words, the language used to study these ecologies is not secondary to the ecologies themselves. In fact, they are one in the same, as my neosophstic methodology recognizes that the language used to describe an object cannot be different than the object itself.

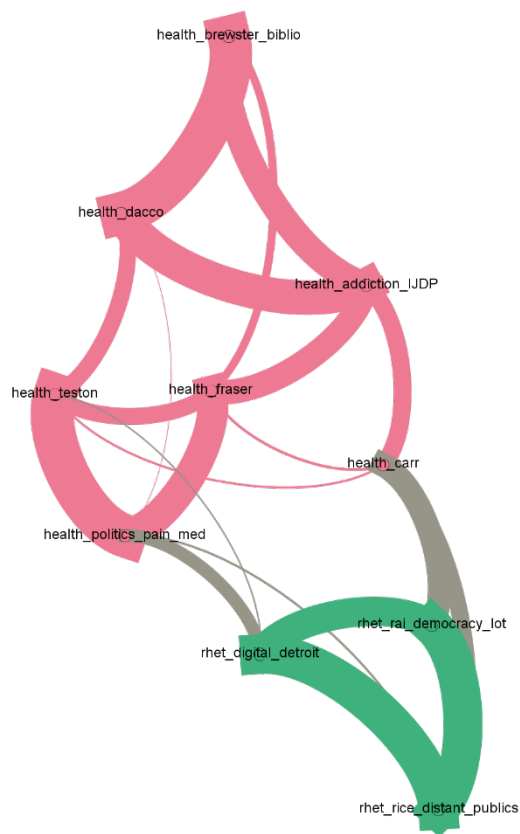


Figure 10. The results of the Network Analysis.

While it is true that my textual analysis is missing the specific distinctions between ecologies, such as those involving agency and discourse complexity, this approach does accomplish several of the goals outlined in the literature on text analysis. First, it helps generate new research questions, including those that may aid us in understand why the health ecologies were consistently divided even further into groups. Second, this analysis provides additional data supporting my assumption about dissimilarities among ecologies. This data is in line with a close reading of these texts discussed in the previous chapters. For example, in my discussion of agency and health

ecologies, I distinguish between Teston's (2017) work and non-health ecological texts. By visualizing these distinctions, I can make a more persuasive argument. Third, this visualization can help place my research of DACCO's health ecology into context by establishing a starting point from which to employ the rhetorical situation. In other words, I can argue that each group of texts is possibly defined by a different exigence and/or audience, thus requiring different interventions. Finally, this analysis also helps place the remaining portions of my dissertation into context, by using the visualizations as a heuristic when examining the needs assessment survey, the resident survey, the focus group's discussion, and the DACCO collection.

Needs Assessment Survey

Results.

The results of the March 1, 2016 needs assessment survey found that of the 43 residents who participated, 25.58% responded that they wanted to read books that would now be part of the NeuroApp track. Many of these respondents wanted to read for entertainment purposes, and nearly all of the suggested titles belonged to the mystery/thriller genre.

Discussion.

When the library was initially proposed to the DACCO administrators and the MHPs, it was suggested that the three tracks of texts would be sufficient for the residents. This suggestion was based on nearly two years of research and discussions with other library leaders, including those at the State Library of Florida. As previously reported in Cannon (2018), many of the residents wanted to read books that would help

them escape from the world and their problems. Though this fact was reflected in the needs assessment survey, it was largely ignored.

Resident Survey

Results.

Eleven of the resident survey questions were relevant to this study. Question 1 (hereinafter, Q1, Q2, etc.) asked the residents which reading material they liked. There were 12 genres presented, and the residents were free to select more than one option. In all, 163 responses were recorded. Overwhelmingly, 82.82% of the residents surveyed preferred to read fiction over nonfiction, with 19.63% selecting the mystery and thriller genre as their favorite.

Q3 asked residents whether they have ever read a book as a way to cope with issues or problems they face in life. Here, 82.46% of the respondents answered in the affirmative, with 7.02% replying “maybe” and the remaining 10.53% selecting “no.” Q5 asked whether the residents wanted to read fiction and nonfiction titles that would help them with their treatment. Here, 80.36% of the residents answered in the affirmative.

Q6 through Q10 were focused on the types of books the residents wanted to read. These questions were different than the previous ones that focused broadly on genre. For example, Q6 asked why the residents read fiction books. This question helped in collection development and guided the librarians on whether to focus more on “mirror novels,” those books that addressed problems, or general and popular fiction. 24.56% responded that they did so to “escape from my problems,” while 33.33% said they wanted to “escape from the world.” Surprisingly, only 8.87% responded that they wanted to read books that were about the same problems they were going through,

while 21.05% read books only for a good story. Finally, 5.26% read for inspiration, and 7.02% read to solve mysteries.

For Q7, respondents were asked what happened to them when they read a book (“When I read a fiction book...”). Again, this question helped the librarians develop the collection further by focusing on what type of fiction books would be preferred by the residents. Here, 24.56% thought the author wrote the book for them, 22.81% responded that they liked to pretend that they were one of the characters, 19.30% thought they knew the author why the author wrote the book, and finally, 33.33% believed that nothing very special happened to them.

Q8 focused on the specific characters the residents enjoyed in fiction. They responded with 22.81% preferring characters like them, 22.81% wanted complicated characters, while 21.05% wanted ones that were easy to understand. The remaining responses had 14.04% wanting new characters they have never read about before, 1.75% wanting characters they read about previously, 3.51% enjoyed reading characters that were similar to “someone I could hang around with,” while the remaining 14.04% wanted a character they could learn from.

Q9 asked the residents whether they believed that that reading books could help with their recovery with 85.96% responding affirmatively and 8.77% selecting “maybe.”

Q10 asked whether reading books helped them understand and share the feelings of others. Here, 87.72% responded “yes,” while another 10.53% thought reading books maybe could help. Finally, Q11 and Q12 asked about the residents’ perceptions about the level of “repair” books could do for their mind and body. Again, this question helped the librarians gauge the amenability the residents had for bibliotherapy. 66.67% of the

respondents believed that reading books could fix the damage to their brain, while 52.63% thought that it could fix their bodies. Both questions about the brain and the body had an answer “maybe,” with 19.30% and 22.81% responding, respectively.

Discussion.

Q1 allowed multiple answers, and the residents overwhelmingly preferred fiction over nonfiction. These results were not unexpected as the collection was developed with heavy emphasis on the affective track. For policy revision purposes, one question was whether it was better to offer fiction that mirrored the issues the residents were facing or to offer popular and general fiction like the mystery/thriller genre. The library currently has an even mix of the two types of fiction. The residents preferred to read stories unrelated to their issues or treatment. If we remove addiction-related fiction, then 69.94% of the residents preferred to read popular or general fiction titles. If we remove the Young Adult titles, which usually are mirror books, then there were still 65.64% who preferred to read popular or general fiction.

These findings may be supported by the results of Q6. This question only allowed one option and 8.87% of the respondents preferred to read texts about the same or similar problems they were encountering. While there is a difference between 12.88% who preferred to read addiction-related fiction and the 8.77% in Q6 who preferred mirror novels, one reasonable explanation is the fact that many residents in the treatment facility have a dual diagnosis. Their primary problem may not be AOD addiction. In fact, many found reading as a form of escape (57.89%), the same way many view AOD consumption as an escape from their troubled lives (Hari, 2015).

According to Zunshine (2006), the brain is altered by reading fiction: “no two close encounters with the same fictional text are ever truly the same, for the brain that responds to the text changes ever so slightly with every thought and impression passing through it” (p. 75). Empirical evidence supports this notion through fMRI data. These findings support the idea that reading, and reading more, can repair the cognitive damage done by AOD addiction. Additionally, looking at ToM and cognitive repair and its relationship to bibliotherapy, perhaps it is possible to challenge the notion that mirror novels are the best fiction treatment texts. If the goal is cognitive repair, then perhaps it is best to let individuals read the type of fiction they prefer if it is followed by an increase in the number of texts they read. Empirical evidence has not demonstrated such a significant repair magnitude (say on the order of three to one) that weakens this conclusion. Individuals may be able to make up any supposed repair statistical significance between literature and popular fiction by reading a higher number of preferred texts. Since ToM affects our ability to empathize and “read minds,” those questions that touched on characters, empathy, and narrative theory were addressed. Most interesting were those that implicated the gap between the implied reader and the real reader. It is this gap, shown in Figure 1, that I propose is the new rhetorical space for bibliotherapy study. I hypothesize that this space is where cognitive repair, ToM, and bibliotherapy processes converge.

Of interest is the interplay between Q1 (“The type of books I like to read are...”) and Q6 (“I read fiction books [to]...”). While 19.63% of the respondents in Q1 preferred the mystery/thriller genre, only 7.02% of the respondents in Q6 read fiction because they liked to solve mysteries. Q6 only gave respondents one choice, and they

overwhelmingly sought to escape from their problems (23.33%) or the world (33.33%). These responses are not necessarily inconsistent or inaccurate. As actants in an AOD addiction ecology, the residents are reading for a variety of reasons, perhaps mostly in response to the main issues that brought them to the residential center. Their intentions do not necessarily impact the cognitive repair that is occurring.

Q7 (“When I read a fiction book...”) measures the perception the residents have when reading a book. A majority of the respondents (66.67%) felt some narrative interaction with the book, either through the implied reader, character-narrator, or implied author. The remaining 33.33% felt that nothing very special happened. The largest number of respondents (24.56%) who perceived something felt that the author wrote the text for them. This response connects the implied reader to repair and is the focus of the newly identified rhetorical space.

Semi-Structured Group Discussion

Results.

The preliminary group discussion with the current team of MHPs indicated that the therapeutic warrant for having the three tracks of texts may not be as strong as it was when the library was first developed. Nearly all of the MHPs voiced concerns that the residents were “disrupting” group therapy sessions by trying to talk about books they read and that reading was “distracting” the residents from the AOD addiction treatment they were receiving. Despite having research evidence that supported their reading habits (Brewster, 2017), I hoped to avoid a “deficit-model” response and instead, focused on the concerns of the MHPs as well as the preferences of the residents.

Discussion.

Some genres of fiction, such as mysteries or thrillers, are not considered useful in bibliotherapy. In fact, many researchers consider popular genres of fiction as non-literary, reifying the distinction made by scholars such as Mikhail Bakhtin and Roland Barthes that they are “readerly” texts for the passive reader (Kidd & Castano, 2013). Instead, only those texts considered to have high literary value (i.e., award-winning or those considered “classics”) are considered appropriate for therapeutic purposes (Brewster, 2016). The proposed study challenges this assumption. It hopes to support the creation of another model of bibliotherapy consistent with the reading preferences of those in residential treatment.

Unfortunately, many health consumers hoping to use bibliotherapy find it difficult to engage with literary texts. Surveys from the AOD residential treatment center indicate that many of the residents prefer the mystery-thriller genre over others. Furthermore, circulation statistics for the bibliotherapy library at the residential center support this fact; the majority of the books checked out are mysteries and thrillers. Thus, while the library was being fully utilized by the residents, the library data suggested that it was not being used to its fullest therapeutic potential.

Preliminary data from the survey, however, suggested that there was something wrong with the initial assumptions about the library. Its purpose was to provide useful and easy-to-read texts for the residents that would serve the dual purposes of providing entertainment and helping them with their treatment goals. While the affective, or fiction, bibliotherapy books were popular, many residents did not want to read books that mirrored them or their problems. In fact, the residents overwhelmingly wanted to read

books that allowed them to escape from their problems and the world. In addition, some of the data seemed to conflict when it came to the types of characters they wanted to read about during treatment. While many read to escape, they also wanted to read books with characters just like them. The collection development policy assumed that characters “like me” meant those with mental health issues. What it did not assume was the possibility that the residents saw themselves as complex, similar to the characters in the mystery-thriller genre.

If this data is correct, then the collection development policy for the library was flawed (Sheriff, Palmer, & Cannon, 2017). It is clear that the residents believed in the concept of bibliotherapy and felt that it would be useful for their AOD addiction treatment. More so, they wanted to read, and the scores of tattered and overread books being taken out of circulation were a nice reminder that the library was popular. Based on the new survey data and the research used to support the reassessment of the collection development policy, there appeared to be both a gap in the literature and in our understanding on the clinical use of bibliotherapy for those suffering with AOD addiction. The survey suggested that there was a population of residents who would be less likely to engage with the CBT, psychoanalytical, and visual bibliotherapy tracks. It is unclear why, but perhaps some residents turn to AOD use to escape from the stress and trauma they experience in the world. Therapeutically, CBT and psychoanalytic texts would do very little for those who did not feel responsibility for their addiction (e.g., sexual assault victims) or for those whose addiction did not spring from a developmental/personality issue that required cathartic literature.

Thus, this study hopes to employ a fourth track of bibliotherapy, one different than the cognitive, psychoanalytical, and visual models that are presently used by the MHPs at the residential treatment center in Tampa. This new NeuroApp model, however, is not being created out of whole cloth as its guiding principles are generally recognized by research in library science and the neurosciences. This issue is important, since the merits of this new track will need to be accepted by the MHPs at the treatment facility.

Evaluation of DACCO Library Collection

Results.

When the library opened in June 2016, the initial collection had 327 items, with 112 of them being original titles. Of these 112 titles, 5 of them (4.64%) would now be considered part of the NeuroApp track. The circulation data from June 2016 to December 2017 was analyzed. During that period, 1,035 items circulated. The mean circulation rate was approximately 57.5 items per month. During this 18-month period, 56 items (5.41%) circulated that would now belong to the NeuroApp track. The relevant information from the Final Report (2016) listed the following standards, measures, and metrics for circulation services goals: “Circulation services: A) Performance measures: Number of books checked out by residents and counselors. B) Performance metrics: Circulation data. C) Performance standards: At least 50 titles circulated weekly” (2016, p. 9). During the six-month reporting period (April–September 2016), 327 titles circulated as reported. The current Dacco library contains 828 original items. Of this number, 47 items (5.68%) belong to the NeuroApp track.

Discussion.

According to Peggy Johnson (2018), there is a difference between assessment and evaluation, depending on the purpose of the analysis. For an assessment, the information is viewed with respect to the goals, needs, and mission of the library while evaluation is more descriptive, either in relation to the collection as a whole or to other collections. For purposes of my study, both standards are appropriate since I am looking to revise the collection development policy (assessment) and to ascertain how best to measure the impact of an intervention on the library and the ecology as a whole (evaluation).

Traditional collection analysis has relied on the use of formulas to determine the appropriateness of a library's holdings in relation to its service population (Johnson, 2018). For example, academic libraries started with a base of 50,750 volumes with variations based on programs, degrees, and research needs (Johnson, 2018). However, when circulation numbers were added to the analysis, one study found that roughly 20 percent of a library's collection accounted for nearly 80 percent of its use. This produced the now famous 80/20 Rule (Johnson, 2018).

Surprisingly, the item use number has been dropping. In 2011, one study found that 80 percent of the use was driven by only 7.2 percent of a collection. This discovery has led to a new method called Demand-Driven Acquisitions (DDA) (Walker & Arthur, 2018). Using DDA development methods, libraries move from a *just in case* to a *just in time* philosophy. A DDA collection development methodology uses real-time data to deliver materials just in time to a user following an established formula, triggered by a user's selection of a digital item. There are several models such as the *single-trigger*

model where an item is purchased after a single access. Another model is the *short-term loan model* where an item is purchased after the book is loaned by the publisher to institution (which thereby loans it to the user) (Walker & Arthur, 2018). It should be noted that DDA development models are predominately based on the delivery of electronic items.

While the DACCO library was not a traditional library in its inception, it did follow traditional collection development procedures, especially when it came to acquisitions, assessment, and evaluation. This model was driven by the need to be accountable to grant-awarding and auditing institutions, such as the Florida Division of Library and Information Services, the Institute of Library and Museum Services (IMLS), and even USF. Such professional organizations produce dominant social discourses that control practice (Day, 2000), and the DACCO library modeled its services in a way that would allow for efficient reporting.

Using the traditional library evaluation and assessment model, with its dominant discourse, the DACCO library was seen as successful project, receiving over a \$100,000 in funding in light of its small service population. Thus, from an institutional perspective, the traditional evaluation model works. Unfortunately, with the data from the library, this situation may not be entirely accurate from a user perspective. Using our modified rhetorical situation, the exigence being addressed is the residents' AOD cognitive damage and the resulting treatment plan. This situation could be considered the "need" for the rhetorical intervention. There was both a demand and an acceptance for the intervention offered by the NeuroApp track, with over 25% of the initial survey respondents wanting to read texts from this genre. Unfortunately, the initial collection

had only 4.64% of the texts committed to this genre, with a circulation rate of only 5.41% of the total collection during the first 18 months. Finally, the current collection, one that recognizes a fourth NeuroApp track, still only has 5.68% of it devoted to these titles. In sum, paraphrasing Bitzer (1968), the rhetorical situation at the DACCO library has yet to be met with an appropriate response.

CHAPTER 6: SUMMARY AND CONCLUSIONS

My dissertation provides an example of using a health ecology to help classify books. I construct this example by developing a new methodology for the evaluation of library services in small health information centers that operate as part of a larger health ecology. As such, I am seeking to evaluate more than the flow of rhetoric. I want to measure the effect of rhetorical interventions in health ecologies, including the actions of the audience/rhetor after the interventions have been introduced. As I have discussed previously, it is important to understand each element in both the rhetorical situation and the intervention prior to and after the intervention has been introduced. In other words, my modification of the rhetorical situation allows me to employ the DACCO library's health ecology as my site of study and address my research questions: 1) Extending the work of Walkup & Cannon (2018), how is a health ecology different from other ecological models? 2) How can we operationalize health ecologies in order to use them to study a responsive librarianship text-based therapy (TBT) scheme? The answer to these questions, outlined below, is based on nearly five years of work on this project where I, and my fellow researchers, have attempted to improve the health outcomes of the women residents at DACCO through its library.

How is a Health Ecology Different from Other Ecological Models?

In order to address the first research question, I began by defining health ecologies, something that Walkup and Cannon (2018) left to a later date. I defined health ecologies as the *interconnected networks of events that distribute agency through rhetorical circulation in a medical context*. By defining health ecologies, I am acknowledging that they are different than, but not distinct from, the more general rhetorical ecologies. The major reason for this difference is the nature of health and medical discourse. Differentiating between general ecologies and health ecologies required me to introduce several innovations, something I discussed in my introduction. First, I divided the five particularities of the Bitzer (1968) model into two groups. The first group comprises the “situation elements” of exigences, audiences, and actants, the last a replacement for constraints that reflects Edbauer’s (2005) contribution to Bitzer’s schema. The second group comprises the “intervention elements” of rhetors and discourses. Together, these two groups come together to form a rhetorical health ecology. Second, I redefined agency for this particular ecology as *the distribution of change over time* (Graham, 2009) by focusing on various texts and genres as my objects of study, relying not on individuals or agents, but more on rhetorical events such as reading. Third, I replaced the normative conception of “illness” or “disease” and focused more on a condition’s *salience to an individual* rather than its *presence in an individual*. Fourth, I calibrated the cacophony of discourses in a health ecology by privileging neosophistic rhetoric to allow for competing discourses to emerge and be

enacted. Finally, I employed a new metaphor in discussing health ecologies, moving away from Edbauer’s use of “viral” movement and more towards one of *perfusion*.

With the above framework I developed for my first research question, I was able to focus on those features that distinguished a health ecology from a general rhetorical ecology. Previously, as I described in Chapter 2, I focused on the concepts of rhetor, agency, and rhetorical context based on the literature regarding ecologies. Table 1 identifies the several features I focused on in my analysis and how these are employed in each of the two ecologies.

Table 1. Features present in health ecologies and general rhetorical ecologies.

| Feature/Attribute | Rhetorical Ecology | Health Ecology |
|--------------------------|---|---|
| <i>agency</i> | ability | change over time |
| <i>focus of inquiry</i> | actants | events |
| <i>exigence</i> | not specific but broadly defined and addressed by discourse | biopsychosocial and addressed by discourse |
| <i>audience</i> | intended target | subjunctive participant |
| <i>actants</i> | limitations | constraints |
| <i>rhetor</i> | nonprivileged actant | subjunctive participant |
| <i>discourse</i> | articulated | negotiated and calibrated through neosophistic presupposition |
| <i>metaphor</i> | viral | perfusion |

Agency.

Discursively, these differences appeared in the results of my text analysis discussed in Chapter 5. Looking back at Figure 7, there was a distinct grouping separating the health ecologies from the general ecologies. Figure 8 repeated this pattern, with some interesting granularity as the health ecologies were further divided according to a specific health focus: clinical medicine, drug addiction/policy, and bibliotherapy. With this information, we can make some assumptions using both the

figures (Figs. 7, 8) and Table 1. Starting with the rhetorical concept of agency, there would be a recognizable difference in language used. The three example texts, *Democracy's Lot* (Rai), *Distant Publics* (Jenny Rice), and *Digital Detroit* (Jeff Rice), are general rhetorical texts and address power relations in various contexts. For example, Rai's text investigates an attempt to develop a piece of commercial property in Chicago's Uptown neighborhood, a diverse enclave of residents, seemingly representing almost the entire breadth of humanity. The lot, owned by the city, became a focal point of debate as there was no agreed upon purpose to the development. City leaders left it up to the political process to decide the best use of the land. Jenny Rice's text also looks at development from a public rhetorics point of view, but here the power structure is much more skewed, as civic groups coalesce to stop or slow down the growth of development in Austin, Texas. Finally, in Jeff Rice's text, there is an analysis of space and rhetoric and how relationships exist in and engage with larger networks. Consistent with Rai and Jenny Rice, Jeff Rice's discussion of agency is neither a major feature of the text (with the term "agency" being mentioned only 10 times, half of those in the discussion of other scholars), nor unusual in its focus on power relationships:

but for now I note that the power shift is one of agency regarding what or who is an agent in this network of categories. An early feature of this agency or power shift, I understand, is the informational shifting of fixed categories (worker, road, empty). (Rice, 2015, p. 72)

Continuing later in the text, Rice offers a traditional description of agency: "Capability is agency. Potentiality is agency" (2015, p. 213). Thus, agency as something that can be possessed is a standard definition. Agency as ability is something not measured but

traced in ecological thinking. Tracing involves description, through metaphors, of those things that create what Debra Hawhee (2004) calls “rhythm.” To Hawhee, rhythm “produces distinctive movements within a generalized direction; it combines fixity with variability. Put simply, rhythm emerges from difference” (2004, p. 142). Wells, McGreavy, McHendry, and Senda-Cook (2018) give us another metaphor of tracing, describing it as something similarly done by a clammer who runs her fingers along a shell, feeling its ridges and counting its lifelines to determine the clam's age and status. Thus, ecological tracing is a descriptive act – a discursive act – that seeks to explain something we do not know, or need to know better, in order solve a problem.

Focus of Inquiry.

In a way, measuring goes further because it is four dimensional, with time being a crucial feature. It requires ecological tracing to begin, but it is also necessary to measure the effect of a given rhetorical intervention and whether it has led to an increased distribution of agency throughout the various networks of *events*. An event in a health ecology is defined by something that occurs at a specific place and a specific time. This focus of inquiry is much different than investigating a network of *actants*. In other words, the major idea is whether one can measure *changes in a health ecology* after a rhetorical intervention has been introduced. For measuring, there is always going to be imperfect knowledge, and rhetoric acknowledges this fact. There will never be Jewett's (1850) perfect catalog dropping down from heaven or Teston's (2017) body not in flux. Because health ecologies look to change over time rather than an ability when describing agency, there has to be more than one point of reference. In order to have a point of reference for measurement, we have to “stop the clock,” so to speak. Thus,

when we are looking at the effect of an intervention, we have to imperfectly choose a starting point and an ending point. Where we choose these points is decided by tracing the health ecology, and comparing these points is how I conceive of measurement working. It is possible, then, that Figure 9 from Chapter 5 visualizes this shift in thinking about agency. Each text is both about rhetorical ecologies and ecologies themselves. It only makes sense. Thus, the narratives that flow in each study about rhetoric is connected, and one of those networks woven throughout is discourse about agency. Moving from right to left and up to down on the Cartesian Graph, we can hypothesize that we are moving through the various manifestations of agency. At the center coordinate (0, 0), we are at the mean. At the right-hand top of the graph, we see the texts by Rai, Rice, and Rice, all representing the traditional notion of agency as an ability. Moving from right to left, there is a shift in how the texts describe agency. In some cases, these texts maintain the traditional definition of agency, but there is the added element time. Finally, located at the left-hand bottom of the graph are the two texts about change over time, both dealing with TBT treatment schemes.

This point brings us to our focus. Measurement (and eventually evaluation and assessment) in a health ecology is different. In a general rhetorical ecology, rhetoricians tend to look at actants. Much of today's ecological thinking relies upon Bruno Latour's actor-network theory (Rice, 2012). According to Rice, "actor-network theory is more about how we are within a process. While we may not be conscious of the networks we inhabit, we are aware of the networks through a kind of embodied knowledge that is reflected in our behavioral adjustments" (2012, p. 169). Those things – people, places, spaces – are the actants that alter the flow of relationships. When tracing a general

ecology, focusing on actants makes sense. In a health ecology, there are actants, such as MRIs and nurse's scrubs, that affect our behavior – our relationships – in a larger network. Health ecologies more than general rhetorical ecologies, however, incorporate time into the network. Time as an “actant in motion” is transformational. Being able to travel through time allows one to think in terms of *events* instead of *actants*. For example, an MRI image of a brain, one without tumors, lesions, or other concerns, might be unremarkable. Sure, one can speak about the visual potency and rhetorical power of an MRI image, its relationship to other technologies, and its usefulness as a diagnostic tool, something that Teston does with force in her book *Bodies in Flux* (2017). However, if we want to measure a rhetorical intervention, thinking in terms of events is far more useful. Thus, in our MRI example, if we add an MRI image of a brain with a tumor taken six months prior to the initiation of chemotherapy, then we can think in terms of *events over time* rather than actants and the effect of an intervention. Thus, for example, the second cancer-free MRI image can be part of an event that visualizes the body, affecting someone's cancer disease salience in a positive manner, and distributing agency throughout the network.

Audience.

In a general rhetorical ecology, the audience and rhetor are most often going to be different. The reason for this difference, I posit, is the relationship between the definition of agency as an ability with actants being the focus of inquiry. From these two features flow a large amount of discourse in a text. If we are to think in terms of an ability, something has to have (or not have) that ability. Each concept requires description. Thus, if we talk in terms of children and agency, we need to explain how

children are actants in a specific ecology and what specific ability the children are seeking to employ. For example, do we allow for children to have the agency necessary to be rhetors when it comes to discourse about the exigence of gun violence? The analysis necessary to rhetorically address this question involves a lot of discourse, and much of it will resemble discourse that seeks to investigate other power-relationship exigencies, such as women in politics or issues of equity, diversity, and inclusion (EDI) in education.

In Table 7, I list both the audience and rhetor as “subjunctive participants.” While Walkup and Cannon (2017) did discuss the imbalance of power in a health ecology, there is also a great deal of subjunctive discourse present, too. I borrow the concept of subjunctive discourse from Bruner (1986) and employ it here to discuss how a rhetor’s discourse is transformed by an audience. A subjunctive process is the one I describe in Chapter 3 in relation to the event of reading using the NeuroApp track. Subjunctivity occurs when the audience rewrites the discourse received from a rhetor, imbuing it with meaning that is personal to audience but not so much where the discourse is idiosyncratic. It is why we say a text is never read the same way by two different readers because each reader comes with her own experiences and inserts them into the text for it to make sense. It is a process that is less “fact-driven” and more “context-driven” in a neosophistic way. It is why the Deficit Model of health communication does not work: giving someone who does not understand a health situation more “facts” does not increase understanding (Walkup & Cannon, 2018). Giving a person information that aligns with what she may already know and allowing her to rewrite the information is how understanding is increased. It is a concept similar to the Productive Usability web

design concept offered by Simmons and Zoetewey (2012), where the needs of citizens who search and use information to satisfy epistemic inquiry and knowledge making are taken into consideration. Productive usability understands that context is transformational, and similar to what I explain here, the information produced and received through this lens will always be dependent on the situation.

This subjunctivity is necessary in a health ecology when we discuss the issue of disease versus disease salience. As I discussed previously in Chapter 1, salience is a much more useful term than disease. Salience is the importance a person gives to a health condition based on her subjective knowledge. In other words, the rhetorical embodiment of disease is rarely going to be the same for two different audience members. Concepts, such as pain, are ontologically different in people (Graham, 2015), and symptoms transform the notion of disease. Some people can tolerate more pain than others, and the issue of pain is not just biological, it produces a mental state (Graham, 2009). So, when a health professional talks about the importance of fixing a cracked tooth, there are times when that discourse is overly burdened with fact-based information that does not allow it to be salient to the audience. Perhaps the audience is thinking that the cost of the dental procedure is too high and the amount of pain is tolerable for now. Here the audience is rewriting the discourse initially provided by the rhetor, a process that often happens in a health ecology. Thus, what has happened through this subjunctive process is the audience has become the rhetor by rewriting the discourse. Effective communication in a health ecology, therefore, allows a reader to become a better writer of health narratives.

Exigence.

The revised model frames exigence in a manner that employs ontological inquiry in a health ecology. Previously, I discussed my preference for the concept of salience over disease or illness. Salience here refers to the importance a person gives a condition or symptom. Salience may not be an actual condition. Rather, it is how that health condition is embodied through rhetoric and that embodiment is often relational. Teston (2017) discusses this relationship between health and rhetoric, and rhetoric's role in the production of evidence: "Despite epideictic monikers like 'evidence based,' 'next generation,' and 'precision,' contemporary biomedical practice is inescapably enthymematic. It is tempting to disparage enthymematic reasoning for the ways it flattens and sterilizes localized experiences, but enthymemes only ever promise probabilistic possibility" (p. 172). Embodiment also means that bodies are spaces where rhetorical work is done. The body is not comprised of a finite boundary, but a porous entity, where rhetorics move through via perfusion (Teston, 2017).

One example illustrates the idea that bodies are rhetorical spaces, where rhetoric flows in and out in an ontological manner. It involves the concept of intellectual disability. Previously called mental retardation (MR), intellectual disabilities are marked by below-average "intelligence" and an impaired ability to exercise adaptive (social) behaviors. Each of these prongs are relational to other individuals and are probabilistic in nature. In other words, an individual was diagnosed with MR based on standardized tests, tests that were statistically normed. The results are not exact; they contain some degree of probability. The results are in flux. In addition, these tests involved data from other tests on other people. These tests included socially and culturally relevant

information that differed according to one's age, geographic location, and cultural background. In order for these tests to be socially and culturally accurate, they required multiple discourses on what should and more importantly, should not be included in the test. Thus, one way I talk about how medical exigences are embodied rhetorics means I am discussing how discourse enters our body through diagnosis and treatment.

Ontology is also important when we discuss MR and salience. Ontological inquiry frees medical exigence from relying on "disease" or defined medical conditions because my revised model understands the fluid nature of truth. Thus, when the modern model of MR was conceptualized in 1961, it defined the IQ prong as subaverage general intellectual functioning. At the time, this measurement was considered to be one standard deviation from the mean of 100, putting the MR IQ at around 85. Thus, in 1961, someone with an IQ below 85 satisfied the first prong for a diagnosis of mental retardation. A diagnosis of MR was considered a permanent disability, entitling that person (and her caretakers) to significant government benefits. Unfortunately, setting the first prong at one standard deviation meant that approximately 16% of the population could be entitled to benefits if they met the other conditions for MR. This decision resulted in massive budget deficits in the area of social services. Thus, in 1973, the first prong was revised to include only those who had an IQ two standard deviations below the mean, or a number around 70. This change reduced the number to around 3% of the population (Harris, 2010).

Under a traditional model of exigence, an individual diagnosed with MR based on an IQ score of 80 in 1972 would no longer be considered mentally retarded in 1973. According to most authoritative texts at the time defining MR, this previously mentally

retarded individual would no longer suffer this “disease.” She would no longer need government benefits or government subsidies. Medical advancements in the field would no longer concern her, and public service campaigns about the rights of those with MR would no longer apply. Medically, it would be as if she was “cured.” Thinking of exigence in terms of salience, however, allows us to understand that while definitions change, the things we feel and their salience are what matter. Thus, a salience model understands that someone with an 80 IQ in 1973 would still have intellectual deficits and a marked inability for self-care. Addressing this exigence in a health ecology would involve personally relevant health information to those who must still care for her, even though she no longer fits the definition of MR. It would also seek to address the larger health ecology, including health professionals and policy makers (Harris, 2010). Thus, the health salience of this condition is concerned less with its definition and more with the agency that such a designation instantiated.

Discourse.

Adding a level of complexity to the revised model is the idea of competing discourses that must be calibrated in a health ecology (articulation versus negotiation). As I discussed in Chapter 1, the concepts of negotiation and articulation come from the related field of technical communication, and concern the role of the author (Slack, Miller, & Doak, 1993). Under a “translation” view, the primary goal of communication involves the meanings of messages and how power has been negotiated between the sender and receiver. According to this view, communication is a negotiated process that takes into consideration the respective agency of the participants. The opposing view of “articulation” understands that identity is socially constructed, often through a

struggle, where meaning is disarticulated and rearticulated. This view does not recognize the ability of some groups to adequately negotiate during the communication process because of the imbalance of power relations that often occur. Therefore, the communicator's job as author is to "articulate" the views of those voices with less agency, adding authority and thus leveling the field (Slack et. al., 1993). Most general rhetorical ecologies favor an "articulation" view when it comes to addressing multiple discourses.

There are expert voices, however, that may create an imbalance in agency, and despite this imbalance, they are still important in health ecologies. Therefore, instead of articulating one voice over another through articulation, the competing discourses need to be negotiated through a process of neosopshitic calibration. As I argued in Chapter 2, neosopshitic truth may be a better vehicle for calibrating competing discourses circulating throughout health ecologies due to its interplay of *alêtheia* (relative truth), *eidô* (communal knowledge), and *kairos* (opportune moment), creating an ethically constructed network of events, through Bruner's (1986) process of "presupposition." According to Bruner, presupposition is "an implied proposition whose force remains invariant whether the explicit proposition in which it is embedded is true or false" (1986, p. 27). In discourse, this approach means that there is a community preconstructed to understand more than what is in the text, be it codes, tropes, or language markers. When presuppositions are used, they are easily unpacked by the rhetor and the audience. While critics may argue that democratically arrived-at decisions do not necessarily imply that they are ethically correct, I counter here that *eidô* and democracy do not always equate – nor should they. *Eidô* can be arrived at through a democratic

procedure, but it does not have to happen that way because of the temporizing and calibrating influence *alêtheia* has on the process. Unlike articulated discourse, neosophistic rhetoric can never emerge from a place of privilege. It is foregrounded in a relativistic truth where no discourse is privileged, social positions are unstable, and knowledge is communally constructed, leaving open the possibility that the arrived at truth may be the minority held, but socially accepted, position. There is no single “Truth” waiting to be discovered in the Socratic sense. Neosophistic “truth” is relative, fluctuating, and changing, always dependent on the situation, with *meaning subordinate to situation*. Thus, when confronted with multiple discourses, the reliance on neosophistic calibration is what distinguishes a health ecology from a general rhetorical ecology.

Metaphor.

Finally, the idea of metaphor should be addressed. The current ecological model thinks in terms of rhetoric being viral. Personally, I do not understand it. Perhaps it is edgy, but it is my contention that it is the wrong metaphor and sends the wrong message. Not only do viruses occupy a negative image, how viruses operate does not fit in well with the health ecologies’ subjunctivity. Viruses target their host, most often without the host’s consent. This metaphor is not how rhetoric works and perhaps violates the “Strong Defense,” by implying a “good” and “bad” rhetoric. A virus can target the heart, regardless of the body’s consent. We can put up defenses in the forms of vaccines, but this action does not necessarily mean it will be 100% effective. Perfusion, on the other hand, does not target a host. Perfusion only occurs if it is accepted. The host must be receptive to the flow and that receptivity may occur quickly

or slowly. In order for there to be receptivity, the medium being delivered via perfusion must be adjusted so the host recognizes it as something “good.” In terms of our body, blood does not target our heart. There may be problems or issues with our heart, but if we adjust the blood’s properties (i.e., perhaps make it thinner), the heart will accept it. Rhetoric in a health ecology works the same way. It has to be accepted, not forced.

How can We Operationalize Health Ecologies?

Now that I have addressed the first research question, I have to ask, what does this information mean? To operationalize something means to make it something we can measure. I have identified certain features that distinguish one form of rhetorical ecology from another, but how is this important, especially in the field of rhetoric? Surely applying the measurable features of traditional rhetorical ecologies discussed above to a health ecology would yield a certain set of results. Applying my modified measurable features to a health ecology might also produce results. Of importance, however, is whether they would produce different results and whether the two sets of results are comparable. In other words, can my new methodology provide a unique description of the DACCO health ecology that is measurable, and is this description interesting or useful?

It is important to note that there has not been evidence that my method of evaluation or assessment has had an effect on DACCO’s health ecology, but it is a possibility. The intervention I propose to introduce and then measure is ecological in nature and employs Speculative Usability design principles. First introduced by Nathaniel Rivers and Lars Södelund (2016), Speculative Usability goes beyond thinking in terms of an object’s proposed use by an individual.

To expand usability, we create the concept of Speculative Usability, which focuses as much on discovering the multiple relations that an object has as it does on elaborating the specific dysfunctions that a user experiences in his or her encounters with an object. As such, it allows us to ask usability questions less exclusively wedded to the user than those posed by traditional usability tests. Rather than “Is the user able to efficiently work with this object as the designer intended?” or “Does the composition of this object satisfy the user’s specific intentions?” we can ask, “How does this object work given its particular set of relations?” and “How might this object work otherwise?” (Rivers & Södelund, 2016, p. 127)

Following this concept of Speculative Usability, the intervention I propose at DACCO considers use of the rhetorical situation as a way to classify books for a health ecology with an understanding that many of the “particular set of relations” are properly reconsidered as those distributed constraints on agency. The constraints in DACCO’s health ecology help define the flow of agency as much, if not more, than the events that initiate change. In this ecology, the event of reading, and the MHPs restraint of such reading, set the limits of how change is instantiated over time. From the defined limits on agency, I can now investigate how else agency can flow. In other words, by using Speculative Usability design principles, I can consider alternative ways of getting the residents to read despite the constraints placed on their ability to read by the MHPs. This alternative route is constructed by introducing those texts into the library that are less likely to create a distraction during counseling. The use of Speculative Usability at DACCO was done previously when the introduction of certain technologies was

considered for mental health literacy instruction (Walkup, Cannon & Rea, 2016). There we said speculative usability “allows us to think about the action of information seeking in relation to the entire DACCO therapeutic library. The library has a very specific set of constraints that must be taken into account” (p. 3). The model that I introduce in my dissertation continues to employ this particular concept of constraints and is part of the framework from Table 1 I use to inform my revised model for the evaluation and assessment of health ecologies. Table 2 further employs Speculative Usability design principles in order to outline some of the differences between the old and new models of evaluation and assessment as they might occur in a DACCO health ecology.

Agency.

Defining agency as change over time implies that the change is contextual, diffused, and sustained. It also means that it can be more personalized and applicable to a wider, more socially diverse population. At DACCO there are varying levels of privilege based on race, ethnicity, gender, and sexual identification. There are also levels of difference based on cognitive abilities, legal status, and prior victimization. Employing a model of agency foregrounded in power relations and ability may be overly broad due to the diverse nature of the DACCO treatment population. This problem could be due to the fact that addiction does not necessarily target a specific demographic, although it could be argued that the effects of addiction do create an inequitable distribution of risk based on race, gender, and socioeconomic status. On the other hand, by measuring change over time, it is possible to contextualize (i.e., personalize) an intervention. For example, it is not unusual for a privileged individual to be admitted into a women’s residential treatment program. If she is a straight, white female who is

economically well off, then it would not make sense to have as the measure of agency her ability to receive the services she needs or her ability to balance the power relations between her and her addiction counselor. In fact, she may be in a residential treatment program as a condition of her probation, a legal status she negotiated because she was able to retain high-priced legal counsel. In a similar health ecology, such as a hospital, it would not be unusual to find different races and levels of privilege grouped together, where most distinctions are made on the level of care (or more likely, the economically efficient delivery of care) and not on demographic status. This distinction is not the case in traditional rhetorical ecologies, such as the one discussed in Rai's (2016) study about the Uptown neighborhood of Chicago, where privilege often defined geographic location and the ability to be heard.

The data obtained from the resident survey supports the revised conception of agency as change over time. Recall my previous discussion about the act of reading. According to Zunshine (2006), the brain is altered by reading fiction: "no two close encounters with the same fictional text are ever truly the same, for the brain that responds to the text changes ever so slightly with every thought and impression passing through it" (p. 75). Michael Burke (2013) makes a similar point:

Although much future testing will be needed, I will postulate here that the neural pathways in the brain of the avid literary reader will be stimulated and shaped by repeated exposure to certain style-figure structures during acts of engaged literary reading, resulting in a plausible neural mirroring of the essential structure of a certain scheme. (p. 211)

Table 2. Feature operationalization in DACCO’s health ecology.

| Feature | Traditional | Data | Revised |
|-------------------------|--|---|--|
| <i>agency</i> | power relations/inequitable distribution of risk and how it may affect the ability to read | resident survey, collection analysis | whether interacting with a text facilitates change over time |
| <i>focus of inquiry</i> | residents, MHP, texts, facility, alcohol, drugs | semi-structured group interview | the event of reading |
| <i>exigence</i> | addiction and treatment; epistemological inquiry | needs assessment survey, resident survey | biopsychosocial issues where addiction is a symptom; ontological inquiry |
| <i>audience</i> | residents | resident survey, collection analysis | individual implied reader |
| <i>actants</i> | reading level, texts, triggers, beliefs | needs assessment survey, resident survey, semi-structured group interview | constraints that restrict reading |
| <i>rhetor</i> | genre of a text | semi-structured group interview | individual actual reader |
| <i>discourse</i> | resistance and resilience | needs assessment survey, resident survey, semi-structured group interview | discourse of both the MHPs and residents |
| <i>metaphor</i> | selecting texts that target a specific addiction and mental health condition | literature review | selecting texts that the residents and MHPs will accept and understand leading to positive health outcomes |

Thus, if the goal is ToM repair, or change over time, then we are looking for data in the resident survey that supports continued reading.

Recall Q1 from the resident survey that asked the residents which reading material they liked. There were 12 genres presented and 163 responses were recorded, with 82.82% of the residents surveyed preferred to read fiction over nonfiction and

19.63% selected the mystery and thriller genre as their favorite. These data suggest that there is a way to instantiate change over time, in other words agency, in this population: develop a library collection where fiction/mystery/thriller titles are both therapeutic and available. Unfortunately, from the data produced from the evaluation of DACCO's collection, the initial collection development policy resulted in only 4.64% of the collection belonging to the mystery/thriller genre. Today, the number of mystery/thriller titles is still low at only 5.68% of the collection. Thus, under my revised methodology, in order to sustain agency, the number of mystery/thriller titles needs to be increased.

Focus of Inquiry.

In my revised model for evaluation and assessment, I focus on events rather than actants. While traditional rhetorical ecologies focus on the relationships among actants, I find that these relationships are more useful if they are understood as *evidence* of events. For example, at DACCO, we could have everything necessary for a resident to participate in a TBT scheme. The list, indeed, is long. It can include texts, treatment modality, the right MHP, reading time, a quiet space, so on and so on, only to find out that none of the residents are reading. What then? We could tease out more actants or just move on and look at the limitations. A better approach, one that recognizes that the elements in a rhetorical situation “just bleed” according to Edbauer (2005), would be to focus on events – those rhetorical “verbs” – that occur between actants. In other words, instead of looking at the nodes in a network, those hubs of activity, we peer instead at the edges, the links or highways, where the activity actually occurs. Looking at events still allows us to use a revised rhetorical situation, but it gets

us to the problem quicker, without unnecessary layering of actants, exigences, and limitations. Continuing with my example, by focusing on reading, I can understand what facilitates or limits this event, and if I visualize the event in a network analysis, I can figure out how to bypass a limiting actant, such as treatment counselor, in order to foster the event of reading.

Furthermore, if we focus on events, we can bypass a limiting actant, allowing for a more efficient distribution of resources. For example, using the data in my study, I found that the MHPs favored a policy restricting the use of fiction texts to those residents in treatment Phase 3 (or above). If I focused on the MHP as actant, my solution most likely would have involved trying to change the beliefs of the MHPs. While this change in attitude is no doubt a long-range goal, neosophistic rhetoric deals with problem-solving. Instead, I was able to focus on two events: reading and the interrupting during group sessions caused by the residents wanting to discuss a book or narrative with which they identified. From this event came the development of the NeuroApp track that both facilitated the event of reading and reduced (or eliminated) the event of interrupting. Bypassing the MHPs and introducing a new track of text-based therapy allowed me to gather the necessary evidence needed to address the *concerns* of the MHPs, eventually allowing the residents in Phase 1 and 2 of treatment to read those texts belonging to the NeuroApp track.

Exigence.

The revised model of exigence further embeds discourse into a health ecology. It also privileges the role of health information as an intervention in a health ecology, influencing how agency is viewed as an event. Thus, if we understand that many

problems in a health ecology are discursive in nature, related to the articulation and comprehension of complex health information, then we can narrowly tailor our rhetorical responses in order to “match” the rhetorical exigence. In DACCO, addiction is an embodied condition. Authoritative texts, such as the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), now in its fifth edition, are based on a classification system that “constructs a certain reality through relations of similarity and difference” (Fraser, Moore, & Keene, 2014, p. 34). Like all classification systems, the DSM is imbued with the values of its creator (Johnson, 2012). The DSM-V creates a polythetic category of addiction labeled “substance use disorder” based on eleven criteria, of which only two need to be present to be diagnosed as a “mild” disorder. The eleven criteria are a mix of “cognitive, behavioral, and physiological” symptoms. These symptoms are both neurobiologically based and socially constructed. Further complicating the matter is the fact that the DSM is not the only authoritative text for defining addiction. In other words, AOD addiction can best be described as a reality with multiple ontologies. There is no single definition or model of addiction. What kind of AOD addiction someone has depends on place and space, and places are powerful agentic forces that transform the ontology of AOD addiction (Teston, 2017).

From my data it is possible to see how the way addiction is defined directly informs the rhetorical exigence. Specifically, we can look at the responses on the resident survey, as well as the semi-structured group interview. According to Mutsumi Karasaki et al. (2013), there are five conceptual models of addiction, with each one leading to different treatment options. The most recognizable model is the moral model, which assigns blame via stigma to the individual for their AOD addiction and therefore,

the responsibility for correcting it. Second, under a social model, AOD addiction is a societal problem that manifests itself in the individual. Third, the medical model fixes AOD addiction as a disease and assumes that individuals are not held responsible for the problem or the solution. Under this model, there is still stigma attached to addiction; being an “addict” is a performative part of that person’s identity. Fourth, in an enlightenment model, individuals are seen as responsible for addiction but not for solving it. Finally, in a biopsychosocial model, addiction is seen as a result of various forces acting on an individual causing a need to “escape” from the world (Karasaki et al., 2013). Since there is no absolute “true” definition of addiction, the concept of exigence should be fluid and focused on the ontological origins of AOD addiction. Therefore, “AOD addiction” would rarely be an exigence in DACCO’s health ecology. Instead, the exigence would involve the underlying, or causal factors, that lead to addiction. We see data supporting this argument in Q6 of the survey, an inquiry into why the residents read fiction books. This question originally was designed to test the hypothesis that the residents preferred “mirror novels,” or those books that addressed problems, or general and popular fiction. Contrary to the initial assumption, only 8.87% responded that they wanted to read books that were about the same problems they were going through, while 24.56% responded that they did so to “escape from my problems” and 33.33% said they wanted to “escape from the world.” Thus, using my revised methodology, the data did not support the development of a collection with a large amount of affective titles. Instead, the data suggests that those titles in the NeuroApp track would be preferable.

Audience.

My methodology reconfigures the traditional conception of audience by expanding it to include not only those who are the intended targets of a speech act but also to include subjunctive participants in the role of the implied reader. A subjunctive participant is different than the unintended audience member, such as the contemporary student who is moved to action after reading Lincoln's Gettysburg Address. There is an element of intentionality, and in this dissertation, it comes with the selection of a particular text. Each text has an implied reader, an individual for whom we can say the author may have had in mind when writing the text. It is a general idea and is often imprecise, but as a concept it is somewhat intuitive. A good example is the *Harry Potter* series written by J.K. Rowling. We would not be surprised if we said that the implied reader for these books were young adults who liked a fantasy story, but one that retained many of the typical elements in a child's life. One can go further and make the argument that the implied audience for Rowling's books is slightly different than the implied audience for J.R.R. Tolkien's books in *The Lord of the Rings* trilogy. Both series belong to the fantasy genre but differ because each activates a different subjunctive process.

At DACCO the implied reader differs based on a book's genre. Many of the CBT books dealing with addiction or mental health issues are texts where the women residents are the implied reader. Most likely the author wrote these texts for individuals living in the same context or situation that the women at DACCO occupy. It is also a good assumption that many of the fiction titles were not written for the women at DACCO. For example, in the library's collection, are books written by Tamora Pierce

belonging to the *Song of the Lioness* series. These books, written for teens, are about a young woman who defies convention and becomes a knight. The protagonist complicates traditional gender roles by empowering women and eschewing those traditional tropes often seen in girls' literature. The implied reader is not the average adult woman at DACCO, addicted to AODs, and suffering from a history of physical and sexual abuse. This discrepancy does not mean she cannot become the implied reader. In fact, one of the anticipated health outcomes of the library is for her to become the implied reader through a subjunctive process, a sustained series of event that produces change over time.

The data from the resident survey support this argument and are useful in evaluating the library under my revised methodology. In Q7, respondents were asked what happened to them when they read a book. Here 24.56% thought the author wrote the book for them, 22.81% responded that they liked to pretend that they were one of the characters, and 19.30% thought they knew why the author wrote the book. In other words, nearly a quarter of the residents thought they were the implied reader even though, on most occasions, they were not. In addition, nearly 23% employed a subjunctive process (or one of identification) by stating they felt they were one of the characters in the book. Finally, almost 20% thought they knew the implied author, an abstraction gained only through the evidence presented in the text through textual clues. It is important to note that this last conclusion uses the same subjunctive process where the reader fills in the textual holes (this one about who the author is and what her motivations are) with her own life experiences. Thus, one assumption one can make from the answers to Q7 is that the women at DACCO are involved in a transformational

process when they participate in the event of reading. They initiate their own, personalized agency through the rhetorical space that exists between themselves, the real reader and all of their problems, and the implied reader.

Using this data to evaluate a library, therefore, requires an evaluation of the texts in the collection based on the real reader (the DACCO resident) and the implied reader, with the implied reader representing the specific health outcome trying to be achieved. Thus, using Pierce's *Song of the Lioness* affective track texts as an example, we are trying to produce an outcome where the DACCO residents transform themselves to individuals *receptive* to the narrative in the text, a narrative of strength, courage, resilience, and independence. This perspective is different than identification with the character, an entirely different health outcome. The NeuroApp track texts are evaluated the same way. The implied reader for the mystery/thriller genre is one who can take information under advisement, make connections, and solve a problem. When a DACCO resident reads a book in the NeuroApp track, that gap between the real and implied reader closes over time, producing a positive health outcome.

Actants.

In the original rhetorical situation proposed by Blitzer (1968), the third element was comprised of those things that either influence or limit the available means of persuasion. What he described as constraints were "beliefs, attitudes, documents, facts, traditions, images, interests, interests, motives," and other such influencing factors (Blitzer, 1968, p. 8). My data suggest that these constraints, what I am calling limiting actants, are those things that influence events. They do not necessarily stop events from happening, but instead, these limiting events alter the perfusion of agency

throughout the health ecology. Thus, if we are examining the event of reading as something that instantiates change over time, then we are looking through my data for those limiting actants that affect this event.

According to my data, there are several. First, the data suggest that in the needs assessment survey, 25.58% of those who responded wanted to read books that did not have anything to do with their treatment. This response meant that these residents did not wish to read books belonging to either the CBT or affective tracks. Thus, the initial way the collection was developed, and its ultimate composition, was a limiting actant. Similarly, in the resident survey, 10% of the respondents to Q3 had not read books related to their treatment, and in Q5, almost 20% of the respondents did not want to read books related to their treatment. Thus, by limiting the composition of the initial collection to books related to AOD treatment, the collection again acted as a limiting actant. Finally, the data from the semi-structured group discussion suggest that the MHPs may also be serving as limiting actants. By restricting the genre of texts that may be read during Phase 1 and Phase 2, the MHPs have reduced those titles that appeal to low-literacy readers or those readers with low interest.

Rhetor.

My revised methodology employs a concept of rhetor foregrounded in the theories developed by Bruner (2004), and it is the lens of rhetor that I find most useful for evaluating the texts we employ at DACCO. When discussing audience above, I remarked that there existed a subjunctive process making an individual *receptive* to a narrative. This receptivity constructed a cultural “tool box,” to use Bruner’s term. Now that we have this tool box, what do we build and how do we build it? In order to explain

this concept, it may be better to begin with what it does not look like. If we return to the traditional method of evaluating therapeutic libraries, that tool box will be quite limited. For example, the many didactic texts that make up the CBT track allow for very little personal narrative construction by means of the subjunctive process. The tools employed by CBT texts are simple and behavioral and apply to the greatest amount of people who share a certain condition: do not do X, or Y will happen. These qualities do not mean that CBT texts are not useful. In fact, they are very useful. Unfortunately, they are not capable of much personalization, and herein lies the problem. From the data obtained from the semi-structured group interviews with the MHPs, I discovered that in group counseling sessions, the MHPs remarked that some of the residents were “distracting” the other members of the group because they wanted to talk about a particular insight they achieved by reading an affective text. In other words, they had personalized a narrative to fit their particular situation. Unfortunately, group sessions are not well designed for personalized treatment. Instead, they are designed to treat the most amount of people in the least amount of time, and the application of CBT texts fits perfectly within that model. The very nature of behavioral implies a broad applicability. Unfortunately, the traditional model of evaluation views this particular genre, and those authors that operate in this genre, as the rhetors. It is the *genre* of a text that is most important. In other words, if an adequate author of mediocre talent can write in a favored genre (CBT in this example), then this text is considered good and therefore, useful. It satisfies the evaluation criteria, and the data from the semi-structured focus group session with the MHPs supports this assumption.

My revised methodology, however, is different when it comes to the concept of rhetor for *it allows for the greatest amount of subjunctivity without becoming idiosyncratic as determined by the kairotic situation*. Thus, under my revised model, CBT books work well in certain situations but not all situations. The same can be said for affective texts and visual materials. Going back to neosophistic thought, *the content of the text is subordinate to the situation where the text will be introduced*. Why is this important when I just remarked that mediocre authors of texts are the wrong standard? Am I not just reifying this belief? No, because the rhetor in my revised evaluation model is not the actual author of the text but the *actual reader of the text*. In my model, it is not the text that is most important, but rather, it is the holes, the gaps, the spaces where the reader fills in her narrative that are essential. It is where we take a text and subjunctively construct an “autobiographical narrative,” to use Bruner’s term (2004).

What this term means is best explained by Bruner (2004) in a long quote. Such lengthy quotes, generally, are not favored in dissertations, but I find this statement compelling for two reasons. First, it was the impetus for this current project. Understanding how the women at DACCO transformed their lives through reading was such an important answer to a question that everyone seemed afraid to ask and is fundamental to gaining further support for this and other projects. Second, Bruner’s words were so clear, so precise, that I often had to read them over to make sure I was not missing some larger point. Not only do they state the issue well, they also provided me with an additional warrant to do this research:

But the issue I wish to address is not just about the "telling" of life narratives. The heart of my argument is this: eventually the culturally shaped cognitive and

linguistic processes that guide the self-telling of life narratives achieve the power to structure perceptual experience, to organize memory, to segment and purpose-build the very "events" of a life. In the end, we become the autobiographical narratives by which we "tell about" our lives. And given the cultural shaping to which I referred, we also become variants of the culture's canonical forms. I cannot imagine a more important psychological research project than one that addresses itself to the "development of autobiography" – how our way of telling about ourselves changes, and how these accounts come to take control of our ways of life. Yet I know of not a single comprehensive study on this subject. (Bruner, 2004, pp. 694–695)

Going back to my revised model, what we are looking for are texts that allow the women residents of DACCO to rewrite their autobiographies, to close the gap between the real reader and the implied reader, in a way that produces positive health outcomes. The data that support this argument come from the needs assessment survey where we found a variety genre requests, everything from religious instruction to murder mysteries; the resident survey responses discussing both genre and the receptivity to reading therapy; the candid discussion with the MHPs about what happens in various therapeutic contexts; and an evaluation of the collection itself, not only those areas where we have a sufficient number of titles, but also in those genres where we are lacking. All of these data support the idea that the true standard for evaluating a good rhetor is not the name that appears on a cover of a book, but rather how well that author taught us, the reader, to be good writers of our own narratives.

Discourse.

The final topic I will address in this section is discourse, and it is one of the distinguishing features in a health ecology. It is perhaps the most difficult element in this context because being a medical librarian and a rhetorician can put one at odds with either field, or if one is talented enough, to paraphrase Saki, both. As a medical librarian at DACCO, I often have a duty to ensure that the library services are consistent with the treatment plans provided by the MHPs. In this service situation, this role meant two things: first, the texts provided to the library had to be cleared by someone on the medical staff; second, only certain pre-approved texts could be offered to the residents enrolled in Phase 1 and Phase 2 of the program. These conditions are not unusual in a medical context since the mission, vision, and values of the DACCO library are to support the services provided by the MHPs in order to produce positive health outcomes. In another context, such as a public library, such restraints would not be acceptable, and there is a long history of librarians pushing back against what they consider censorship. As a rhetorician, however, the privileging of one discourse over another can be problematic, especially in the context of DACCO where the power relations are so obviously skewed. These observations provided much of the background in the study conducted by Walkup and Cannon (2018), and it was this issue about discourse that eventually led to my current study.

This tension between the goals of a medical librarians and the goals of a rhetorician could possibly be considered incommensurable (Graham & Herndl, 2013). I would submit, however, that it is not necessary to make this determination since it is clear that there is some conflict found in the discourse between medical librarianship

and rhetoric. Instead, it is necessary to understand how that discourse is presented, often through *logos*, but usually amplified through an appeal to *ethos*. For example, the traditional belief is that since DACCO is a medical institution that operates using a medical hierarchy, the discourse offered by medical professionals (as opposed to the medical discourse itself) needs to be privileged. Walkup and Cannon (2018) found that a discourse of resistance and resilience was one way in which the agency of the residents at DACCO could be improved. This discourse, however, was often at odds with the discourse of the MHPs which could, at times, be considered paternalistic, if not autocratic.

The data from the semi-structured group interview with the MHPs were instructive. Many times, during the interview, the MHPs would refer to the residents as “addicts” and to their cognitive processing as “addict thinking.” These are common terms in the AOD treatment and recovery community, and as they were offered here, not meant to be pejorative. Instead, these terms were rhetorically imbued with meaning as a way to embody the very real lived experiences of the residents. In fact, many of the counselors at DACCO are former addicts, and they feel that this experience gives them more *ethos* when dealing with both the residents and with other MHPs. Unfortunately, such terms create a performative atmosphere where the residents are expected to behave as addicts (Walkup & Cannon, 2018), possibly leading to negative health outcomes. Alternatively, the data suggest that there are times when the MHPs are correct. Again, using the example of the group counseling session, the MHPs are correct in stating that it was disruptive when the residents referred to a book with which they had identified and then proceeded to talk about that personalized process. The

solution offered by the MHPs (restricting access to fiction for Phase 1 and Phase 2 residents), however, was not correct because they were concerned with the *genre* instead of the *context*. In other words, the MHPs employed a thinking where meaning was superior to situation.

As I stated previously, neosophistic truth may be a better vehicle for calibrating competing discourses circulating at DACCO due to its interplay of *alêtheia* (relative truth), *eidô* (communal knowledge), and *kairos* (opportune moment), creating an ethically constructed way to communicate in a health ecology. This approach means that there are times when a certain position must be *negotiated* instead of *articulated*. In the case of the group counseling session, for example, it is necessary that all stakeholders understand that the discourse of the residents was not “wrong” or “disruptive.” Equally important to understand is the position of the MHPs when it comes to therapeutic processes. Favoring one discourse over another does nothing to solve the problem. Furthermore, by favoring one discourse over the other, there is the very real possibility for incorrectly evaluating or assessing a particular intervention. For example, if we favor the discourse of the residents and their ability to go through the process of identification during group therapy, then it is a likely assumption that the texts are not supporting the mission of the DACCO library, which is to offer adjunctive reading materials consistent with the residents’ treatment plans. On the other hand, if we favor the discourse of the MHPs in restricting the genre of texts, then we are also not reaching our goal of offering personalized library services in support of individual health outcomes. Only by calibrating the discourse through neosophistic rhetoric is it possible to arrive at the appropriate measure of an intervention’s success.

Conclusion, Implications for Practice, and Future Directions

The revised methodology I present here in my dissertation is based on years of practice and failure. The most difficult aspect in writing my dissertation has been articulating the practices carried out at the DACCO library in a way that makes sense for a particular community of thought. In other words, because I am an English PhD candidate in the field of Rhetoric and Composition, it has been a challenge to privilege one discipline when describing a truly interdisciplinary project. On the other hand, I feel that this focus on rhetoric has given me a better understanding of the field of rhetoric by giving me the opportunity to contextualize my research. In fact, I have presented my research at various library and information science events, and the reception has always been positive. Furthermore, the text-based therapy scheme described above and the method for its evaluation have been recently introduced into a different health ecology. This newest therapeutic library offers similar services to children and teens in an acute mental health facility, and the use of my revised methodology for assessment has seen some initial success.

What eventually did not make it into my dissertation was a textual analysis of the actual books used in the library, using a method similar to the one comparing the several types of rhetorical ecologies. This future study will continue the work in my dissertation by suggesting that there is a statistical methodology that can be used to identify the different types of texts to test my intervention evaluation, especially when it comes to NeuroApp track. Preliminary research in this area supports this methodology for evaluating texts, and future findings may support its use in a broader scheme for introducing text-based therapy in public libraries.

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APPENDIX: READING PREFERENCE SURVEY

Q1 The type of books I like to read are (choose all that apply):

- Mystery and/or Thriller (1)
 - True Crime (2)
 - Biography (3)
 - Fantasy (4)
 - Science Fiction (5)
 - Historical Fiction (6)
 - General Fiction (7)
 - Young Adult Fiction (8)
 - Addiction related fiction (9)
 - Treatment and self-help related (10)
 - Physical Health (body) related (11)
 - Mental Health (mind) related (12)
-

Q2 The type of book I like best is

- based on something true (non-fiction) (1)
 - based on something made up (fiction) (2)
-

Q3 Have you ever read a book as a way to understand or cope with problems or issues you face in life?

- Yes (1)
 - Maybe (2)
 - No (4)
-

Q4 Have you ever read a comic or graphic novel as a way to understand or cope with problems or issues you face in life?

- Yes (1)
 - Maybe (2)
 - No (3)
-

Q5 I want to read fiction or non-fiction books that will help me with my treatment

- yes (1)
 - Maybe (2)
 - No (3)
-

Q6 I read fiction books...(check only the best option)

- To escape from my problems (1)
 - To escape from the world (2)
 - That are about the same problems I am going through (3)
 - To be inspired by the story (4)
 - Because I like to solve mysteries (5)
 - Because I am bored and there is nothing else to do (6)
 - Only for a good story (7)
-

Q7 When I read a fiction book...(check only the best option)

- I feel like the author wrote this book for me (1)
 - I like to pretend that I am one of the characters (2)
 - I like to think that I know the author and why the author wrote the book (3)
 - Nothing very special happens to me (4)
-

Q8 I like the characters in fiction books to be (check only the best option)

- like me (1)
 - complicated (2)
 - easy to understand (3)
 - ones that I have read about before in a series (4)
 - new ones I have never read about before (5)
 - someone I could hang around with (6)
 - someone I could learn from (7)
-

Q9 I believe that reading books can help with my recovery

- yes (1)
 - Maybe (2)
 - No (3)
-

Q10 I believe that reading books can help me understand and share the feelings of another

- yes (1)
 - Maybe (2)
 - No (3)
-

Q11 I believe that reading books can fix the damage to my BRAIN caused by drugs or alcohol

- yes (1)
 - Maybe (2)
 - No (3)
-

Q12 I believe that reading books can fix the damage to my BODY caused by drugs or alcohol

- yes (1)
 - maybe (2)
 - no (3)
-