

**Paper Programs: Notebook-Based Information Systems and the Generative Potential of
Constraint**

by

Moriah L. Kirdy

B.A., Muhlenberg College, 2004

MFA, George Mason University, 2010

Submitted to the Graduate Faculty of the
Kenneth P. Dietrich School of Arts and Sciences in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

University of Pittsburgh

2019

UNIVERSITY OF PITTSBURGH
DIETRICH SCHOOL OF ARTS AND SCIENCES

This dissertation was presented

by

Moriah L. Kirdy

It was defended on

August 30, 2019

and approved by

Stephen Carr, Professor, Department of English

Annette Vee, Associate Professor, Department of English

Alison Langmead, Clinical Associate Professor, History of Art and Architecture & Associate
Professor, School of Information Sciences

Thesis Advisor/Dissertation Director: Cory Holding, Assistant Professor, Department of English

Copyright © by Moriah L. Kirdy

2019

Paper Programs: Notebook-Based Information Systems and the Generative Potential of Constraint

Moriah L. Kirby, PhD

University of Pittsburgh, 2019

This dissertation investigates genres of handwritten notebook-based information systems through meta-genre, a term borrowed from Janet Giltrow to describe the talk and texts surrounding genre-based practice. We live in an era with a massive “productivity market,” for wearable self-tracking tech, web and mobile productivity applications, and computer-based note-taking and yet many everyday writers maintain robust pen-and-paper practices. This dissertation asks: what do these routine and repetitive acts of writing promise for their users, and what do they *do* as rhetorical and affective agents of change? The case examples that structure this dissertation include the commonplace book (a genre of reading log popularized in the early modern era), the bullet journal (a productivity and mindfulness practice), and the experiences of seven individuals I interviewed about their practices which ranged from health symptom management, to workplace productivity, to time-based quantified self experiments. Drawing from experimental poetics, I introduce the concept of constraint to describe the self-assigned and generative “rules” practitioners design and appropriate to govern these systems, which promise for their users a training akin to cognitive, emotional, and rhetorical programming. I argue that constraint-based systems infuse text and writer with potentialities generated not from the writer’s agency alone, but in collaboration with the system’s own rhetorical force. “Paper Programs” thus offers that we do not need to look far for examples of writers who are attuned to the ways in which their subject positions are being deferred and distributed, and who adopt constraints as technologies of mediation to intervene in the various forces that co-construct their being.

Table of Contents

Preface.....	xi
1.0 Paper Programs	1
1.1 Introduction	1
1.2 Rhetoric Machines.....	6
1.3 Constraint and/as Genre Convention and Genre Convention and/as Constraint..	13
1.4 Everything but Blank	19
1.5 Commonplaces and/as Methodology [Chapter Outline].....	25
2.0 The Commonplace Book as Recombinatory Machine	29
2.1 Possibility.....	29
2.2 Common Places and the Origins of the Commonplace Book Genre	41
2.3 Desiderius Erasmus	47
2.4 John Locke	54
2.5 Training	59
3.0 Bullet Journaling and the Context of Genre: a Computer-Assisted Study	71
3.1 A Brief Rationale for Computer-assisted Textual Analysis and/as Genre Study...	76
3.2 The Bullet Journal.....	80
3.3 Texts as Topics, Topics as Texts.....	85
3.4 Topics and LDA	89
3.5 LDA Assumptions and the Context of Genre	92
3.6 The Bullet Journal Genre as Read through Topic Modeling	99
3.7 Limitations	117

3.8 Conclusion	118
4.0 Recollection, Remediation, and Re/Processing: Nonce Notebook-Based Information Systems and their Processing Mechanics.....	124
4.1 Semi-Structured Interviews and Thematic Analysis.....	126
4.2 Why They Write	130
4.3 Recollection	134
4.3.1 Tertiary Memory and Finding Mechanics.....	134
4.3.2 System Origin Narratives and Memories	140
4.4 Remediation	147
4.4.1 Self-tracking	150
4.4.2 Self-Monitoring	156
4.5 Re/Processing	163
4.5.1 Processing Through Present-Tense Writing.....	163
4.5.2 Processing through Discernment	168
4.6 Conclusion	171
5.0 Implications for Rhetorical Ecological Frameworks, Rhetorical Genre Theory, & Constrained Notebook-Based Practices and the Commonplace of “Self-Care”	175
5.1 Habits and Ecologies	176
5.2 The Texture of Constraints.....	180
5.3 Contributions and Implications for Future Work	184
5.3.1 Genres of Notebook-based Information Systems	184
5.3.2 Notebook-based Practices as Contributing to the Commonplace of “Self- Care”	188

5.4 Conclusion	193
Appendix A Topic Models.....	196
Appendix B Semi-Structured Interview Protocol and Consent Form.....	210
B.1 Semi-Structured Interview Protocol	210
B.2 Informed Consent Form.....	212
Works Cited.....	214

List of Tables

Table 1 Sample Topics from a 10-Topic Model with an Even Distribution of Topics	96
Table 2 Sample Topics from a 10-Topic Model with an Asymmetrical Distribution of Topics..	97
Table 3 Phases of Thematic Analysis, adapted from Braum and Clarke.....	130
Table 4 Topic Key: 20-Topic Model with an Even Distribution of Topics.....	196
Table 5 Topic Composition: 20-Topic Model, Even Distribution (Topics 0-9).....	197
Table 6 Topic Composition: 20-Topic Model, Even Distribution (Topics 10-19).....	200
Table 7 Topic Key: 20-Topic Model with an Asymmetrical Distribution of Topics	203
Table 8 Topic Composition: 20-Topic Model, Asymmetrical Distribution (Tpics 0-9)	204
Table 9 Topic Composition: 20-Topic Model, Asymmetrical Distribution (Topics 10-19)	207

List of Figures

Figure 1 Visual representation of a sentence in its syntactical context as transformed into a “bag of words” to be read by machine operations.....	88
Figure 2 Plate Notation of the LDA Algorithm, adapted from Blei, Ng, and Jordan "Latent Dirichlet Allocation." Each circle (node) is labeled according to their role in the process. Θ represents the assumption that each document contains a mixture of topics. Z is a topic assignment. The rectangles indicate repetition; that the process is repeated for each document in the corpus and for each word in each document.	95
Figure 3 Topic 4 (20-topic model, even distribution).....	101
Figure 4 Topic 4 (20-topic model, even distribution) without "bullet_journal_ token.....	101
Figure 5 Topic 0 (20-topic model, even distribution).....	103
Figure 6 Topic 1 (20-topic model, even distribution).....	103
Figure 7 Topic 2 (20-topic model, even distribution).....	103
Figure 8 Topic 7 (20-topic model, even distribution).....	103
Figure 9 Topic 8 (20-topic model, even distribution).....	103
Figure 10 Topic 9 (20-topic model, even distribution).....	103
Figure 11 Topic 10 (20-topic model, even distribution).....	103
Figure 12 Topic 14 (20-topic model, even distribution).....	103
Figure 13 Topic 15 (20-topic model, even distribution).....	104
Figure 14 Topic 16 (20-topic model, even distribution).....	104
Figure 15 Topic 18 (20-topic model, even distribution of topics).....	105
Figure 16 Topic 19 (20-topic model, even distribution).....	105

Figure 17 Topic 6 (20-topic model, even distribution).....	106
Figure 18 Topic 13 (20-topic model, even distribution).....	107
Figure 19 Topic 15 (20-topic model, asymmetrical distribution).....	108
Figure 20 Topic 15 Graph (20-topic model, asymmetrical distribution).....	108
Figure 21 Topic 18 (20-topic model, asymmetrical distribution).....	110
Figure 22 Topic 18 (20-topic model, asymmetrical distribution) without "bullet journal" token	110
Figure 23 Topic 18 Graph (20-topic model, asymmetrical distribution of topics).....	111
Figure 24 Topic 1 (20-topic model, asymmetrical distribution).....	112
Figure 25 Topic 3 (20-topic model, asymmetrical distribution).....	112
Figure 26 Topic 14 (20-topic model, asymmetrical distribution).....	112
Figure 27 Topic 16 (20-topic model, asymmetrical distribution).....	112
Figure 28 Topic 2 (20-topic model, asymmetrical distribution).....	114
Figure 29 Topic 4 (20-topic model, asymmetrical distribution).....	114
Figure 30 Topic 5 (20-topic model, asymmetrical distribution).....	114
Figure 31 Topic 6 (20-topic model, asymmetrical distribution).....	114
Figure 32 Topic 19 (20-topic model, asymmetrical distribution).....	114
Figure 33 Topic 2 Graph (20-topic model, asymmetrical distribution).....	115
Figure 34 Topic 0 (20-topic model, asymmetrical distribution).....	116
Figure 35 Topic 0 Graph (20-topic model, asymmetrical distribution).....	116
Figure 36 Megan's habit tracking squares.....	152
Figure 37 Dane's time tracking paper log	154
Figure 38 Screen capture of Dane's Excel dashboard.....	155

Preface

My warmest thanks go out first and foremost to my committee. They were exactly the interlocutors this project needed, and, moreover, are the *people* I needed to reach this time and this place. Thank you to Alison Langmead, who as my “outside” reader has tested my resolve in the best way, pushing me to refine the legibility of my work beyond the flexible spheres of composition and rhetoric. Thank you to Annette Vee, who has empowered me as a thinker, as a woman, and as a mom, and whose openness, kindness, realism, and strength have modeled for me a way forward where maybe nothing is in balance but somehow it’s possible to do and make interesting work and keep our children alive, and maybe even thriving. Thank you to Stephen Carr, whose orbit I am so grateful to be within. I always hope to live up to his confidence in my potential. He has always been in my corner, and I cannot appreciate that enough. Thank you to Cory Holding, my chair and friend, who has been my mentor from the day I stepped into her Rhetorical Gestures graduate seminar up through our more recent meetings where we attempt to hold some semblance of an agenda while our children vie for our attention or practice being gentle while poking at each other’s faces. In many ways I feel the rhythm of this work is the rhythm of our walk in Frick and the cemetery that day, with our children in carriers and the breeze at our backs. We’ve proven motion by walking.

Thank you to the faculty and administrators in the English department, who have afforded me so many opportunities to grow and change as a thinker and teacher. I am grateful to my students, who have helped me troubleshoot and test the hunches that this work represents. Thank you to my parents, who have always encouraged me to pursue that which fuels my mind and spirit and to my brother, who has modeled for me how to make a career out of one’s passions. I am

grateful for my fellow graduate student friends and colleagues for all of the many ways I cannot begin to enumerate. You know who you are and what we've been for each other, and I thank you. Thank you to our good friend, Niki, who has cared for and loved our child and without whom so much of the revision of this project would not have been possible. Thank you to my son, Alexander, for keeping me young. Not least, thank you to my husband Tim, who is my heart of hearts, "my safe harbor in an endless stormy sea."

1.0 Paper Programs

The act of composing begins... by positing the attainment of a composition on the horizon.

~ Jacques Roubaud

1.1 Introduction

We live in an era with a massive market for wearable tech, web and mobile productivity applications, and computer-based notetaking software all promising users that diligent use will aid users by alleviating the stresses induced by life's abundance of information and lead to self-improvement, better time-management, productivity, and health. These technologies automate or assist in the collection of data which are then reported back to the user in easy-to-digest graphs and charts marketed as flashy pedagogical tools: they promise to teach us something about ourselves which will ultimately motivate us to walk more steps, do more tasks, collaborate more efficiently, and achieve a sense of accomplishment and balance. Such technologies appear alongside work-life management strategies and philosophies in ample supply in best-selling books, high-traffic websites, and their companion apps. These include the Pomodoro Technique developed by Francesco Cirillo, Tim Ferriss's "Four Hour Work Week," the Marie Kondo method of tidying, and David Allen's "Getting Things Done," among many other snappy-titled systems promising to be the solve-all techniques for accomplishing goals *and* a more balanced and mindful life.

For these systems, whether computer programs or a systematic course of action, writing is often integral to the program's functionality. If a company Trello board is going to work

efficiently, employees have to write down what they are currently working on and at what stage in the process their work can be categorized as “to do,” “doing,” or “done”). The “capture” stage of “Getting Things Done” requires taking stock of everything you can think of at the moment, which could be done via voice recorder, listing on a piece of scratch paper, or writing into a computer document. When we look around spaces where personal and professional work happens—home and company office, conference rooms, libraries, classrooms, coffee shops, kitchen tables, and so forth—it’s not uncommon to see people using notepads, notebooks, and paper planners as well as computers and smartphones. For some, a notebook or scratch paper serves as a freeform space for processing information in the present tense: that is, a person might fill pages on end but will rarely if ever return to what has been written because it serves an occasional purpose for a fixed time. Perhaps one writes as an aid for active listening in a class or meeting, or to brainstorm ideas better fleshed out in a different medium, or to make shopping lists that enter into the short-term memory long enough that if the list is forgotten or dropped its items are still likely to be remembered.

For some, however, pen-and-paper notetaking methods are just as systematic as those computer or methodological programs, where writing is not only *a part* of the functionality, *it comprises the entirety of the system itself*. People who routinely practice robust pen-and-paper notebook-based systems create, appropriate, and customize writing constraints as strategies for how information is recorded, organized, and ultimately processed. These systems are the focus of this dissertation.

In this dissertation I engage with the commonplace book and the bullet journal, two genres of notebook-based systems with well-circulated and discussed conventions, as well as the robust systems of seven individual practitioners. I engage with these notebook-based practices through meta-genre, a term I borrow from Janet Giltrow to refer to the “situated language about situated

language,” (190), that is, the instructional and promotional talk surrounding genre practice. I explore various meta-genres, including conventionally published articles as well as blog posts dedicated to advocating for and debating best practices, the meta-data encoded into the blog posts that influences how these meta-genres are circulated, and talk solicited directly through one-on-one interviews. Attending to the discourse surrounding these systems reveals not only that discussion and debate contributes significantly to the stabilization and visibility of contemporary notebook culture, but it allows me to consider what I see as the central question of this dissertation: what do these routine and repetitive acts of writing promise for their users, and what do they *do* as rhetorical and affective agents of change?

Practitioners describe the purposes of these systems as including workplace and personal record keeping, planning, health-symptom tracking and management, reading logs, and quantified self experiments—purposes based on a desire to keep track of life’s abundance of information in order to control it, better understand it, make it more pleasant to deal with, and to engage productively with one’s own information with curiosity and creativity. Unlike the ephemeral notes that can be discarded almost as soon as they’ve been written, these systems take advantage of the technology of the book to contain notes in one place. Their use is both reciprocal and recursive, with mechanics that facilitate the efficient capture of new information as well as ease-of-use in finding what has already been captured through organizational strategies including indices, iconographic cues (like color-coding, flags, or category headings) to aid the writer for some present and/or future use. While conventional books are generally read front to back in western society, these mechanics facilitate non-linear reading across pages to assemble and improve an understanding of the contents captured therein.

This dissertation advances a concept of these systems as *paper programs*. I argue that these systems promise for their users a training akin to cognitive, affective, and rhetorical programming. Repetitive acts of writing under constrained mechanics infuse the text and the body of the writer with potentialities that arise not from the writer's personal agency alone, but from the rhetorical potential of the system itself. That potential is pervasive: it is attractive to other potential practitioners as these systems coalesce into genres and tempts practitioners into longstanding and sometimes obsessive relationships as people rely on their systems to remediate various responsibilities. I continue a narrative begun in media studies linking notebook-based information capture and processing to contemporary computer programs by insisting that paper-based and computer-based programs have a collaborative and contingent relationship. The digital has not usurped or superseded paper-based systems; far from revealing rifts between pen-and-paper methods and digital culture, this research demonstrates that such practices draw from digital culture, both in the sense that discussion of such systems in web publications, blogs, and social media popularize and circulate these systems as they coalesce into genres and in the sense that their mechanics appropriate digital ones (practitioners might design, for example, their own visually striking pedagogical charts and graphs). From the perspective of rhetorical genre theory and post-critical theory, I argue that the relationships individuals develop with their systems, as active components of their lived experiences, evidence a human and nonhuman collaborative effort, offering an example of writers who willfully engage with a deferred and distributed agentic subject position.

The designation "program" resonates in multiple registers. In the colloquial sense, a program is an established behavior or a conventional way of going about something—when we "get with the program" we're falling in line, submitting to the procedures dictated by "the Man"

and “the Machine.” As a physical artifact, a program is an account of proceedings or a plan of action, as with a wedding, theatrical performance, or graduation ceremony. Such programs offer both a sense of what is about to happen but also who the key players are. A college graduation program includes the schedule of events but also educates the attendee on the disciplinary colors represented by academic regalia, the biographical information of guest speakers, and provides a script for the person whose job it is to read each name before they take the stage to receive their diploma. In the realm of machines (including, but not limited to computers), a program instructs the machine how to execute a set of operations. Its instructions are written in languages legible to the machine that may not be legible to non-programmers should they ever encounter it (part of the point being, no one should need to if the machine is doing what it’s supposed to). In both human and nonhuman animal conditioning, a program is a method of reinforcing learned behaviors through repetitive action and perceived rewards.

Describing pen-and-paper information systems as *paper programs* is thus an insistence that these systems operate under various understandings of “program” and the programmatic. They are often efforts to “get with the program,” in that practitioners feel a sense of urgency to get and keep themselves organized for the sake of staying on top of work (professional or personal work), an exigence that carries with it the demands for professional and personal etiquette, civility, and decorum. As physical artifacts, the notebooks become a record of a course of action, including life’s main events and key players. The constrained mechanics practitioners use to determine how information will be captured, organized, and archived are not unlike a set of instructions given to a machine and perhaps are only legible to the individual who writes and uses them. Finally, through repetitive use, these systems’ rules and constraints offer a mode of pedagogical training with cognitive, affective, and rhetorical dimensions.

The notion of “information” is itself complex and by no means neutral, as argued by Philip Agre, who asserts that information is “at best a superficial generic term for a broad range of categories whose forms can be described in terms of genres but whose nature can ultimately only be understood within a larger system of structural relationships and ideologies” (“Institutional circuitry”). Far from decontextualized nuggets, information “*is always touched, handled, passed along a continuous material exercise*” to cite Casey Boyle, who positions information as “neither the content of media nor the media itself but the *mediating process* through which signals emerge” (81, emphasis in original). In this dissertation I consider information as somewhere between the two accounts. Information is embodied in ideological structures and can only ever be understood as within a constant state of being mediated and thus cannot be distinguished from the processes and practices that mediate it. Such processes can be described in part in terms of genre, which are recognizable by their formal conventions which carry with them rhetorical and ideological force. Attempts to capture information can only ever be freeze frames within processes of mediation. Information systems as are thus environments within which information can be processed and described. Of course, as soon as information can be described it has already transformed into something else.

1.2 Rhetoric Machines

Contemporary scholarship exploring the relationship between rhetoric and programs of writing and criticism have done so largely to celebrate a displaced author or critic in favor of texts and games that at least in some way write themselves. In James J. Brown’s “The Machine that Therefore I Am,” an article that began as an experiment to see what kind of thinking could result

from putting two juxtaposed pieces of writing together,¹ Brown reads Jacques Derrida's *The Animal that Therefore I Am* alongside Desiderius Erasmus's *De Copia*. As both a contemplation of and an enactment of procedure-based writing, Brown's experiment results in a thought-provoking exploration of "the procedures that infect writing," (495), going so far as to define rhetoric as "a collection of machines":

Rhetoricians never tire of defining rhetoric, so I offer my own definition hesitantly, but let me suggest that rhetoric is a collection of machines, ('whatsits,' 'gadgets') for generating and interpreting arguments. The virus that infects Derrida's inventional and interpretive mechanisms is rhetorical and procedural. It is mechanical, operating by certain logics, taking inputs and generating outputs. This makes the rhetorician squirm, since describing rhetoric in terms of procedures might be seen as reducing the art to mere rules. (495)

This concept of rhetoric as that which *machines arguments* is helpful for this project in that the systems I describe are full of constrained mechanics which can be understood one category of *whatsits* that transform language into differently legible forms. We know we're in the realm of rhetoric when there is something that compels us to understand its inner workings, its logic (that there is something requiring interpretation), but the capacity to reach any kind of understanding of the inner workings of a compelling thing requires an attention to limits. The tension Brown cites between rhetoricians and "the rules," (one I'll explore in greater detail in the following chapter) is a tension long contemplated and representative of what I'd consider one of the great paradoxes of rhetoric: with the skilled rhetor there is no visible semblance of having followed procedure, and yet knowing and executing the rules well is what enables a rhetor to exhibit what strikes an

¹ I am aware of this fact because Brown described the process behind this article to those of us in the RSA summer workshop in "Rhetoric's Algorithms," which he co-facilitated with Annette Vee in 2015.

audience member as the rhetor having “natural” ability. A person can follow procedure but not “output” impactful results. Thus, rhetorical procedures are as much about decorum, conduct, and civility as they are about *merely* following the rules. “If,” as Brown writes, “I am merely ‘following procedure,’ then I am not making ethical judgments, I am off-loading ethics onto the machine” (497). To put it in another voice, Longinus says: “Impeccability escapes all blame, but greatness is the object of our admiration and wonder.”

Studies in computational media have gotten around the unease surrounding machinic writing schema by asserting that the powers of authorship remain, they have simply moved to the authorship of the procedures rather than the authorship of the utterance. As Brown states it, “rules are not only followed. They are also *authored*” (497). Perhaps most prominently figured in this area is Ian Bogost and his concept of *procedural rhetoric*, which he describes as “a subdomain of procedural authorship; its arguments are made not through the construction of words or images, but through the authorship of rules of behavior, the construction of dynamic models. In computation, those rules are authored in code, through the practice of programming” (29). This mode of authorship has also been celebrated as well by Noah Wardrip-Fruin, whose own term “expressive processing” is meant to evoke that “computational processes are an increasingly significant means of expression for authors” (3) in digital media. Wardrip-Fruin extends expression to the player, who takes part in making the game by exploring game mechanics to understand what is possible in gameplay, even thwarting designers’ initial intentions. In simulation games like SimCity, a city-building game, or its off-shoot, *The Sims*, a life-simulation game, a player’s experience depends on the player coming to understand the game’s mechanics. “Players begin to see how this type of system operates and become capable of thinking about appropriate and inappropriate uses of such systems” (310). Gameplay, then, depends on the player’s ability to use

those mechanics for their own expressive purposes. These authors' projects and those inspired by their works aim in part to elevate video games, especially, to the status of expressive media worthy of study alongside literary and aesthetic artifacts, so the insistence on a rather conventional understanding of authorship and the exemplary serves to hitch procedurally-constrained writing to the longer history of aesthetic production.

Indeed, such scholarship rarely proceeds without at least a nod to the constraint-based writing experiments of the experimental poetics group the Oulipo (the *Ouvroir de Littérature Potentielle*, or “workshop for potential literature”) founded in 1960 by Raymond Queneau and François Le Lionnes, though as Richard Deming points out in a special issue of *Poetics Today* dedicated to constraint, the use of “enthusiasts,” the term Jacques Roubaud prefers as a reference for those who write through constraint, implies *amateurs*, but also “a seriousness beyond simply facilitating a pastime” (655). For Queneau, who wrote a sort of manifesto of the Oulipo, the experiments of constrained writing are “naïve,” that is, “[w]e forge ahead without undue refinement. We try to prove motion by walking” (51). Constraints are thus experimental methodologies to test the possibilities for language, making, and reading. Poet and critic Jan Baetens and Jean-Jacques Poucel define constraint as follows:

...strictly speaking, a constraint is a self-chosen rule (i.e. different from rules that are imposed by the use of a natural language or those of convention); it is also a rule that is used systematically throughout the work (its range therefore differs from that of style, which is less systematic), both as a compositional and as a reading device. Constraints are not ornaments for the writer, they help generate the text; for the reader, they help make sense of it. Accordingly, rigorously applied constraints are explicitly definable and verifiable in a textual analysis. (613)

I'll return to complicate this definition below, but for the moment the important aspect of note is the relationship between the writer and the reader. Constraint works against the “natural” tendencies of the writer and should be legible to the reader to make sense of the resulting text. Perhaps the most famous examples of constraint-based writing are Queneau's *Exercises in Style*, where he retells the same simple story in 99 different ways, is remnant of Desiderius Erasmus's experiment in rewriting “your letter delighted me greatly” in 195 variations (an experiment cited in the above mentioned piece by Brown), or his *A Hundred Thousand Million Poems* which presents a series of ten sonnets with lines cut into strips so that when different strips are peeled back the lines recombine into 10^{14} possible poems. Oulipoian constraints were often inspired by mathematics and involved some kind of transformative experiment, including $n+7$, where a text is transformed by replacing every noun with seven nouns away from it in a dictionary.

I do not take it as a coincidence that such curiosities emerged at the same time of the development of the nonhuman computer (remembering of course that the first computers were people, primarily women), which could realize the handling of recombinatory and replacement work on a massive scale. Nor do I take it as surprising that constraint-based writing beyond the Oulipo has remained a mainstay of contemporary experimental poetics. Deming articulates that “the use of constraints has deeply philosophical implications insofar as to say *constraint* is also to invoke freedom or, in this case, the willing forbearance of freedom” which amounts to both an aesthetic and an ethical philosophical undertaking (654-655). That undertaking is inspirational for a variety of reasons, not least of which is this thread I'm following regarding the ways in which writing through constraint, rule, and procedure challenges a conventional understanding of authorial agency.

The computer has indeed made possible a range of experiments with and through constrained mechanics amplified in scale and scope due to the affordances of software, hardware, networks, databases, hyperlinks, and so forth. Stephen Ramsay's *Reading Machines* even conceptualizes an "algorithmic criticism," utilizing the computational ethos behind Oulipo constraints practices to consider computation as a transformative reading practice useful for critical inquiry. Kevin Brock's "One Hundred Thousand Billion Processes: Oulipian Computation and the Composition of Digital Cybertexts" offers that cybertext is a potential definition for Oulipoian constraints, in that they require a "'non-trivial' engagement from a reader in order to be understood" and as well that they "draw attention to their procedural mechanics, i.e. the means by which they function, as a significant component of reader engagement." That is, a reader, like Wardrip-Fruin's description of the simulation game player, learns the system by interacting with it; the system becomes part of the *content* of what is experienced. N. Katherine Hayles claims through interpreting Mark Danielewski's *Only Revolutions*, a text made possible only by software such as Photoshop, that "[o]nce specified by the author, the complex set of constraints become semiautonomous components of it, dictating the author the spectrum of choices," and that the software, network functions, and hardware are "cooperating in the authorial project" such that authorship "is distributed then, though the writing down system that includes both human and nonhuman actors" (236).

These and many other efforts to explore constrained compositions produced in collaboration with machine operations are significant in that the computer expands what is possible for such compositions, but they do not require computers to function as semiautonomous collaborators. While perhaps the constraints of the Oulipo are the most memorable and the most comparable to those thinking through the lens of computer programming, constraint has always

been an element of poetic invention, from traditional forms to radical transformations. It is, in the language of poetics scholar and critic Marjorie Perloff, “a *generative* device: it creates a formal structure whose rules of composition are internalized so that the constraint in question is not only a rule but a thematic property of the poem as well” (208, emphasis in original). Consider the sonnet and its conventional turn, or volta, which signals a shift in thinking or argument so the poem closes in a different logical place than where it started. This turn carries with it narrative and ideological implications and is an expected convention for anyone employing a sonnet form (or truly, any poem roughly eleven to sixteen lines). When poets buck against the turn and do something else, that transgression becomes a kind of commentary on the turn and thus is still reliant on the convention to make meaning for a reader. I’ll explore Perloff’s conception of the internalized constraint in the following chapter, but for the moment it might suffice to emphasize that for constraints that become stabilized as conventions—or conventions that become understood as constraints—it is not as simple as someone authoring the constraint that then determines some aspect of the resulting text.

Constrained making as represented in the scholarship cited above offers a challenge to conventionally humanistic understandings of authorship and audience reception as a text generated in part or whole by a relatively strict set of rules and constraints can’t be fully attributed to the human, nor can it be fully attributed to the machine or the machinic. According to the Bogost-ians among us, anyone made slightly queasy by this can be assured that human authorship remains, it is merely *relocated* to the designer of the rules. In the context of notebook-based information systems, however, constraints may be designed but they are just as likely to be appropriated and customized, whether deliberately from others who advocate for best practices, or subconsciously. The constraints employed bear a kinship to the Oulipo experiments in that, as poetics scholar and

poet Jacques Jouet has articulated it: “form showcases itself; it showcases itself as something artificial, as work” (5). They also bear a relationship to expressive media in that there is an individual practitioner who has a say in what mechanics will be useful to them and might exploit mechanics for their own expressive purposes. However, as methodologies of collecting, organizing, and processing personal data their pragmatic purposes have a complex relationship to authorship in that their practitioners *willfully defer and distribute* responsibility for that data to the mechanics of the system.

1.3 Constraint and/as Genre Convention and Genre Convention and/as Constraint

Contemplations of constraint have proliferated well and have been welcomed in scholarship attending to literary and critical composition and critique but are lacking in works attending to everyday writers. As techniques, or we might say *techne*, they can be taught, appropriated, tested, experimented with, and refined or discarded. Constraints are not precious; they can and should be appropriated by others. Jacques Jouet insists, “Constraint is altruistic,” (4). I employ the language of constraint in this dissertation as a preference over “procedure” or “rule” to signal a companionship with constraint-based poetic experimentation as that which involves a writer’s *willful* surrender of authorial autonomy and in the sense that such constraints require both writer and reader for any meaning to be made of the experiment. In the context of personal notebook-based information systems, the writer is also reader, so if the system is to be useful the task is always at some level to remediate information to make it differently legible to themselves.

As literary media, experimental poetics can only take us so far into an understanding of how everyday writers practice constrained writing on a routine basis for an audience primarily of

themselves. As genres, the systems' constraints are not isolated idiosyncratic mechanics bucking against a long-standing literary tradition; they are pragmatic and conventional approaches to a host of concerns related to the collection, maintenance, processing, and archiving of personal information. According to Baetens and Poucel, constraints have nothing to do with convention because they are self-imposed, and yet they "defend the hypothesis that constraints are a universal phenomenon. Because constraint is embedded in the very notion of form, all periods, all languages, all types of literature provide more or less self-conscious examples of constrained writing, some more rigorously defined than others" (614). The emphasis seems to be about the level of consciousness a practitioner has when taking on constrained writing mechanics, a point of emphasis I'll challenge variously throughout this project.

As genres, the systems I discuss in this dissertation have a more tenuous relationship to constraint and/as convention and convention and/as constraint. On the one hand, meta-genres evidence that constrained mechanics are at the forefront of consciousness when they are discussed, debated, and advocated for by practitioners sharing their approaches; on the other hand, as enactments of such systems recur and become more pervasive.² As a brief example I'll explore in greater depth in Chapter 3, the Bullet Journal system at the level of constraint is a very simple, streamlined, and no-frills approach to mindful personal information management as imagined by its creator Ryder Carroll and as practiced by its early adopters; however, practitioners quickly saw opportunities for customizations including illustration, ornament, and other expressive details to

² Chris Andrews in "Constraint and Convention: the Formalism of the Oulipo" observes that according to some members and scholars of the Oulipo, the difference between convention and constraint is a matter of scale. Constraints for the purposes of literary experimentation needed to be strictly *unconventional*, that is, used in a relatively small number of texts. If employed widely, the experiments lose their avant-garde status. Andrews ultimately proposes "that the constraint, as it is used by the Oulipo, closely resembles a prescriptive rule, where the generic convention is a regularity" (227), that is, constraints are employed prior to the moment of making deliberately, where conventions are "inferred by critics after the fact, when they have noticed recurring features in a large corpus of works" (227, citing Gerard Genette).

embellish the constrained mechanics aesthetically. While illustration is not antithetical to the systems' objectives for a more mindful living, someone just happening upon the genre is likely to conceive of the practice as an illustrated planner or calendar and the systems' core mechanics as subordinate to aesthetics.

This is not as simple as Lloyd Bitzer's formulation of the rhetorical situation such that "comparable responses... function as a constraint upon any new response in the form" (13). As Kathleen Jamieson challenged Bitzer on this point, "perception of the proper response grows *not merely from the situation* but also from antecedent rhetorical forms" (163). These days with the proliferation of media, representations of those media, and discussions of those media that circulate online, historical forms appear alongside contemporary iterations making the field of possibility for someone researching a genre practice both quite narrow and quite expansive. In addition, and not without note, because notebook-based systems have a material presence in non-digital environments (the coffee shops, conference rooms, and kitchen tables I evoked in the opening of this chapter) the chatter surrounding such practices occurs frequently offline. Since I started this research, I've struck up (or eavesdropped in on) many a conversation with notebook users beginning with curiosity and evolving into lengthy discussions of personal practices, and while it isn't a central focus of the third body chapter of this dissertation where I relate the experiences of notebook-based system practitioners, my interviews evidence that practitioners often will readily discuss their systems with friends, colleagues, family members, and strangers.

That conventions constrain genre-based writing and speaking is perhaps undeniable, and when genres operate as "social actions" and as they serve social exigencies for communities, groups, and institutions, as Carolyn Miller's seminal scholarship in rhetorical genre theory

proposed,³ the situational and ethical dimensions of that which constrains are palpable and significant. In Amy Devitt's depiction, genre practice always involves choice:

The existence of genre in an established rhetorical and social context... does not dictate any writing, it is a choice to be made. Certainly, it's a choice with powerful incentives and punishments attached.... Yet, the nature of genre as inhibitor of a writer's freedom and creativity is not as simple as it might appear... a combination of constraints and choice is essential to creativity. (138)

Devitt's insistence that individuals have a choice in the matter is a helpful bridge to a consideration of the systems I investigate in this dissertation as genres, in that they serve individual exigencies but engage with social dynamics at the level of meta-genre and through the human and nonhuman networks that circulate and proliferate representations of the system. Genres as social actions abstracts the individual rhetor, as Latour articulates it before he complicates it: "In most situations, we use 'social' to mean that which has already been assembled and acts as a whole" (43). As a different kind of challenge to the autonomous author, genre as social action has had considerable staying power in the realm of rhetorical genre theory, where scholars continued to complicate an understanding of genre as a social action through activity theory (Berkenkotter and Huckin; Bazerman; Russell), notably among many others.

More recent genre theory has attempted to reintroduce the individual in relation to the force of social motives. Relating genre to Pierre Bourdieu's notion of "habitus," Anis Bawarshi emphasizes that "genre functions as a site which invention itself takes place," such that "[I]ike habitus, genre both organizes and generates the conditions of social and rhetorical production" (8).

³ See Miller's "Genre as Social Action"

Bawarshi continues by developing the metaphor of genres as “rhetorical ecosystems,” that not only function as classifications of particular forms, but that “which make possible certain commitments, relations, and actions (8-9). He continues:

Just as natural ecosystems sustain certain forms of life, so genres maintain rhetorical conditions that sustain certain forms of life—ways of discursively and materially organizing, knowing, experiencing, acting, and relating in the world. More significantly, the metaphor also captures the dynamic relationship between rhetorical habits and social habits that genres maintain... It suggests that, rather than being static backdrops against which speakers and writers act, social and rhetorical conditions are constantly being reproduced and transformed as speakers and writers act within them. By way of genres, speakers and writers maintain the habitual social and rhetorical interactions and practices that sustain the social and rhetorical conditions that compel such habitual interactions and practices. (9)

Bawarshi’s metaphor isn’t so far off from the classical notions of rhetoric that emphasize training-made habit. Even in the origins of the term “automation,” from the Greek αὐτόματον meaning “self-acting, spontaneous” refer both to natural processes of plant growth, for example, as well as mystical features like the gates of Olympus which opened themselves. It also referred to events “happening of themselves, without external agency,” indicating occurrences that could not be accounted for by usual causes. It is the neuter of the much more common αὐτόματος meaning “acting of one’s own will, of oneself” (LSJ). The procedures enacted as a part of rhetorical production are thus both closest to nature and farthest from it when they appear most automatic (or spontaneous) on the part of the rhetor. Bawarshi later asserts that “[e]ach textual instantiation of a genre is a result of a unique negotiation between the agency of the writer and the agency of a

genre's conditions of production" (79), that because in every act of genre-based writing the predispositions habituated through larger social motives are rearticulated every time a writer writes.

Bawarshi's depiction of genre and the writer acting within and through genre is persuasive. However, as will be explored throughout this dissertation, constraints have a complex relationship with automation and with training-made-habit, in that they seem to be doing something slightly different. I posit that we might think of constraints as technologies of mediation. Because of the ways constraints machine language, the writer is the one who gets the machine running but who also steps back to be affected by the system reorienting or remediating itself, which reveals new and unexpected potentialities. Constraints thus rub up against habituated dispositions to interrupt the flow of the ecosystem, as an external force that requires the system to reorient itself and to shift to accommodate it. This is how the generative potential of constraint works.

By suggesting that the notebook-based systems function in programmatic ways, I see this work as extending the above-cited scholarship in that their relationship to constraint is quite different than in expressive media. As genres of information collection and management, they involve constrained mechanics that are not authored so much as they are adopted, appropriated, customized and negotiated; they require know-how as via the Aristotelian notion of productive knowledge as craft, or "the reasoned capacity to make" (NE bk VI Ch 3), and thus their practitioners draw from mechanics from a range of activity systems. The constraints as external forces thus interrupt both the social motives reinforced by convention and the writers' own "natural" tendencies for language use, retraining their tendencies toward new potential.

If the version of rhetoric at play here is an attention to some *whatsits* that machine language, then this study is a case for how, in the language of N. Katherine Hayles, "human and machine

cognitions intermesh” (13).⁴ That is, this project is interested in the ways in which human practitioners operationalize the logics of their systems’ mechanics, processing and remediating life’s information into forms easier to digest and more pleasant to deal with. In addition, and not without note, as genres of contemporary notebooking culture, digital mechanisms (like search engine optimization, for example) contribute immensely to how the systems circulate, stabilize, and change. In what follows, I offer a bit of context for that culture.

1.4 Everything but Blank

None of these systems could exist without the blank book. Whether truly blank—a snow white or unbleached sandy field open to the imagination—or sectioned off by ruled lines, dots, grids, or calendars—“rules” distinguishing one blank book from another—blank books are, as Lisa Gitelman in *Always Already New: Media, History, and the Data of Culture* describes them, are “for incremental filling in, filling up” (21). Gitelman offers that such books afford both stasis and inertia, that because both writing and book-making are preservative, “these books preserved preservation,” but they also are “shaped according to the inertial norms and obligations that attending the specific settings or callings in which they and the books that contained them were habitually deployed” (22). That is, their writers return to continually and routinely fill the blanks, and in the context of financial blank books (like check logs or invoices), that return has significant implications for commerce and other circuits of exchange.

⁴ While I draw from scholarship in posthumanism, of which N. Katherine Hayles is a key figure, I hesitate to fully claim this project as posthuman, because while posthumanism considers the broad constellation of forces that influence something like invention, I’m always interested in the location of the human within and in relation to that constellation.

Gitelman's attention to the blank book forms the opening gesture of a longer-history of workplace documents and job-printing, "a porous category used to designate commercial printing on contract" (24), to "offer a glimpse into the extended history of information, presenting one context (certainly among many) for the supposed distinction between form and content—for the imagination of data as such—on which contemporary experiences of information technology so intuitively rely" (26). That is, the preprinted lines in any number of blank books determine through form what content is to be filled in. "Rules, like habits, were broken, of course—as notebooks became scrapbooks, for instance, or as ledgers became the illustrated chronicles of indigenous tribes—but rules there were; that is what made one class of blank book distinguishable from another" (23).

Ann Blair's study of the history of reference books, *Too Much to Know: Managing Scholarly Information Before the Modern Age*, describes the reference book as "one of the longest-running traditions of information management" (1). Blair offers a lens into the transformation of excerpt-based notetaking (of which the commonplace book is one, which I'll discuss in the first chapter) into compilation-based printed resources (such as the encyclopedia). She aims to "gain insight into the ideals and practices of what one can anachronistically call 'information management,' in a period prior to our own" (1). Riahcard Yeo's *Notebooks, English Virtuosi, and Early Modern Science* looks at the necessity of copious notetaking during the Scientific Revolution, "both as a way of dealing with the proliferation of printed books and as a means of assembling and securing information that books did not supply" thus making "notetaking and information management a crucial part of the modern scientific ethos" and as invested in the "interplay between individual memory and externalized records in the storing and processing of information" (xiii).

From a comparative media perspective, the histories presented in the works cited above offer a robust and appealing notion of handwritten notetaking and notebook keeping as important antecedent modes of information capture and management preceding the digital modes prevalent today. As histories, however, their relationship to present-day practices is through analogy, and offer little to no acknowledgement of the *continuation* of handwritten notebook-based practices or how those practices have been influenced by the digital mechanics that computer-based applications offer. Today many blanks have seen a bit of a resurgence, expanding well beyond the wide- or college-ruled pages of spiral bound notebook. Blanks have been designed for project planning notebooks, steno notebooks have been appropriated well beyond stenography, square grid and dot-grid paper has been used for far more than engineering purposes, and of course the blanks of a pre-printed personal organizer or planner have been popular for over a century.

I begin with some of the scholarship attending to the filling of blanks because the notebook-based systems I study in this dissertation share that history, but from the perspective of job-printing from Gitelman's point of view the "[b]lanks are printed and used, not... authored or read" (25). In contemporary notebooking culture, broadly speaking, authorship and readership are always at play, by which I mean both that they are active and contingent forces in the creation and maintenance of writing routines and, simultaneously, that their practitioners *play* in and through notebook-based writing in expressive ways. In the specific context of highly constrained notebooking practices, this playfulness resonates with the procedurally expressive modes engaged in the scholarship I cite above and evidence a pleasure in appropriating and customizing mechanics that defer and distribute authorial responsibility for life's information by remediating it, which I'll explore in greater depths within the body of this dissertation.

Notebooking culture has never been so visible as some notebook users turn to online resources to research options and share images of pages. A search for “notebook,” “notebooking,” and “journal” on Pinterest reveals striking images of artist books, travel journals, homeschool note and lesson books, and “printables” (blank forms to be printed and filled in and bound by users) for personal planners alongside posters to blog posts touting “21 Ways to fill a notebook,” and links to blog posts on “How to set up your Writer’s Notebook: 10+ Categories!” for aspiring writers and ideas for bullet journal pages (the genre I’ll discuss in the second body chapter of this dissertation). Social media hashtags such as #studynotes and #studygram reveal students (often from STEM fields) sharing beautifully detailed and color-coded study notes for high school and college courses, and #planneraddict for those self-described as *addicted* to planning, planners, and planning systems. Discussions of the best materials for notebook-based practices occur across blogs dedicated to notebook-based practices, with discussions in the comments sections or in the subReddit r/notebooks over users’ “go-to” notebook brands and lamentations like user QUILA2019’s recent post “I wish I wasn’t such a paper snob” ([reddit.com/r/notebooks](https://www.reddit.com/r/notebooks)).

Online sharing and discussion of notebook-based practices is a fountain of inspiration for those seeking out a way to fill their blanks, but not everyone is interested in the methods proliferated in those spaces. That notebook-toting person might not need anything fancy or leather bound, however there is still something to the preference of a notebook to legal pads or scratch paper. The popularity of quality notebooks with simple layouts and strong binding indicate a strong and growing market for notebooks—which might suggest something about a notebooking and notetaking population that *does* care about quality materials, whether visibly sharing about it online or not. It’s saying something that production and product lines from notebook manufacturers such as Rhodia, Moleskine, Field Notes, and other blank book manufacturers have

increased in recent years. Moleskine, created in 1997 with the ambition of “bringing back the legendary notebook used by artists and thinkers over the past two centuries, such as Vincent Van Gogh, Pablo Picasso, Ernest Hemingway, and Bruce Chatwin,” (us.moleskine.com/company), boasted just shy of 200 million in sales in 2018.

Booming, too, are pre-printed planners. At the turn of the new year “best-of” articles dot the headlines of lifestyle sections of news publications and popular media features, including Perrin Drumm’s “I’m an Obsessive Calendar Keeper, and these (under \$30) Planners are the Best Out There” for *The Strategist* and Caitlin Gibson’s “A journey through the fancy day planners that promise to fix our broken, millennial lives” from *The Washington Post* who writes: “If you are a person who does your seeking on the Internet—and especially if you’ve ever given the Internet any reason to think that you might be stressed-out, or a millennial, or a woman, or a stressed-out millennial woman juggling work and a family—these planners are going to find you” (Gibson). Popular women’s media site *Refinery29* cites 26 planners in their “Planners that will Make 2019 your Most Organized Year EVER” including “The Imperfect Life Planner,” which the article’s author, Elizabeth Buxton, describes as including “everything from reflect and refocus check-ins to happiness banks, mistake logs for ditching perfectionism, reward stickers, coloring pages, and more for living and embracing our most imperfect (but organized) lives,” the “Panda Planner,” which “takes a scientific approach toward increased productivity and happiness within its layout,” (although it’s unclear what that approach is from the article), the “Vision Planner and Calendar” by Bloom Daily Planners featuring not only space for weekly planning but also includes monthly “vision boards,” and the Erin Condren “Deluxe Monthly Planner,” a spin on their popular Lifeplanner (™) hyped for its available layout customizations which are finished off with the cover design of your choosing embossed with your name (erincondren.com). The article also features

more streamlined favorites like Moleskine's 12-month Daily Planner (though the article features the pink color).

Molly A. McCarthy in her history of the planner, *The Accidental Diarist, a History of the Daily Planner in America*, offers as an epilogue that perhaps the day planner is doomed to recede as more people will eventually favor digital modes. Published in 2013, her account of the long history of daily planners in America emerged at the instant Ryder Carroll's Bullet Journal practice hit the web and went viral (a case I'll explore in my second body chapter), making visible a whole host of notebook aficionados who readily embraced the systems' appropriation of digital mechanics, its familiar time-based planning opportunities, and its flexibility in terms of how practitioners might customize the system for their own use.

While the bullet journal cannot be said to have a direct causal relationship to the surge in the availability of in custom printed planners and quality notebooks, its systematic qualities will be shown to have resonated with an already existing culture of writers and a market for personalized consumer products that make such practices pleasurable from a material standpoint. It is a culture *invested in* technologies of writing that make the act of writing pleasurable and worth returning to in a routine way. In Cydney Alexis's study of writer's habitats, she offers a perspective on "what it means to be one who writes," (93) through interviewing those with routine writing practices and argues that being one who writes depends in part on having access to the materials of writing:

When a writer picks up a particular object, this is in part a matter of aesthetic-sensory preference; it is also a response to sociocultural scripting of idealized notions of what it means to write. Buying a fountain pen might be a first step toward embodying the role of write as buying running gear is the first step in becoming a runner. The best way for us to

understand the roles these objects are playing is by digging into the varied writing habitats in which and around which writers are working (93).

This dissertation deals in part with the question of “what it means to be one who writes” for a specific subset of writers for whom their writing environments involve not only the objects that surround and contribute to a writing practice, but for whom self-imposed and genre-imposed rules and constraints foster or require a material conception of personal data such that it can be remediated into forms more pleasurable to inhabit. It also deals with a material conception of language more broadly, where keyterms, hashtags, and metadata function to circulate commonplaces that influence the motivations behind sharpening routine practices of writing into robust and highly constrained systems of personal information collection, organization, and processing.

1.5 Commonplaces and/as Methodology [Chapter Outline]

This study deals variably with commonplaces as inventive and persuasive forces. As components of the complex dynamics that inform human inventive practice, commonplaces operate as touchstones for arguments shared and repeated. I explore variably, materially, and methodologically the etymologically linked terms *topoi*, commonplace, topic, theme, token, and keyword as a constellation of discourse involved in how notebook-based system writers conceive of, advocate for, and describe their practices. The methodologies enacted in this dissertation grapple with *topoi* as conceived in classical rhetoric as it influenced the emergence of the commonplace book genre (where we begin in the following chapter), with topics in the sense of sets of terms likely to appear in connection with one another as revealed through topic modeling

(where we enter in the second body chapter), with subject-matter themes revealed through one-on-one semi-structured ethnographic interviews (in the last body chapter), and with a conceptualization of the ways in which contemporary commonplaces function as material and ideological forces within and through human and nonhuman collectives (as a gesture toward concluding).

That *topoi* translates, literally, to “places,” offers a topological understanding through which my readers might see these various methodologies as places to land, or perhaps more precisely, *ways of landing in a place*. I take a media and material view toward commonplaces. That is, with a through line of constraint as it informs these notebook-based systems as media and mediations, I see these methodologies as an attempt to “prove motion by walking,” to cite Queneau once more. Theories of *topoi* have long grappled with the inadequate articulations of its boundaries in ancient rhetoric and the arguments commonplaces carry with them are taken for granted and passed off as trite, but commonplaces mobilize everyday writing practices and theory can only do so much. To puzzle through how this constellation of terms might help me to arrive at a contemporary theory of commonplaces I had to interact with them variably.

In the first body chapter, “The Commonplace Book as Recombinatory Machine,” I explore the commonplace book, a genre of reading log first popularized in the early modern era for the collection of poignant excerpts to furnish argument schemes (the *topoi*) with apt examples. Through the case examples of David Bartholomae and Ryan Holiday along with Desiderius Erasmus and John Locke as contemporary and historical advocates, respectively, I offer an interpretation of the commonplace book as a recombinatory machine, that is, as a system that according to its organizational constraints organizes excerpts in ways that facilitate nonlinear reading. I explore how organizational mechanics carry with them ideological weight which is

internalized in compositions built from the collection and within the body of the practitioner, ultimately arguing that the capacity for one to activate the storehouse of one's commonplace book collection requires an acknowledgement of the system's potential.

In the following chapter, "Bullet Journaling and the Context of Genre: A Computer-Assisted Study," I use topic modeling and metadata to explore 106 popular blog posts about the Bullet Journal, a productivity and mindfulness system created by digital product designer Ryder Carroll. I argue that the topic-first orientation of the topic modeling algorithm latent dirichlet allocation (LDA) is evidence of what genre scholar Amy Devitt describes as the *context of genres*. That is, when LDA is used to explore a corpus, it operates under the assumption that topics (patterns of language use) exist *prior to* the construction of any individual document. The context of genres asserts the same—that prior to any generic utterance is the knowledge and experience (be it effusive, unconscious) of genre that inevitably informs any genre-based practice. Taken together, these always already existing qualities of language make topic modeling an effective mode of genre study in that it makes visible the contexts of genre. As a method of comparing Carroll's formal discourse to the discourse lifestyle bloggers adopted to describe their own uptake of the system, I interpret the topics as revealing a robust context of genre and posit the theory that the bullet journal tapped into a ready and waiting culture of planning and planner enthusiasts, transforming the productivity system into a kind of DIY planner.

For the final case study of this dissertation, "Recollection, Remediation, and Re/Professing: Nonce Notebook-Based Information Systems and their Processing Mechanics" I investigate through semi-structured interviews the systems of seven self-identified practitioners of robust notebook-based systems. Through thematic analysis and ethnographic narrative, I define the details of our conversations as falling under three thematic trends signaling the purposes these

systems serve for practitioners in their everyday lives: recollection, remediation, and (re)processing. Each of these aspects have at once both procedural and mechanistic qualities as well as affective dimensions, in that they describe how the individuals' systems attempt to make sense of the information organized within the system and they describe the attempts to alleviate cognitive and affective pressures that information has on their lives. I emphasize through this interpretation the power and problems associated with differing agency to the system mechanics.

In the conclusion of this dissertation, I bring the work of the previous chapters into conversation with some of the scholarship advancing rhetorical ecological frameworks as models for the distributed nature of our complexly constructed world. I do so to advance an understanding of the contributions of this dissertation, which I see as taking shape in three areas: 1) notebook-based information system practitioners provide a case for those who are attuned to the array of forces that influence their coming into being and thus introduce constraints as a way of intervening in those forces, thus complicating prevailing depictions of habit and embodiment as taking part in rhetorical ecologies. 2) This dissertation's variable interactions with meta-genres show the promise of a meta-genre focused inquiry to better accommodate the complex relationships between forces that inform genre work. 3) Finally, as mediating technologies that rub up against engrained habits, notebook-based information systems provide insight into the contemporary commonplace we might identify as "self-care," which I describe in relation to a potential future direction of this work.

2.0 The Commonplace Book as Recombinatory Machine

2.1 Possibility

I dwell in Possibility – –
~ Emily Dickinson

In the spring of 2011, I was visiting a friend in Brooklyn, and while on a stroll in her neighborhood we took a slight detour to go to her favorite local bookstore. I forget the name of the place, but it was contemporary and quaint with a lot of interesting artifacts and objects on the shelves. No best-seller list here—just employee recommendations, gift books, and books only book-lovers would love. There I found a book with mostly blank pages called *A Little Commonplace Book*, published by Cabinet Books & Proteotypes (a press off-shoot of *Cabinet Magazine* of Brooklyn), a facsimile reprint of a 1797 commonplace book method circulated by Hamilton and Co. for sale in the Shakespeare Library in London, “formed generally upon the procedures recommended and practiced by John Locke, Esquire, Author of An Essay on the Human Understanding, &c” (3). A contemporary introduction by D. Graham Burnett, editor of *Cabinet Magazine* and Professor of the History of Science at Princeton, reveals that it comes from a 1998 acquisition to the Rare Books at Firestone Library at Princeton of an unfilled blank book situated by an introduction to Locke’s method which itself had been repeated elsewhere in the eighteenth and nineteenth centuries. The mostly blank book opens with a brief articulation of how to use the index, a strange looking table where each letter of the alphabet is given a line for each vowel, so that the page number for passages dealing with Beauty, for example, could be filed under B-e. It assumes the purchaser would already be familiar with the practice of keeping a

commonplace book, as “the advantages of a Common Place Book, in which thoughts, remarks, and quotations may be arranged and digested in such a manner, as to be referred to with ease and dispatch, are sufficiently obvious,” since “there is indeed no man, whatever may be his station in life, who has not often lamented that he has allowed ideas to pass away, which he could have wished to have retained, and in vain solicited his memory for passages, which he might easily have treasured up in such a repository” (5). The eating and digestive metaphor, the promise the practice will alleviate stresses related to not being able to remember key passages (an anxiety based in the much longer tradition of memorizing), and the notion of the “repository”—the storehouse—for “treasured” material at the ready are, I would later learn, conventional depictions of the value of keeping a commonplace book.

At the time I encountered *A Little Commonplace Book* I had only known about the commonplace book genre through a mention in David Bartholomae’s essay collection *Writing on the Margins*. He describes his own practice for keeping a commonplace book as follows:

For years I have kept a commonplace book—more recently in a computer file. It is a collection of passages drawn from my reading and teaching, and it includes passages from student papers. In my mind I am recording moments of striking eloquence. When I turn to them, they stand as quick reminders of what has captured my attention; for my writing they serve as points of reference to individual performances and positions in a larger field of ideas or debate. I often use epigraphs at the beginnings of essays, and I almost always use them in assignments I write for courses, and the commonplace book serves as sources for these. (1)

Bartholomae proceeds to open the collection of essays with several of these passages, which he draws from the current order of his computer document as “a kind of found poem... a poem with

an argument,” regarding students’ relationships with “the languages of power and knowledge,” beginning with a passage from the character Bill Gray in don DeLillo’s *Mao II*, and proceeding with excerpts from Charles Bernstein from “The Secret of Syntax” and student sentences from Mina Shaughnessy’s *Errors and Expectations*, and ending with a passage from Ludwig Wittgenstein’s *Philosophical Investigations* (1). Whether or not Bartholomae added or subtracted from the list or changed the order of the passages we cannot know, but if we take him at his word, this “found poem” offers a material situation for reading across texts, for the production of this poem, and to enter into the broader argument of his collection of essays. The passages sit next to each other and make meaning for a reader (first Bartholomae, then his readers) through parataxis,⁵ by the sheer fact of their proximity. It positions Bartholomae himself both as a student of these instances of language use, and as someone thinking toward their use *with* students in pedagogical circumstances.

The argument, he offers, is one that represents the central question of the essays to follow and of his career, that is: “How do we understand the relationship between our students and the languages of power and knowledge that circulate inside and outside the university? Or, from the position of the student, what might it mean to match wits with the language, to see yourself in sentences?” (1). Bartholomae’s contribution to the fields of writing studies has by and large been the argument that we should take student writing seriously, and that students can handle and should be given opportunities to engage with, read, and respond to difficult texts. To see themselves as capable and able to respond. By including student sentences alongside scholarly, philosophical,

⁵ The term *parataxis* itself from Greek (*παράταξις*) refers to placing something side by side (OED). Grammatically the Greeks loved the parataxical clause, often separating independent ideas only with what we’d separate with a semi-colon. Proximity and shared case and voice demonstrated comparisons even while content might not. This is also shown in their propensity for the “*μεν...δε*” clause (“on the one hand... on the other”).

and literary passages in his commonplace book, Bartholomae amplifies student discourse and humbles the rest. Bartholomae makes sure that for him student sentences can resonate and reverberate alongside established writers and thinkers. Chronological order both constrains and makes possible a new reading of the excerpts as a combined text. Both Bartholomae as the collector of the excerpts and their appearance in chronological order *make* the argument they pose. The key here is that Bartholomae is himself open to seeing the passages' current combination as a workable found poem to open his collection of essays. He reads them in their current order and realizes that they serve to ask those key questions on his behalf in the order in which they appear.

The Bartholomae example offers how even the most fluid and flexible system for commonplacing, where the organization of the passages is determined only by the order in which they were encountered in reading, can be used as a text recombinatory machine, or in Bartholomae's terms, a found poem generator. The potential for a commonplace book system to function in this way depends entirely on how the passages are filed away in the log itself, as the organization constrains the way the passages can be read if encountered in a linear fashion. As I was investigating contemporary understandings of the genre in social media spaces, I came across a version of the commonplace "book" kept instead on file cards, which struck me for their extreme recombinatory potential. After all, all you have to do is shuffle. I discovered Ryan Holiday's system on Pinterest, the social image-based bookmarking site with a user base made up primarily of women. Holiday is a media strategist and author and former Director of Marketing for American Apparel. In his position there he was responsible for helping the retail conglomerate capitalize on controversy sparked by its ads depicting women (often barely wearing the retailer's clothes) in sexually-explicit poses. His first book, *Trust Me I'm Lying: Confessions of a Media Manipulator*,

which came out of Penguin's Portfolio offshoot in 2012, is about new media marketing and marketers responsible for the sensational spread of media perceived to have "gone viral."

To look at Pinterest, Holiday might be better known instead by his posts on commonplace books from a series of articles on the blog/web zine *Thought Catalog*: "How and Why to Keep a 'Commonplace Book'" (published in August 2013), an articulation of a commonplace "book" system through using notecards filed according to a subject heading, "Everyone Should Keep a Commonplace Book: Great Tips from People who Do" (also published in August 2013) an article including some of the ideas and responses to his first article, and a follow-up article called "The Notecard System: The Key for Remembering, Organizing, and Using Everything you read" (published in December of 2013) which rearticulates his system but doesn't use the term "commonplace book" to signal its content (it does, however, link back to the prior and more popular article). According to *Thought Catalog*'s social share counters, the articles have over 631k, 71.5k, and 170.9k shares (respectively) across Facebook,⁶ Twitter, Pinterest, Reddit, and LinkedIn. To look at Pinterest feeds involving the commonplace book, some of which interpret the commonplace book to be an "everything book," with scraps and recipes along with quotations all embellished by calligraphy and even illustrations and stickers.

Holiday's method isn't his. He adopted it from Robert Greene, for whom Holiday dropped out of college to apprentice with. Greene also contributes to *Thought Catalog* and is a best-selling author of *The 48 Laws of Power*, a book on power that apparently became popular to rappers and others seeking positions of power or fame. The system relies on 4x6 notecards labeled with the theme in the top right corner rather than a blank book, filed in card boxes with dividers dedicated

⁶ As of early June 2019.

to the themes the passages have been allocated to. He describes the process of deciding what goes in the collection as a “ritual”—beginning with marking passages while reading and later writing down those passages on cards. Holiday describes a commonplace book broadly as “a central resource or depository for ideas, quotes, anecdotes, observations and information you come across during your life and didactic pursuits. The purpose of the book is to record and organize these gems for later use in your life, in your business, in your writing, speaking or whatever it is that you do” (“How and Why...”). He cites a long list of men who have kept commonplace books in history (Marcus Aurelius, Petrarch, Montaigne, Jefferson, Napoleon, and Bill Gates) but makes sure to mention that “common people” have also kept commonplace books. To amplify his call for their utility, he relies on Seneca: “We should hunt out the helpful pieces of teaching and the spirited and noble-minded sayings which are capable of immediate practical application—not far far-fetched or archaic expressions or extravagant metaphors and figures of speech—and learn them so well that words become works” (Seneca, as cited in Holiday).

Holiday has a sense of what the “right” version of the commonplace book is. The advice is familiar. To read widely, to mark while reading, to take notes, to look for “wisdom.” “Your commonplace book,” he writes, “over a lifetime (or even just several years), can accumulate a mass of true wisdom—that you can turn to in time of crisis, opportunity, depression or job.” To do it right is to have the right mindset toward the potential of your collection, “to keep our learning priorities in order... to look for and keep only the things we can use” (“How and Why...”). On the themes under which he files his passages, he’s rather fast and loose. “Guess what? It doesn’t matter. The information I personally find is what dictates my categories. Your search will dictate your own. Focus on finding good stuff and the themes will reveal themselves” (“How and Why...”). When he’s writing, he’ll pull out all the cards that might be relevant, for example for

this article, “I grabbed all the ‘writing’ cards before I hopped a flight and through [six] the post together while I was in the air” (“How and Why...”).

In the sequel article, Holiday picks positive responses from email, the comments section of the article, and Reddit, curating a shortlist of methods and approaches from the responses he received to the first article. “Well,” he begins, “the idea of keeping a commonplace book has clearly struck a nerve. Not only did the article make the front page of Reddit and blow up on Facebook and Twitter, but many people emailed their own methods for keeping a commonplace book” (“Everyone Should Keep...”). The article synthesizes together those promoting cloud-based personal notetaking program Evernote to disciplinary uses outside of writing (there’s a cook who uses one for scraps of texts related to cooking, an engineer who uses one for “cataloguing engineering resources and project notes”). Many report having kept a notebook of quotations for along time without realizing it was a genre with a long history and established conventions. Many expressed using blogs or other writing-oriented platforms for this work. Yet another emphasizes the notecard system makes possible shuffling the examples within a theme.

Beyond those picked by Holiday himself, however, there was significant push-back in the Reddit discussion surrounding his articles, not only for the pretentiousness they perceived in his discourse but as resistance to this approach to reading. A user named “gordiep” writes the following:

As several others have commented, the author of this post has a peculiar attitude towards reading, and towards books in general. He’s is a strong advocate of reading and of reading ‘well,’ which is commendable, but his constant emphasis on reading as a kind of mechanistic chore (e.g. see his advice [here](#)) betrays a certain callowness. For example, in the link I just cited he suggests that while reading, one can disregard facts and other

“school” information, and rather that “your energy needs to be spent on figuring out if he’s right and how you benefit from it.” The apparent proof of his approach is his own (anecdotal) success in publishing a book with “the biggest publisher in the world.” I absolutely agree that extensive, thoughtful reading improves a person, but to read only for personal advancement is to miss the many pleasures that books afford... The author of this post wears his apparent erudition like a badge, but despite the sprinkling of aphorism that he has included in his articles, his writing lacks the very “wisdom” that he claims a commonplace book should hold. Certainly, a commonplace book or filing system can be a useful tool, but it is only if the tool is used to manufacture a thoughtful and interesting product. If not, then, as in this article, the inclusion of superior material from other authors betrays the poor quality of the enclosing thought. (gordiep)

gordiep’s response reflects a standard argument against procedurally-based practices as associated with reading and writing, such as the interpretation of Holiday’s system as reflecting reading as a “mechanistic chore,” and that knowing the mechanics makes possible a reading of the output as carelessly based on the process. While gordiep acknowledges that something like a commonplace book might be helpful in the construction of argument, it is only so if “used to manufacture a thoughtful and interesting product.” That is, gordiep sees the artifice of Holiday’s process of using his commonplace book and is altogether unconvinced by the output inspired by it. The responses to this gordiep’s comment, including from Holiday himself, varied from people suggesting Holiday’s process sounds exhausting (lynnangel) to assertions like the following: “It seems to be a creative and personal activity that is better if everyone does it differently. Otherwise you might as well just pick up a copy of Bartlett’s quotations and save yourself some time” (GoldenEyedCommander). Holiday responded that he loves reading, and gordiep retorted: “so far

as I can judge by your several articles about reading and writing, that you don't understand much of what you read, and that your analysis is shallow" (gordiep).

The commonplace book system Holiday utilizes has interesting potential in amplifying the potential of the system to operate as a recombinatory machine (as reflected in the Bartholomae example) through the technology of notecards, but he doesn't seem to have activated that potential. Passages seem plucked out and dropped in to his own writing where they "betray the poor quality of the enclosing thought" to echo gordiep's critique. To use the Seneca quotation as an example, those familiar with the commonplace book would perhaps refer instead to Seneca's passage on the "industrious bee,"⁷ which was a commonplace often activated as justification for the value of passage-based collections. There's a certain machismo involved that is off-putting with Holiday, that makes it seem like the commonplace book is more about surrounding yourself with powerful men than it is about deriving wisdom from anything they've said. Indeed, when Holiday insists on the practice being handwritten he says "Technology is great, don't get me wrong. But some things should take effort. Personally, I'd much rather adhere to the system that worked for guys like Thomas Jefferson than some cloud-based shortcut" ("How and Why..."). Here, perhaps, the commonplace book is used as a system for strategic name-dropping rather than for assistance in the construction of argument.

I begin with this story in part because it's the story of the start of this dissertation—a happenstance informed by a reference leading to poking around on the web to see what else could

⁷ As translated in Ann Moss's *Printed Commonplace Books and the Structuring of Renaissance Thought* from the *Epistulae morales*: "We should imitate bees and we should keep in separate compartments whatever we have collected from our diverse reading, for things conserved separately keep better. Then, diligently applying all the resources of our native talent, we should mingle all the various nectars we have tasted, and turn them into a single sweet substance, in such a way that, even it is apparent where it originated, it appears quite different from what it was in its original state" (as cited in Moss 12)

be out there, which ultimately led me to arrive at the other case examples in the following chapters. As examples of constrained practices of reading and writing, these commonplace book practices motivate for me a much larger discussion of the rhetorical utility of constrained practices and the ways in which humans collaborate with and make through such systems. Moreover, however, the Bartholomae and Holiday examples provide a lens for the central point of inquiry to follow in this chapter: how does one's commonplace book system promise to facilitate the crafting of arguments? And when the system fails to fulfill the potential of its mechanics, who or what is at fault? On the one hand, the commonplace book appears to be a powerful technology for the semi-automation of one key element of argumentation: the delivery of the apt example which upon amplification by the rhetor will improve one's logical appeal to an audience. On the other hand, if such examples are merely plucked from the repository are they truly "treasured" by the rhetor, or is their power taken for granted?

The purpose of the commonplace book, as we'll see, is almost always positioned as a risk and a solution; that is, if one's commonplace book is merely a storage vessel rather than a dynamic system, then the use of passages from it will come across as sterile instead of sweet. In Burnett's introduction to *A Little Commonplace Book* he offers a description of the commonplace book that might be appealing to those of our own digitally-saturated era:

This body of practices—techniques for indexing, strategies for note taking, mechanisms for the maintenance of prosthetic memories, all stuff laid out in the pages to follow—amounted to an elaborate tactical convergence between the art of reading and the art of writing. The *commonplace book*, where one gathered and sorted one's textual gleanings, was nothing if not a model of the well-organized mind. (1)

His conceptualization of the commonplace book as determined by “mechanisms” and “strategies” and as “tactical” are employed by Burnett in part to recover a pejorative sense of the “commonplace” by comparing the practice to computerized methods of capture and organization. He even later describes the Locke method as articulated therein as “FileMaker for the quill-pen set” (1). Burnett’s articulation of the practice as a “model of the well-organized mind” and as a database for the storage of media one encounters in reading for the future purposes of writing.

Burnett’s depiction implies the media stores are static and stationary until called upon and activated by the user, that the organizational mechanics amount to elaborate finding schemes to replace one’s memory. The examples I explore in this chapter reveal Burnett’s depiction to be only a half truth. That is, while certainly such systems serve as an archive of encounters from reading and thus alleviate the rhetor’s need to memorize, rather than serving as a “model” of an already “well-organized mind,” the commonplace book genre has been compelling for so many, especially in its heyday in the early modern era, because it promises *to organize* the mind, to train one’s mind so that “finding” the right examples for the right moment can become a matter of intuition. This promise is informed in part by the classical advice regarding the *koina* and the *locus communes* that inspired the practice, the treatises about which always involved advice that collecting media for future use is a routine worth developing.

That a commonplace book can help a rhetor more efficiently realize potential arguments isn’t a new or revelatory understanding of the genre. How the practice promises to train the rhetor, however, is a matter often left up to individual skill. As the Holiday example helps to demonstrate, however, a rhetor might capture a range of passages from exemplary texts evidencing subject matters worth citing, arguments whose logical forms are worth mimicking, and authorities whose wisdom is worth appealing to, and still not produce compelling utterances themselves. Longinus

urges us to remember that even if one's nature is responsible in some way for the effectiveness of one's utterances, what we interpret to be evidence of "natural talent" is in fact the result of significant study:

The products of nature are thought to be enfeebled and debased when reduced to dry bones by systematic precepts. But I say that this will be proved otherwise if one considers that natural talent, though generally a law unto itself in passionate and distinguished passages, is not usually random or altogether devoid of method. Nature supplies the first main underlying elements in all cases, but study enables one to define the right moment and appropriate measure on each occasion, and also provides steady training and practice. (*On Great Writing (On the Sublime)* 5)

In the remaining half of this investigation I undertake efforts to understand, through the commonplace book systems delivered by Desiderius Erasmus and John Locke (in addition to those contemporary examples briefly explored above) how practitioners orient themselves in relationship with/to their systems' constraints to provide "steady training and practice." Ultimately, I posit that diligent collection and use of a commonplace collection best serves practitioners if used in training one's readiness for the right moment (*kairos*), and that readiness is trained in part through the iterative capacity of the system's mechanics. I engage in scholarship that considers rhetorical training and the ambitions toward compelling rhetoric as an issue of embodiment—specifically, the internalization of constraints—such that one's execution of their studies at the "right moment and appropriate measure" requires an acknowledgement of the system's potential and the enhancement of one's capacity to iterate through possible arguments through combinatory play.

2.2 Common Places and the Origins of the Commonplace Book Genre

According to its progenitors and earliest advocates, the commonplace book is a technology of textual capture and sorting, a way of aggregating sources together and sorting them according to headings for easy retrieval. In the early forms, the headings pointed to argument schemes, the *topoi*, for use in dialectical and rhetorical reasoning. Understanding the genre to be much more than an invention for information storage, its champions also promised that the diligent collection of the right resources through the most appropriate system for capture and arrangement could help a person generate spontaneous arguments by having ready-access to apt examples. While this promise is well-circulated in the literature surrounding the commonplace book and in the case examples I cite here, how exactly a routine use of one's commonplace book collection can facilitate this ability is largely left to a matter of mystery, which I'll attempt to unravel in the conclusion of this chapter.

Discussion over best practices in the early modern era—the heyday of the commonplace book—were significant, including discussions over what headings to include, how to organize them, and how to facilitate the easy retrieval of passages. While I cite here several thinkers and two primary case examples for those meta-genres discussing best practices, it's important to emphasize that as a genre of everyday writing the practice was heavily steeped in notetaking traditions rehearsed by many in pedagogical and personal circumstances. I share Ann Blair's suggestion that the genre's spread be attributed instead to a moment in our history where information itself was expanding:

We should not attribute the spread of commonplacing and related forms of excerpting in the early modern period to the peculiar success of these pedagogues. Instead we can assume that their advice was widely followed because it adapted methods of notetaking already in

existence (and visible, for example, in the structure of the *florilegia*⁸) and responded effectively to the new conditions of the Renaissance as they were experienced by a broad educated elite, including: the widespread availability of paper; a new abundance of printed texts, both ancient and modern; a desire to emulate classical rhetoric and culture; and a special enthusiasm for recovering lost material and guarding against future losses of information. Forming a durable collection of excerpts of the best bits from all the works one read, as the pedagogues advocated, promised a viable method for managing and benefiting from all the newly available information. (73)

It is, after all, the quality of commonness to the materials of shared human experience and one's ability (and privilege) providing access to the texts that grapple with argument and argumentation that opens up opportunities for rhetors to collect information from them. Individual practices of the commonplace book genre varied widely, and while I'll explore some of the conditions of its emergence it cannot be expected that all practitioners had the same understanding of the genre's roots as they came to grapple with a vast array of information and the compulsion to control and capture it.

The commonplace book derives its name from the *locus communes* (in the Latin, for "common places" as articulated by Cicero and considered by Quintilian, as an evolution of

⁸ In the material history of the commonplace book a clearly antecedent genre are the *florilegia* (flower collections) of the medieval period. Such notebooks were collected excerpts from classical authors, of which ample manuscripts exist from as early as the twelfth century. Moss tells us that "like the future commonplace-book, the *florilegium* had an ambivalent status, and function in both a private and public context" (26), kept both through personal means and circulated as manuscript editions. In such collections, excerpts were organized by author, often ordered so that the more difficult and complex excerpts would appear at the end of the collection, for ease of use in schooled situations of learning Latin (27). "The implicit message of this medium of elementary instruction was that Latin, the language of learning, came as an assemblage of separable quotations which were authoritative, morally loaded, and available for extraction and placing in appropriate contexts," writes Moss (29). In short, the *florilegium* served pedagogical purposes for learning Latin as well as the moral content of the works excerpted, and also to make the retrieval of any instance of one's learning efficient.

Aristotle's description of the common (*koinos*) *topoi* (in the Greek, for "places").⁹ The *topoi* that started it all have a long and mysterious history and have been the subject of much debate in part because Aristotle makes use of the term in a way that takes for granted an understanding which we cannot necessarily have through interpreting the ancient texts. *Topoi* has great utility in any discussions surrounding physical places, but the place-based metaphor as applied to the "places" of argument are endlessly complex. What does seem reasonably clear, at least as put forth by Sara Rubinelli's interpretation in *Ars Topica*, is that *topoi* as employed in the *Topica* is a technical term which refers to specific argument schemes for use in dialectical debates by students of formal logic. The understanding brought into the *Rhetoric* is of those schemes with applicability beyond dialectic (into rhetoric) for broad ranging topics, which Aristotle distinguishes from *idia* which are discipline specific and operate as 'subject-matter indicators'. The descriptor "common" is often used in conjunction with these schema, thus a *topos koinos* or "common place."¹⁰

Citing Brunschwig's explanation of a *topos* as "a machine for making premises", Rubinelli offers the revision that "a *topos* is a 'machine for making arguments'... what I mean by this metaphor is that a *topos* in the *Topics* is an *argument scheme of universal applicability*: it describes a way of constructing an argument by focusing on the formal structure of its constitutive propositions" (14). Rubinelli suggests this definition as a metaphor rather than defining the *topoi*

⁹ In general, I reflect an understanding here derived from Sara Rubinelli's *Ars Topica*, which provides a clear and assertive interpretation which helps present a practical understanding for our purposes in this current chapter, and Ann Moss's interpretation of the emergence of the commonplace book genre in *Printed Commonplace Books and the Structuring of Renaissance Thought*. For the longer and detailed histories of both I defer to these authors' expertise for the longer expanded version of this history which I do not have the space to explore here.

¹⁰ Rubinelli points out that "koinoi topoi" isn't a figuration employed by Aristotle, that "common" is used rather as a descriptor for those *topoi* with "wider applications" (68) and that to use *topoi* and commonplaces interchangeably is a misunderstanding (61-62). She offers elsewhere the compact interpretation that "*topoi* and *idia* reflect Aristotle's understanding of the form and content of an argument, respectively" (Rubinelli 18, from "Aristotles *Topoi* and *Idia* as a Map of Discourse"). She argues that the use of *idia as topoi* in the *Rhetoric* is employing a "different technical sense, one that has already been developed by rhetoricians before [Aristotle], namely in the sense of 'subject-matter indicator': *idia* are indications of topics to be used in argumentation" (Rubinelli 69).

as literal machines, making a familiar appeal to those who might be uncomfortable with the mechanization of an inventive process by positing that one's choice of which *topoi* to employ is still a matter of individual creativity (23).

Importantly, the *topoi* as described in the *Topica* are *forms* not *content*. The content is furnished by one's own study of the experts and one's understanding of the *endoxa*, the opinions broadly shared and that people generally believe to be true. Aristotle begins the *Topica*: "Our treatise proposes to find a line of inquiry whereby we shall be able to reason from opinions that are generally accepted about every problem propounded to us" (Bk 1: 100a 18-21). Thus, the content of one's arguments should come from familiar, sharable, and reputable notions to solve problems—problems being any question that is debatable, such as "Are sensation and knowledge the same or different?" (Bk 1 102a 7). To prepare for argument construction using the *topoi* Aristotle urges the student to develop a robust understanding of those concerns of relevance worth debating. In addition to employing those "statements that seem to be true in all or in most cases" Aristotle urges the following:

We should select also from the written handbooks of argument, and should draw upon sketch-lists of them upon each several kind of subject, putting them down under separate headings, e.g. 'On Good,' or 'On Life'—and that 'On Good' should deal with every form of good, beginning with the category of essence. In the margin, too, one should indicate also the opinions of individual thinkers, e.g. 'Empedocles said that the elements of bodies were four': for any one might assent to the saying of some generally accepted authority. (Bk 1 Ch. 14 105b 9-18).

Importantly, thus, preparation for and efficient employment of the *topoi* requires assembling an array of media with which to furnish those schema. This advice outlines a method of study that

will help prepare content one can apply when making use of the *topoi* to structure how such media can be deployed. Because the common topics can be transferred to many situations, the commonplace book was an (perhaps inevitable) invention for the practicalities of keeping track of all of the materials one could access in relation to those common topics.

The Latin *loci* is also “place,” and Cicero’s own *Topica* purported to extend the work of Aristotle but dealt not with dialectic but rhetoric. Cicero describes the topics in Book II as “the art of discovering arguments, which is called topics, as “seats [*sedes*] from which arguments are derived” (Bk II 7-8 *trans. Yonge*). Elsewhere they are translated as the “dwelling places of argument” (Bk II, as cited in Rubinelli). Ann Moss reveals that Cicero’s *De Inventione* experienced a much greater circulation, which refers to the common topics as those arguments that “can be transferred to many cases,” as either “some amplification of a well understood thing” or “a doubtful matter” and that should be used sparingly to gain the audience’s ear so that “when the mind of the hearer is refreshed so as to be inclined to attend to what follows” (Bk II ch 15). Michael Leff articulates that “the decision about whether and when to invoke a commonplace entails a judgement grounded in a particular case.... The *loci* operate as a process of discovery; the *loci communes* are products, apparently invented and completed before dealing with the case at hand” (448).

By the time of Quintilian’s *Institutio oratoria*, compilations of commonplaces were already in circulation and made use of especially in school contexts and in preparation for work in the courts (Moss 10) and he already cites an understanding of the commonplace that is overdone to the point of meaning very little:

...it must be remembered that there is hardly a single commonplace of such universal application that it will fit any actual case, unless some special link is provided to connect

it with the subject: otherwise it will seem to have been tacked on to the speech, not interwoven in its texture, either because it is out of keeping with the circumstances or like most of its kind is inappropriately employed not because it is wanted, but because it is ready for use (Bk II Ch 4 30-31).

Once again, we hear an echo of the critique of Ryan Holiday's utility of the commonplace book. The readiness of passages for use is simply not enough; it must be "interwoven in its texture."

Importantly, Moss informs us that by the time of Quintilian the sense in regular use in educational contexts was of "'commonplace' as an essentially moral theme proposed for rhetorical amplification" and that sense was passed along to humanists who discovered his works (Moss 10). Already we have a sense of the risks of collecting possible examples. Indeed, Quintilian cautions not to stick too close to one's preparatory training:

If, however, some brilliant improvisation should occur to us while speaking, we must not cling superstitiously to our premeditated scheme. For premeditation is not so accurate as to leave no room for happy inspiration: even when writing we often insert thoughts which occur to us on the spur of the moment. Consequently this form of preparation must be conceived on such lines that we shall find no difficulty either in departing from it or returning to it at will. For, although it is essential to bring with us into court a supply of eloquence which has been prepared in advance in the study and on which we can confidently rely, there is no greater folly than the rejection of the gifts of the moment. Therefore our premeditation should be such that fortune may never be able to fool us, but may, on the contrary, be able to assist us. This end will be obtained by developing the power of memory so that our conceptions may flow from us without fear of disaster, and

that we may be enabled to look ahead without anxious backward glances or the feeling that we are absolutely dependent on what we can call to mind. (Book X 5-7).

Quintilian's emphasis is thus on the retention of examples of eloquence committed to memory with the flexibility to depart from practiced uses of them when "happy inspiration" or the kairotic moment strikes.

Through these classical examples we see how an interpretation of the "places" of argument becomes a moving target. The public value of learning the places common to human experience was well-established in the texts of antiquity, as expressed. As a shared ideal, the progenitors of the commonplace book aimed to invent a means of turning this generalized advice into established practices to furnish the memory with ample examples to call up for the purposes of gaining favor with one's audience. Below I explore the commonplace book as a genre through two arguments for the practicalities of the genre, as delivered by Desiderius Erasmus and John Locke.

2.3 Desiderius Erasmus

Desiderius Erasmus's *De Copia* of 1512 will serve as the first example for how this advice was actualized by a prominent thinker of the time and as one rationale for a system to organize passages from reading. The advice that follows cites Quintilian and Cicero as inspiration, "lest anyone think this is a modern device" (12). The *De Copia*, overall, is a treatise on how to introduce variety into one's utterances so that one's *copia*, or abundance, is not employed carelessly. For Erasmus, the *copia* are anything but static; to begin at the end, in the conclusion to the *De Copia* Erasmus urges the user to "consider his method of arrangement and disposition of utmost importance, lest his whole speech be thrown into disorder and confused by an undigested mass of

materials” (105). It is not enough for the collection of materials to be assembled; one must *digest* its materials, recalling again the commonplace of the digestive metaphor from our introduction. It cannot be allowed to remain static; it must be interacted with, arranged, and considered with due diligence to become anything of value in the matter of rhetoric produced from it. Erasmus’s *De Copia* and several other of his publications in 1512 were, according to Moss, to “represent something of a watershed” (103) for the commonplace book genre. I focus here on *De Copia* but it is worth mentioning that several others of his works attend to the utility of collecting excerpts from a variety of media, including how the teacher can limit students’ access to unsavory aspects of passages by excerpting around them in *De ratione studii* and through example of his own collection of proverbs, the *Adagia*, evidencing, again, a culture of notetaking and passage collection already well-established.

He opens with a problem the *De Copia* aims to solve, a problem that will strike the reader as familiar, in a section subtitled “That the Aspiration to *Copia* is Dangerous,” as follows:

Just as there is nothing more admirable or more splendid than a speech with a rich *copia* of thoughts and words overflowing in a golden stream, so it is, assuredly, such a thing as may be striven for at no slight risk, because, according to the proverb, Not every man has the luck to go to Corinth. Whence we see it befalls not a few mortals that they strive for this divine excellence diligently, indeed, but unsuccessfully, and fall into a kind of futile and amorphous loquacity, as with a multitude of inane thoughts and words thrown together without discrimination, they alike obscure the subject and burden the ears of their wretched hearers. To such a degree is this true that a number of writers, having gone so far as to deliver precepts concerning this very thing, if it please the gods, seem to have accomplished nothing else than, having professed *copia* (abundance) to have betrayed their poverty. (11)

Erasmus describes that for those rhetors whose “thoughts and words” have been “thrown together without discrimination” so far as to “obscure the subject” have, in short, attempted to speak without decorum, and indeed without proper procedure, without precepts as a guide. As the collection of passages for use in speaking engagements was already a practice well-taught in schooled contexts and practiced by many, Erasmus warns that one’s *copia* can reveal one’s deficits. We might recall the critique of Ryan Holiday’s use of excerpts from his reading by the Reddit user gordiepie, as “the inclusion of superior material from other authors betrays the poor quality of the enclosing thought.”

Since “Nature herself especially rejoices in variety” (16), we must pursue variety and variation so that one may have “skill in extemporaneous speaking or writing” (17). Variation is best achievable through diligent collection and study of words and thoughts and, ultimately, through variational play: “Having diligently committed the precepts to memory, we should often of set purpose select certain expressions and make as many variations of them as possible” and practice in making variations is best rehearsed “if several students compete with one another either orally or in writing” such that both common approaches and novel discoveries will reveal themselves to those participating in such a competition (17). That the methods of introducing variety are best furnished through competition harkens to Aristotle’s dialectical strategies for use in debate training. In an exchange of wits variations are revealed and on display; the artifice of one’s argumentative constructions are made clear and become material for study and reinvestigation. Erasmus’s own playful practice is revealed at the end of Book I where he explores variations of the sentence “Your letter has delighted me very much” by rewriting it over and over with slight changes in synonym and phrasing of each component part of the sentence. My favorite, the reason for which will become clear in a moment, is “Your letter was pure honey to me” (41).

Ultimately it is in Book II that Erasmus outlines his understanding of commonplaces and a strategy for collecting and making use of them, with the purpose of “enriching” one’s own position: “The eleventh method of enriching depends on the copious accumulation of proofs and arguments which the Greeks call *πίσεις*. Various reasons are employed to support the same proposition, and the reasons are confirmed by varied arguments.” (66). Deferring his reader to Aristotle, Boethius, Cicero, and Quintilian for further details on commonplaces, he briefly defines them as “places common to general classes and also to all division of cases” (67). His direct advice is as follows:

Whoever trains himself for eloquence ought to examine individual places and go over them in detail to see what he can elicit from them. Practice will result in their suggesting themselves automatically in a never ending series. Likewise, arguments can be based on supposition, which is common to many places, and also on the details peculiar to a case. ¶ However, most powerful for proof, and therefore for *copia*, is the force of *exempla*.... [which are] customarily used not only for producing belief but also for embellishing and illustrating, for enriching and amplifying subject matter. Therefore, if anyone is willing to collect a great number of ornaments of speech from his reading he can produce an oration as copious as he wishes; and yet it will not be a lifeless mass of words, and through its variety will avoid tedious monotony.... One should obtain the greatest and most varied number of these possible and have them always at hand. (67-68)

Examples from reading thus, through practice, may be recalled by the rhetor and employed in the opportune moment, as “automatically suggested in a never-ending series” and for use in “embellishing and illustrating, enriching and amplifying subject matter” (67).

Importantly, the capacity for one's collection to suggest potential examples for use "automatically" requires *practice* in making use of one's collection. In the context of schooling, let practice run wild, "since youth naturally runs to excess" (106) but "of a serious matter where risks are involved" one must use proper judgment to discern the appropriate examples and ornamentation to employ. Perhaps paradoxically given Erasmus's copious *copia*, the ultimate task is for the rhetor to "say the best possible things in the fewest words," (105) but one can enhance one's capacity for doing so if they have a wide variety of available words and thoughts at one's disposal. The practitioner can improve their chances of the apt example rising to memory through employing appropriate organizational constraints. For Erasmus, the best strategy is to organize passages by similarities and opposites, "[f]or those that are related to one another automatically suggest what should follow, and the same thing is true of opposites. (87), thus fleshing out a range of appropriate headings under which to sort one's collection. Under these headings you begin first with listing commonplaces, then add "whatever you come across anywhere in any author, especially if it is very noteworthy" (89).

Erasmus continuously employs natural and naturally-derived metaphors to form his own embellishments and to augment his points. His own examples are flush with the stuff of the natural world. His rationale for the utility of marking down passages from one's reading is no exception:

This method will also have the effect of imprinting what you read more deeply on your mind, as well as accustoming you to utilizing the riches of your reading. For there are those who hold a great many things in their minds, as though stored up in the earth, although in speaking and writing they are wonderfully destitute and bare. Finally, whenever the occasion demands, the stuff of speech will be ready to hand, as if safe nests had been built, whence you can take what you wish. (89-90)

Interestingly, here the natural metaphor “as though stored up in the earth” refers to those whose memories are robust lying just under the surface, who have a natural capacity for holding a lot, but who may not be able to unearth the right material when needed in speech and writing. The organizational constraints that determine how one’s collection is organized will thus provide “safe nests,” that is, *structures made* that will keep one’s notes off the ground, so to speak, to protect one’s collection and make its contents ready at hand.

One metaphor a commonplace itself in relation to the value of notetaking from reading is the figure of the bee. Indeed, we might think of it as the mascot of the commonplace book genre. Erasmus employs it in the following passage in a conventional sense:

And so the student, like the industrious bee, will fly about through all the authors’ gardens and light on every small flower of rhetoric, everywhere collecting some honey that he may carry off to his own hive. Since there is such great abundance of subjects in these, a complete gleaning is not possible, and he will be sure to select the most important and adapt them to the pattern of his work. There are some which can be adapted not only for different, but even for opposite uses, and therefore should be noted down in several places.

(90)

That one must be diligent in choosing only the right and best media to collect from is a common description of enacting restraint when adding to one’s collection. It might be that some media are useful for several purposes and must be filed away appropriately under each. The bee must be “industrious” (a figuration familiar in Seneca’s use of the bee metaphor for collecting media), that is, discriminating and *productive*.

In Debra Hawhee’s treatment of this passage, she deftly points out that the bee visits *all* the gardens but only selects from the “*praecipua*, a word that signals peculiarity or distinction”

(267) such that there is both expansiveness of options but constraint when making choices for what to collect. Ever more evasive is the process by which these resources turn to honey, that mysterious sweet substance that is the product of all of this gathering. James Brown's treatment of Erasmus calls attention to the imitation of nonhuman animal procedures as akin to imitative exercises of others' language—"procedures at work in language" (503)—but Hawhee describes that animals not only recommend natural procedures for human study, they give those procedures their vitality and momentum toward change:

[I]n the context of rhetoric and language, nonhuman animals keep things moving and changing. They keep sensation at the fore. When it comes to memory, that all-important faculty for the art of rhetoric, a 'store from inert goods' will not get you very far, but a storehouse buzzing and oozing with varied substances resulting from lively activity might do the trick. (268-9)

On the one hand, the Erasmus storehouse is filled with easy interpretations of the variety of excerpts and examples. The truthfulness of many of the examples are taken for granted, as they are commonplace and thus generally accepted as true. Erasmus ensures at every turn that the user must determine appropriateness for any given situation, and insists students of such variety are protected by their teachers, as only the most appropriate examples are made available for young minds to use.

We start to see in Erasmus's *De Copia* the celebration of abundance and the mechanisms for organizing the abundance. Erasmus offers enthusiasm for all of the possible binaries that emerge from the collection. The human reader and collector is always the subject of the action. Whoever has the "resolve" to read as much as is needed for such abundance and whoever takes up the challenges of becoming the industrious bee will be rewarded by the work. The procedures for

arrangement are determined to be effective because they are derived from the perceived natural balance of similarities and opposites, which in Erasmus's view are "automatically" suggested as soon as a topic is offered. While his repeated use of that which will "automatically" be suggested is tempered by his equal insistence that the collection cannot remain static; it must be engaged with, interacted with. We must construct "safe nests" for our media. The ideal of automation is thus about structuring one's abundance, the way the bird constructs a nest for her eggs. "Greatness," to return to Longinus, is "the object of our admiration and wonder" (48). The bee knows which flowers to visit, they are the ones he is awed by.

2.4 John Locke

By the time of Locke (150 years past Erasmus) the commonplace book was even more pervasive in schooled contexts and what Moss calls the "mentality of the commonplace book" (191) where one's utterances were furnished from one's media collections. A relatively standardized set of commonplace headings had become conventional to the genre, primarily made up of abstract and moral concepts such as honor, piety, etc. and alphabetical order provided an easy organizational scheme for the finding those passages sorted under headings. Such a system required the practitioner to leave blank spaces in the book for future passages to be filled in as needed, a luxury of a much wider availability of affordable blank books though still a privilege. Also by the time of Locke pre-printed commonplace books became available as compiled by those who claimed themselves to be professional curators of textual media, promising to alleviate the labors associated with the collection of passages allowing one to jump straight to the study and use of them.

While the initial inspiration for the construction and use of commonplace books might have been that buzzing storehouse, by the end of the seventeenth century, the honey produced seems to have lost its sweetness, as it had become so pervasive in schooled contexts and had manifested in pre-printed reference texts of commonplaces and passages from the canons of great works. Richard Yeo describes that “Locke rejected the role of commonplacing in university pedagogy, in part because he believed that it instilled bad habits of thinking and failed to appreciate the nature and scope of empirical knowledge” (76) which makes sense given that this is the man whose perhaps most pervasive contribution to modern intellectual thought was the value of experiential learning. It is perhaps true that by Locke’s time the pervasiveness of controlled, pre-printed, and pre-formatted iterations of the commonplace book genre had started to leave common passages for inclusion with the bitter aftertaste of those trite arguments too often deployed (rather than, we might say, produced). It is in this context that we can read Locke’s very particular, highly constrained procedures for commonplacing as an important revision to some of the conventions that had by his time become overworked.

In 1686 Locke published his *Methode nouvelle de dresser des recueils* as a letter to Mr. Toignard, a friend who had encouraged him to publish his approach to commonplacing and had persisted for years in trying, such that Locke finally gives in: “At length, sir, in obedience to you, I publish my ‘method of a common-place book.’ I am ashamed that I deferred so long complying with your request, but I esteemed it so mean a thing, as not to deserve publishing, in an age so full of useful inventions, as ours is (444). Ultimately many *did* perceive Locke’s method as a “useful invention” and the method I’ll explore below became another “watershed” moment for the commonplace book and indeed for notetaking practices beyond.

The version I excerpt below is from an 1824 edition of *The Works of John Locke in Nine Volumes*. The practice needs only a two page index to record all of its passages, and this indexing method prevents the user from needing to leave blank pages after alphabetically sorted headings, thus conserving paper and making notetaking more affordable for more people. Locke had honed this method over twenty-five years of routine practice. As briefly described in the opening of this chapter, the Locke index depended on marking page numbers for passages related to a given heading so the collection is built up and logged in the index rather than requiring a finding mechanism for returning to passages by flipping pages. “Every time that I would write a new head,” he instructs:

I look first in my index for the characteristic letters of words, and I see, by the number that follows, what page is that is assigned to the class of head. If there is no number, I must look for the first backside of a page that is blank. I then set down the number in the index, and design that page, with that of the right side of the following leaf, to this new class.
(446-7)

The approach is both practical in that it reduces the need to set aside blank pages for headings in advance and provides different recombinatory potential in that passages from disparate topics might appear next to one another as pages are flipped to be read and studied, opening up the potential for cross-topic study of passages. As the headings are of the practitioner’s own design, Locke’s method demonstrates how the genre had or could open up to fields beyond law or public discourse.

Richard Yeo, whose scholarship on Locke’s notebooks is extensive, cites these changes as evidence that Locke’s method “shifts the emphasis from rhetoric to research” (11) implying that the system was more the repository than argument generation system, and Moss expresses a real

sense of loss in this shift. She admits that Locke's headings "are servicing erudition (and possibly providing ammunition for a defense of religious toleration), but that erudition is not mapped onto any pre-existing conceptual grid," and that the ordering is in service of "finding mechanism rather than an ordering principle" (280). To Moss this sense of loss is a clear signal that the commonplace book genre had devolved, but the revisions that Locke's method made to conventional pre-determined headings was a significant revision itself with rhetorical promises. If not bound by the eco-system of self-regulated, pre-established themes which suggested themselves "automatically" to the practitioner, the commonplace opened itself up to even greater variety of media providing opportunities for argument generation beyond the commonplace expressions already too often employed in public discourse. In short, the Locke method allowed for true variety in one's storehouse *and* an organizational schema that made possible readings across texts *and across topics*.

As is often the recommendation, the usefulness of one's system depends on diligent study. In Locke's own essay on reading, "Some Thoughts Concerning Reading and Study for a Gentleman" he expresses that "Reading is for the improvement of the understanding, and that such improvement "is for two ends; first, for our own increase of knowledge, secondly, to enable us to deliver and make out that knowledge to others" (405). Most importantly, he advocates for a treatment of texts that readers must check the supposed truths offered against one another "to observe the connection of these ideas in the propositions, which those books hold forth, and pretend to teach as truths; which till a man can judge, whether they be truths or no, his understanding is but little improved" (406). As a distinct departure from the acceptance of the *endoxa* and reasoning from shared opinions or those believed to be true by trust in an author's expertise, Locke argues against commonplaces standing in for truths and as used to gain favor with

one's audience. All notions posited as truths must be tested by one's own experience and independent faculties in reasoning. Furthermore, on the point of the rhetoricity of Locke's procedures, he insists: "When a man, by use, hath got his faculty of observing and judging of the reasoning and coherence of what he reads, and how it proves what it pretends to teach; he is then, and not until then, in the right way of improving his understanding, and enlarging his knowledge by reading" (406).

If we read Locke's notes on reading as a supplement to the procedures he advances for the arrangement of the commonplace book (not to mention as a supplement to his well-known *An Essay Concerning Human Understanding*) it is clear that leaving the design of the appropriate headings for the reader is part of the commonplace book's rhetorical function. Not only might the headings allow for customization according to disciplinary or experiential purposes ("the Traveller, the Trader" etc.), the true worth of the collection can only be determined "by use," which will make clear how well the truths recommended in texts can play out as truths (or not) in lived experiences of public utterance. He continues his notes on reading: "To fit a gentleman for the conduct of himself... nothing can be more necessary than the knowledge of men; which, though it be had chiefly from experience, and, next to that, from a judicious reading of history: yet there are books of that purpose treat of human nature, which help give an insight into it" (411). Texts and experience thus provide reciprocal experiences to aid in appropriate reasoning—reading provides language for the interpretation of experiences and experiences test the salience of proposed truths in life. Rather than the system of excerpts regulating itself, as per the Erasmus rendition, Locke's excerpts must enter into a system of checks and balances as mediated and observed through human experience.

While it is true that the Locke commonplace book no longer supplies a means to supply the argument schemes of classical rhetoric with content for use in debate, its organizational schema still constraints how the collection may be read, and while fresh combinations within topical orientations may be difficult to find as one might have to travel to many different places as indicated by one's index, the potential for reading across topics offers the opportunity for fresh perspectives on one's collection perhaps even in the Bartholomae sense of the "found poems" of one's collection.

Erasmus on the emergent end of the commonplace book's arrival in the early modern era inspired the collection of an abundance of media in accordance with the variety exhibited in nature and Locke's late era rendition indicates the shift toward experiential learning by advocating for variety that can be tested by lived experience. All offer constraints for bringing order to abundance, and demonstrate how organizational schema can cue one to find material for use in traditional argument schemes or in the development of one's critical faculties. Even if the Locke version is more the storehouse than the buzzing storehouse, the changes Locke advocates for to the conventional arrangements of commonplace heads, the tailored system for excerpt storage and retrieval carry with them a rhetorical training beyond the context of dialectical debate and public discourse.

2.5 Training

Now that we have four case examples on the table with different organizational schema which constrain the ways in which a commonplace collection can be read and ultimately made use of, as a concluding gesture I turn toward a theory of how constraints provide a practical response

to the “risk” of making use of a commonplace book without due diligence, as cited in Erasmus and perhaps as demonstrated by Holiday (if you take me at my word that his prose is less than enthralling). In terms of the commonplace book, if one’s storehouse is only stocked with poorly curated or pre-packaged (truly commonplace) examples, or if the practitioner’s aptitude for using his own resources is less than diligent, no matter how clever one arranges the examples the utterances making use of the collection will be stale instead of sweet. If, however, something in the disposition of the rhetor allows for the most natural pathways to become visible (such as the pathways those industrious bees might take), a rhetor with the appropriate training and the apt collection might be able to see connections across an unlikely combination of excerpts, thus providing fruit and flower for (re)fresh(ed) language and argument. As the discussion surrounding the Holiday example reminds us, however, the rhetor’s success is always contingent upon the audience’s response. Some found his argument sweet, others found plenty to trifle with.

I propose that this “something” in the disposition in the writer is an orientation toward constraint such that the writer submits to or defers agency to its generative potential. This requires awareness at the level of self-selection of the constraining mechanics and a capacity to see (or perhaps we should say “read”) the system’s generative powers as revealing potential (re)combinations of examples for use in arguments. This does not take away from the socio-cultural contexts that contribute to the constraining mechanics, like Erasmus’s reinforcement of binary classifications or Locke’s assertions that a commonplace book’s contents be determined not by school-based exercises and commonplaces but instead be derived from disciplinary texts and those works of particular interest to the individual, as these contexts reflect the conventions of the genre under renegotiation by its users as the genre instantiations met with current exigencies; no genre is ever perfectly stable. Certainly, the *topoi* from which the commonplace book sprung

(albeit through a long, meandering lineage) were constraints in and of themselves, such that they determined the shapes arguments could take, and the argument there is that their utility is in part to train the *intuitive* skills of the rhetor. But if a commonplace collection reveals new insights based on how passages combine and recombine by reading one's notebook (as facilitated by the organizational schema under which they have been organized) it might be more accurate to attribute that skill to a collaboration between the organizational constraints and the notebook's user.

When Marjorie Perloff suggests that constraint operates as “a *generative* device: it creates a formal structure whose rules of composition are internalized so that the constraint in question is not only a rule but a thematic property of the poem as well” (208 emphasis in original), she describes constraint-based writing in contrast to employing an external form (like a Petrarchan sonnet), which may even be a writing mechanic that “remains largely hidden to the reader” (208) but that still instructs the reader about its themes (I'll revise: its argument). She cites Marcel Benabou's experiment in his 1986 *perverses* where he splits apart well-known lines of poetry and recombines them. The “Alexander Transplanted” project in collaboration with Rimbaud splits hemistichs from Baudelaire with lines from Rimbaud, Racine, and then work from elsewhere in the Baudelaire corpus. Perloff interprets this exercise as demonstration of intertextuality, of how “even the strongest urge to ‘Make It New!’ involves familiarity with what came before” (209). This interpretation offers a view through which writing under constraint enacts a critical argument and reinvigorates an older example with new life.

While the constrained mechanics that determined how a commonplace book's media will be collected, organized, indexed, read and studied differ from the experiments of constrained poetics, the senses through which a “rule” differs from a “constraint” is relevant here in that the

rhetor is, ideally, looking to unlock the untapped potential of the resources contained within their notebook, and the constrained mechanics can help facilitate that process. Marcel Bénabou responds to the critique that constraints can be understood as “a superfluous redoubling of the exigencies of technique” such that “[i]t is as if there were a hermetic boundary between two domains: the one wherein the observance of rules is a natural fact, and the one wherein the excess of rules is perceived as a shameful artifice” (41) with the assertion that this boundary “must be challenged in the name of a better knowledge of the functional modes of language and writing” (41). Thus, the complexities of language as a complex system will reveal themselves, such that “to the extent that constraint goes beyond rules which seem natural only to those people who have barely questioned language, it forces the system [of language] out of its routine functioning, thereby compelling it to reveal its hidden resources” (41). Superiority complex aside, Benabou’s claim that part of the purpose of constrained writing is that it pushes language beyond its “natural”—or we might say, invisible—state (or perceived state) for a reader and/or writer is relevant here insofar the commonplace book’s recombinatory potential, which is influenced by its organizational constraints, is what the industrious bee ultimately makes into sweet honey—the thing created when the commonplace collection reveals its own “hidden resources” as fresh combinations of excerpts and examples reveal themselves.

In the realm of rhetoric this same tension exists between the “natural” and the “artificial” even in relation to those techniques taught in pedagogical circumstances that are not “excessive.” Extending Bourdieu’s sense of “embodiment” as “not something that one has, like knowledge that can be brandished, but something that one is” (Bourdieu, as cited in Atwill), Janet Atwill advances *kairos* (from the Greek, meaning “the right time”) as the key to a rhetor’s perceived “success” in transforming “the rules” into a compelling utterance:

What is at stake for the rhetor's performance is twofold. On the one hand, the successful performance of the rhetor who has appropriated both rules and proper timing is often a testimony not to his mastery of an art but, paradoxically, to his "natural" ability—and even "natural" virtue. It is when art "appears to disappear" that it has been most successfully appropriated—or transformed into "nature." On the other hand, the unsuccessful performance of the rhetor who appropriates rules without this practical sense of the "right time," will only expose the "inadequate" and "unnatural" character of his art—and consequently his "virtue." Put more pointedly, decontextualized principles and rules are usually markers of the successful mastery of the art of "going to school"; they point to success in a pedagogical context that only underscores the initial "lack" in the rhetor. (59)

The key for the successful rhetor, then, is a readiness for the *kairotic* moment, "the right time," such that one's utterances might appear to be "natural," spontaneous, or we might even say automatic. Ultimately, Atwill posits that the "successful rhetor understands and responds to the limits of the 'given case.' An art deployed at the 'right time,' however, may do more than redefine the limits of specific situations; it may also create alternative situations" (59-60). Thus, situation also constrains the rhetor, and depending on the response a new situation may be crafted in its place.

Consistent across these depictions is a sense that when limits are *applied* in a situation, such as with self-appropriated constraints, or when situational limits constrain an utterance, as Aristotle refers to as the "available means of persuasion," there is the potential for discovering and/or crafting something new with/against/in reaction to that which limits or constrains. There is also, however, a perceived problem with artifice; that is, one might reveal that they've appropriated the rules but not the proper timing, or one's rules are "excessive" beyond technique and therefore

“superfluous.” If there is something to be learned from the approaches of the experimental poets, excessive rules are precisely what allows for the “hidden resources” of language to reveal themselves, but beyond poetics such constraints are mostly valuable in pedagogical circumstances or training; in order to meet the kairotic moment all procedures inculcated through practice must be fully embodied.

Scholarship attending to embodied practice tends to point, as Atwill does, to a sense of embodiment articulated by Bourdieu, but when he considers “practical schemes” (20) he does so only to emphasize their futility, using the example of the Sophists:

[t]he pedagogy of the Sophists, forced, in order to realize its aim, to produce systems of rules, such as grammars or rhetorics, came up against the problem of the rules defining the right way and right moment—*kairos*—to apply the rules, or, as the phrase so aptly goes, to *put into practice* a repertoire of devices or techniques, in short, the whole art of performance, in which the habitus inevitably reappears. (20)

Systems of rules are constituted only *ipso facto*, and because *kairos* challenges one’s capacity to “*put into practice*” any techniques so described has “ambiguous status” because grammars “never make it clear whether they reconstitute the real mechanics of the schemes immanent in practice or the theoretical logic of the models constructed in order to account for practices” (20). While the habitus invariably figures into all practices at the level of engrained dispositions, procedures *applied* (even if only describable *ipso facto*) rub up against those dispositions to *retrain* them to do something else.

In training one’s capacities for reasoning from one’s collected experience and media artifice is in fact key. If constrained mechanics teach or train the rhetor in the complexities of language by rubbing against its “natural” pathways and showing their powers and deficits, then

their utility might best be thought of as pedagogical. Indeed, as the Oulipo thinks of their poetic experiments as *experiments*: “Obviously,” Benabou writes, “nothing prevents us from studying the behavior, in every possible circumstance, of [the elements of language]. On the contrary: it is only in this manner that experimental research into the possibilities of language can proceed” (41). As reflected in the Longinus passage cited above, that “study enables one to define the right moment and appropriate measure on each occasion, and also provides steady training and practice” (5). In the dialectical debates making use of the *topoi* or in the experiments of variation as encouraged by Erasmus, the constraints provide methods of play and practice. Thus at the level of training, one’s procedures are expected and necessary.

In Debra Hawhee’s work in *Bodily Arts*, she insists that nature (*physis* or *phusis*) “is both the capacity for the effect of movement and change, most especially in the ‘disposition and temperament’ dimensions of the word,” citing Aristotle’s *Metaphysics* (1015a15-20), such that “[t]he disposition and temperament aspects of *physis* suggest a link to the ancient concepts of *ethos* (habit), *ethōs* (disposition, character), and *hexis* (state, condition, habit of the body)” (95). Thus when she assembles her neologism “physiopoiesis” to describe “the creation of a person’s nature” (93), she is signaling the change that results from a readiness forged from mental and physical habit (the embodiment of training) and the condition of being in a state to change and move. She grafts the term from Democritus’s “physiopoiei”—the verb phrase for “produces his nature,” which fuses *physis* with the third-person nominative of “poieo” (ποιέω) which means “I make or do.” In this reconstruction Hawhee purposefully defers the subject position of the maker to a more abstract assemblage. She writes:

[I]n the context of education, *kairos* eludes programmatic qualities. That is, physiopoetic *kairos* cannot be articulated as “steps” for improvement, but rather emerges among a

variety of dynamic forces. This emergence happens in a way that troubles a notion of an individual making conscious choices—in other words, it is not simply the students’ agency, whereby he ‘seeks out’ training, nor is the teacher/trainer’s agency, whereby he seduces the student to yearn for transformation. The dynamic is more responsible, more mutual, and at times less conscious than such a description would suggest... *phusiopoiesis* is a dynamic stylization that emerges *between* teacher and student. An opening up of the self/other distinction facilitates a kind of reciprocal bond between teacher and student guided by complimentary capacities... An exchange occurs, a mutual questing ignites. (99)

In Hawhee’s work, that mutually ignited quest is a complex physical, pain-inducing, and at time erotic description of the “bodily arts of becoming” (99), but there are aspects of the term that are helpful here in that the training provided through the use of a commonplace book and its role in the making of one’s nature is a complex and dynamic happening. We might see the commonplace book system and the practitioner engaging in mutual commitments to growth and change. While that exchange might not deal with erotics, perhaps it is pleasure derived from appropriating the system that results in its mechanics being fully internalized by the system *and the body* of the practitioner. One has to *submit* to the system in order for it to work as promised. Procedures and constraints themselves, and thus constrained genres, are teachers. Teachers willfully sought out. The practice of keeping a commonplace book mediates the relationship between reader and writer, the artifact and its user. The practice as auto-didactic, even when as a part of a school assignment, locates at least some of the teaching to the system at work and the potentialities it reveals. As becomes evident in students’ uptake of particular genres as assignments, some students flourish and get to know the logic of the conventions and use them in ways that seem “natural,” and some do not. Part of what I’m suggesting is that there is something in the disposition of the learner and

their orientation toward constraint that allows for the promise of rhetorical efficiency to be recognized and perhaps even realized.

Phusiopoesis cannot be adopted wholesale for my purposes here, however, because as Hawhee insists, *phusiopoetic kairos* “eludes programmatic qualities.” The procedural as the exercise through which the commonplace trains its practitioner, to expand one’s capacity and readiness to meet the kairotic moment when it arrives, has a different relationship to embodiedness. The *routine* of returning regularly to study one’s commonplace collection may become embodied in a way we can describe as habitual, and habitual in a way that one’s notebook and one’s being are concurrently co-constructed. The generative potential of language constraints, however, relies in part on tension being introduced. I have preferred the term “internalization” for this reason, as an internalized practice falls somewhere between artificial procedure and fully embodied habits. The commonplace book requires not only passages pulled from only the sweetest flowers but a commitment to studying the media in one’s notebook such that they will reveal their “hidden resources” to the practitioner at the kairotic moment. The capacity for one to *see* the potential fresh utterance as contributed to by the variety of one’s collection is furnished in part by the diligent study of one’s collection, in part by a willingness by the rhetor to test the limits of language by introducing constraining devices, and in part by the ways in which the arguments constraints offer are internalized in the composition and in the body of the practitioner.

In an ideal use, the commonplace book practitioner thus holds a reciprocal and recursive relationship with the organizational constraints they have appropriated for determining how excerpts will be captured, labeled, and distributed throughout one’s notebook. In the Bartholomae example, the excerpts evidence the ideological assertion of his career—that student writing be taken seriously, and that students have the capacity to think through and interface with complex

and difficult texts. In Erasmus's system, the organizational schema based on similarities and opposites creates a synthesis with the world's natural order, both as *copia* "rejoice in variety" and as enforcing a binary understanding of the world. In Locke's more flexible assignment of headings appropriate to one's own field of study and an organizational schema that facilitates reading across not only various texts but various topical headings reinforces an orientation toward the material that must be maintained only through checking the supposed truthfulness of excerpts with the experience from one's expertise.

That is, even something as simple as organizational constraints become an important part of enactment in utterance, which is *independent from* the writer's own "nature," but *one's nature is reciprocally shaped by routine use* of one's collection in that the system both shapes one's orientation toward a commonplace book's excerpts and reinforces ideological concerns manifested in one's choice of system. Atwill intelligently insists that nature or *physis* is "the result of a consistent 'pattern of behavior,' which, in turn, is the product of cultural force. As this sense of *physis* suggests, the Greeks were aware that nature often requires complicated and well-orchestrated mechanisms for its production and maintenance" (89). For the human mind-body to read as "natural," one's rhetorical training must ultimately be embodied. Rhetoric, then, is *used*, not *known*:

In the domain of productive knowledge, subjects are "users," not "knowers," and every different use of a *technē* defines the subject differently. Subjects of productive knowledge are defined by social exchange rather than by private position, and just as *technē* can never be a form of private property, neither can the makers and users with which it is identified be private, stable entities. (Atwill 185).

Recalling the sense of constraint I introduced in the previous chapter as meant to be circulated and used and as not precious, it is perhaps here in the context of productive knowledge that the commonplace book as a *technē* and a genre becomes more clear and most relevant. If we apply Atwill's sense of productive knowledge to constrained making (machine/code, poetic, notebook systems, and even lived and cultural procedures and systems), then we might think of constrained practices like these renditions of the commonplace book as less aligned with persuasive or expressive acts and more about constraints as conventional generative mechanics that are constantly being renegotiated by its users. Genre conventions are not static; they are renegotiated for contextually complex exigences—as we see perhaps in the shift into Locke's system—and “used” by rhetors, even while they are being reconstructed through particular uses. Certainly the social exchanges that define the subjects of productive knowledge do not assume *equal* exchange, such that a producer may be in a position of power over the user, or the user may use inappropriately or with unequal force. But that such constraints cannot be fixed as private property signals a knowledge making that depends on user appropriation and adaptation. In just four case examples we can see how genre practice can differ quite dramatically while still holding to some core conventions.

Rhetorical production as the indication that a commonplace book's procedures have been effective for the user/maker is therefore endlessly complex. The conventions promise the user rhetorical efficiency in the discovery of the apt example in the opportune (kairotic) moment, such that the individual will spontaneously deploy fresh utterances at will, but the individual may not even be fully cognizant of how he or she has internalized the system, or how the system's self-regulating principles contribute to the retrieval of certain examples over others. What an audience

might attribute to one's "natural" talent is likely to have been shaped by various forces in this complex partnership between commonplace book practitioner and the system itself.

3.0 Bullet Journaling and the Context of Genre: a Computer-Assisted Study

The first clip in the official “How to Bullet Journal” YouTube video is of a streamline black notebook munching up a pile of Post-It notes, loose papers, to-do lists, and doodles strewn across a surface. This is the system, it promises, to contain all of life’s lists, of the past, present and future; the ephemeral; the reminder; and those things you want to keep “for good” (a phrase my grandmother used to explain why she covered the living room carpet in plastic). The pitch for the Bullet Journal system as advanced by its creator Ryder Carroll is that it is the “analog system for the digital age,” (bulletjournal.com),¹¹ and starting is as easy as picking up any notebook and pen or pencil. The system operates at its core through a hack of the bulleted list involving simple iconography to indicate what type of list item it is and what has been or will be done with that item. The promise the Bullet Journal makes, according to Carroll, is the promise that all the paper programs I discuss in this dissertation make: that if one takes up and diligently appropriates the system’s mechanics, it will help alleviate the stresses involved with “information overload.”

Since its release in 2013, the bullet journal has become somewhat of a phenomenon, with a wide range of communities—from homeschooling moms to productivity gurus—taking up the system and customizing it for their own use. Any search of #bulletjournal (or #bujo, for short) will reveal hundreds of thousands of web media articles, blog posts, tweets, Instagram posts, and Pinterest pins. That official YouTube video has over 10 million views.¹² The bullet journal’s conventions circulate and evolve via the digital media that promote it and the platform mechanics

¹¹ The 2019 the tagline has been updated to “The analog method for the digital age”

¹² As of June 2019. As of the end of the data-collecting phase for this chapter that figure was 6.4 million.

and machine audiences that influence what is seen, what gets repeated, stabilized, or unhinged in the discourse surrounding the practice. To the wandering social or web researcher, the bullet journal might appear to be something quite different than Carroll's minimalist and efficient system for organizing life's lists. His "official" depictions of the system appear buried within a sea of results depicting colorfully illustrated pages that look more like hand-drawn planners or artist notebooks. The content circulating this view of the genre is primarily authored by individuals who present as women and who circulate images of their bullet journals as a part of personal and lifestyle blogs and social-media accounts. A cursory look around thus gives off a sense of the bullet journal (lowercase, genre identifier) as quite different from the Bullet Journal (branded system as defined by its creator and initial promoter). In part the depiction in digital media evidences the emergence of the system as a genre, and in part it evidences the rhetorical force of lifestyle content on the social web.

This chapter looks at the bullet journal phenomenon as discussed on personal and professional lifestyle blog posts through topic modeling, a computer-assisted method of identifying thematic and rhetorical patterns of language use across a collection of texts. I set out to inquire whether or not the formalized discourse Carroll designed to describe the Bullet Journal and the ethos behind it persist in popular articulations of the genre as it is advanced by practitioners who author popular media posts about it, and, if not, to come to some implications for what shifting depictions of the system's conventions can teach us about genre stabilization and change, especially in light of the bullet journal's popularity and the machine audiences that elevate it. For this study, I look at 106 blog posts from 2013 (when Carroll first launched bulletjournal.com) to September 2017, collected from a Google search result of "my bullet journal" and then limiting that search to every year since Carroll released the system on bulletjournal.com to see what results

dominated in any given year. A corpus of this size provides a collection large enough for a proof of concept that in future work can be expanded in scale and scope, and small enough that I could also read each post and gather observations about the posts' embeddedness in blogging platforms including information gathered from the posts' web page source code.

While there are a variety of meta-genres evidencing individuals' uptake of the bullet journal system I could have looked at (social media, online forums, popular web magazine articles, etc.), blogs serve as platforms individuals use to share personal experience and expertise, and felt apt for the discovery of discourse trends in relation to how individuals interpret and appropriate the system's mechanics. As a reminder from the earlier definition I provide in this dissertation, meta-genres are the talk and texts that surround genre practice. They include the instructional and promotional discourse that aims to teach others what a genre's purpose is and thus they serve an important role in how genres are understood and become stabilized the communities that discuss and circulate them. The blog posts add further complexity in that they involve the posts' text, tags, categories, section headings, images, comments, links, social media shares, and those social posts which retag and recirculate them.

The blog posts are also by and large the media that come up in web search results about the bullet journal, next to bulletjournal.com and popular web magazine articles. The blogs in this dataset are all derived from single-author blogs, which due to their embeddedness in blogging platforms make it easy for blog authors to add search engine optimization plug ins, social media accounts and sharing mechanics, ad shares and revenue streams like affiliate links (where content creators receive a percentage of purchases made through people following links to products from their sites) and other media hyperlinked to and from the post.

By and large, bloggers are content creators—whether they make a living off of their blogs or not—who understand that writing in web and mobile spaces involves writing that is *computable*. While the trends revealed by topic modeling cannot be read as equivalent to the trends search engines will identify and amplify, they can offer a taste of computationally discoverable keywords that help define the genre for a multiplicity of human and nonhuman audiences. However, because the blog post texts are only one computable aspect of the blog posts, I offer below a brief background on the corpus gleaned from posts’ metadata and observational data (including author-assigned tags, social shares, affiliate links, and so forth) which informs a reading of the posts that is inclusive of factors that may contribute to their elevation in Google’s search results. Lisa Dush explains well that we must think beyond the affordances of digital environments, which perpetuate notions of the agentic writer attempting to address a knowable audience (181), such that “[w]hen writing is content... we must imagine machine audiences, programmed to algorithmically manipulate any composed text—to mine, rank, process, match, reconfigure, and redistribute it—at many places in its rhetorical travels” (176). John R. Gallagher likewise emphasizes that the text is only part of what is searchable, that the legibility of web media to search algorithms depend on “the writing surrounding the text” such as social shares, comments, likes, and so-forth, such that “qualitative affordances will shape how algorithms process a text. In rhetorical terms, the *arrangement* of a website and *delivery* of the site’s content is crucial to how algorithms determine their results” (32). I thus include information gleaned from the posts’ embeddedness in blogging platforms to provide a sense of their arrangement and delivery, including information derived from bloggers’ bios and the ways in which they categorize and tag their posts as well as information from web page source code such as whether or not they use search engine plug ins to optimize their visibility to search engines.

Several points of potential interest were discoverable through reading these points of information beyond the texts of the posts themselves. 84% of the blog posts are authored by individuals who present as women, though 69% of the bloggers who advocated for the system in 2013 were individuals presenting as men, most of whom worked in professions outside of blogging/content creation. Between 2014 and 2017, however, the search results were taken over by lifestyle blogs dedicated to topics traditionally assigned to women's work like motherhood, cooking, homeschooling, fashion and beauty, as well as sewing and other traditional crafts along with blogs dedicated entirely to bullet journaling, stationary, planning, and notebook-based practices. Only 5% of bloggers whose posts I collected for this study seem to have created or commissioned a web-designer to design their own blogs, so their posts involve the appropriation of an existing platform's mechanics. 66% use Wordpress while the remaining bloggers use Squarespace, Typepad, Blogspot, or Blogger. A great majority of bloggers (84%) connected their websites to other social media sites and encouraged users to make contact beyond the comment sections of their blogs, which is not an especially remarkable number given the public-facing nature of blogs and the convention many professional content creators have of using blogs as aggregate sites for a variety of media content the bloggers are also producing (e.g. YouTube content, etc.). Through site data like whether posts involve affiliate links, shops, ebooks and other content for sale on their sites, I estimate that roughly 60% of the posts come from bloggers who receive some financial return from their blogs. 61% of posts have been manually tagged with keywords. The most popular tags after "bullet journal" (51 tags) are "organization" (15), "planner" (12), "journal" (10), and "productivity" (6). 68% of posts include at least one comment, with the majority of posts with comments having fewer than 20, indicating that the sites involve engagement with a community of readers. Notably, however, the post that came up first in the

search result I used to assemble the collection of blog posts has 640 comments, which surpasses the next highest (4th in search results) at 115 comments, and the next highest after that (9th in search results) at 99 comments. These statistics help provide a view of the posts' embeddedness in blogging platforms which contribute variously to a reading of the topics in the discussion at the end of this chapter.

Ultimately, the models depict that while the posts do reflect some of the discourse Carroll uses to describe the bullet journal system, especially with regard to the genres he feels the system includes and/or replaces, the formal terminology he designed to describe the system is by and large *not* the discourse practitioners use to describe their practice. I posit that the topics point to a plausible possibility for this difference in that the topics reveal its practitioners as relating the bullet journal to planning and pre-printed planners. This trend in the topics demonstrates that topic modeling can be a viable method of revealing how practitioners discuss emergent genres in relation to other established genres, and points to a potentially fruitful direction for further research.

3.1 A Brief Rationale for Computer-assisted Textual Analysis and/as Genre Study

At their most basic levels, both topic modeling and genre study involve attempting to capture what recurs across responses to similar situations. Many genre studies have been pursued through manual methodologies of discourse analysis as attempts to capture what recurs through analyzing specific instantiations of genre and through interviews, focus groups, or surveys about specific genre practice. Often the range of features that can be tracked are limited due to time and labor constraints. For example, Amy Devitt's study of discourse trends across historical Scots-English public and private genres looks at 121 documents, but only through randomly selected

passages. I do not mean to suggest that these studies do not offer some important implications for understanding the genres they are attending to, just that if recurrence (which is quantifiable) is part of what genre research must attempt to capture it may be worthwhile to pursue methods of analysis that rely on computable qualities of texts and that can look at entire texts as recurrence comes down to what repeats and under what circumstances.

Simultaneously, topic modeling has boomed as a method in the digital humanities of reading massive collections of texts. While such collections often cohere as collections as a first place because the texts considered belong to a genre (for example, Andrew Goldstone and Ted Underwood's look at journal articles from the PMLA), topic modeling studies tend to orient their observations toward discourse trends as evidencing *subject trends* and do not tend to draw insight from those trends about genre.

Importantly, from within the fields of composition and rhetoric, Ryan Omizo and William have made advancements in both rhetorical genre study and/as computer-assisted research methodologies by designing programs to track and map genre conventions, such as their creation of the "Hedge-O-Matic," a program that mines for hedging in relation to in-text citations of other's works in scientific articles. While the Hedge-O-Matic does not employ topic modeling as its method, it does look for patterns of frequency and recurrence, and their argument that computer-assisted analysis can be used to understand "a generic baseline of moves" (507) is an important rationale for my efforts here to reach an understanding of genre uptake through looking at the recurrence of rhetorical tropes. Elsewhere, they argue through computer-generated data from a genre-based corpus "we can identify where key topics become *commonplaces (topoi)* that stabilize and focus discourse" in that stabilization happens in part through "familiar discursive structures" ("Genre Signals" 100). "In these instances," they write, "writers send genre signals and construct

paths that return to ‘commonplaces’ in order to keep the social contract of shared expectations, an idea inherent in the theory of genre as social action” (101), referring to Carolyn Miller’s important 1984 article “Genre as Social Action.”

This chapter, too, is invested in how “writers send genre signals”, though I see the approach I take here as a twofold contribution: 1) as a novice programmer, I demonstrate a use of the MALLET toolkit (and thus LDA) as a computer-assisted method that requires study and experimentation but does not require specialty expertise in computer programming, and 2) as a proposal for the use of LDA to study the talk surrounding genre—meta-genre—as a potentially fruitful methodology for digital humanities research broadly and rhetorical genre study in particular. This study thus takes a step toward complicating what counts as the social in our contemporary and digitally-saturated time. Genre studies that continue to return to Miller’s definition are invested in the signals human genre advocates send to one another, while part of the benefit of computer-assisted methods is that they reveal some insight into how a computer audience mines for information. It is important that genre study expands to meet post-critical frameworks that acknowledge the “social” in our time includes the machine audiences and other nonhuman agents. I expand on this contribution in this dissertation’s conclusion, but within this chapter I explore LDA as one way to make visible the multiplicity of forces that inform genre practice.

As I’ll explain below, the LDA algorithm has a “topic-first” orientation, that is, it assumes that the topics come before the documents as a prior condition for their production. Genre has also been studied as operating substantially from priors, beginning with Kathleen Jamieson’s 1975 argument that *genres* rather than *situations* (in response to Lloyd Bitzer) be seen as formative; emergent genres involve “discourses that bear the chromosomal imprint of ancestral genres” (406).

The traces that ancestral or antecedent genres leave has been explored well in pedagogical contexts (see for example Ann Beaufort's longitudinal study of writing transfer *College Writing and Beyond*) and in the transition from print media to digital modes (see multiple chapters within Janet Giltrow and Dieter Stein's *Genres in the Internet* which explore how prior genres are reimagined for digital platforms). Amy Devitt has extended this scholarship to involve even more effusive genre knowledge which she describes as the "context of genre," that is, "the already existing textual classifications and forms already established and being established in a given culture, the set of typified rhetorical actions already constructed by participants in a society" (28). In other words, genres embody not only prior genres but the genre knowledge and experience that permeates our lived experiences which we may not even be conscious of knowing or applying to new genre experiences.

These traces have been largely described in terms of conventions that jump across genre practices when writers "transfer" prior genre knowledge to inform new or other genre work. When looking at discrete instantiations of genre this may be the only way of defining such traces. When people talk about genres, however, antecedent genres may be named directly as genres understood to be associated with the genre being discussed. They may also make use of discourse that points to the broader "context of genre"—practices, forms, experiences, and so forth—that inform (consciously relayed or not) a writer's depiction of emergent genre practices. In the context of the *Bullet Journal*, practitioners within the first several years of its emergence and circulation were invested in descriptive work attempting to grapple with what it is and what it does, and so discourse patterns may be revealing of the evolution of the genre and its associated key terms, including those that reference specific antecedent and related genres. I'm thus testing the hunch that LDA

might help reveal some trending ways that early bullet journalists grappled with their adoption of the genre.

I enter into this study thus as an effort to experiment with computer-assisted textual interpretation (in this case, topic modeling) and/as genre study, to see what topic modeling can reveal about the context of genre as the bullet journal genre is advocated for by personal and lifestyle bloggers whose posts have advanced to the top of Google's search results (and thus that may influence anyone doing a Google search about the genre). It is, in part, a proof of concept experiment to see about the viability of topic modeling for genre study as much as it is an attempt to understand the set of blog posts from representations of what terms recur and co-occur.

3.2 The Bullet Journal

In this section, I describe the Bullet Journal¹³ in detail to provide not only a sense for how this genre promises to function as a paper program for its users, but to provide the lens through which the results of my topic modeling experiment should be read in comparison. I emphasize in italics what I understand to be the formal discourse Ryder Carroll uses to brand the system and thus tag the discourse I expect to appear in the topic models. In the previous chapter, I explored the commonplace book as an example where organizational constraints, which carry with them rhetorical and ideological force, can operate as rhetorical and pedagogical training for the practitioner of such a system. While the Bullet Journal handles a different variety of information than the commonplace book, its mechanics as well carry with them a rhetorical and ideological

¹³ In general, when I reference Carroll's "official" version of the practice I use the proper noun "Bullet Journal," but when I refer to the uptake by others I refer to it as simply "bullet journal."

force, if its creator Ryder Carroll is to be believed. In an interview on GroundUp, a podcast by minimalist advocate and filmmaker Matt D’Avella, Carroll describes the Bullet Journal as “a mindfulness practice disguised as a productivity system... It uses basically just a paper notebook to keep your mind clear and keep you aware of the things you need to do, and more importantly keep you aware of why you’re doing those things. So, it’s a daily routine that’s really flexible and it’s really designed to become whatever you need it to be” (GroundUp).

Carroll’s system evolved over time as an approach to hone his ability to focus as someone who suffered from Attention Deficit Disorder (ADD) at a time when ADD was not easily understood and tools were lacking. “The main culprit was my inability to rein in my focus. It wasn’t that I couldn’t focus; I just had a hard time concentrating on the right thing at the right time, on being present” (4),” he writes in *The Bullet Journal Method*. Here is a clear place of contact between my exploration of the commonplace book in the previous chapter and the bullet journal as Carroll articulates it. Both involve at least an anticipation (or a desire to anticipate) the *kairotic* moment, the “right time” for activating one’s storehouse of media. The theory I advance regarding the disposition(s) required to activate the generative potential of constrained writing mechanics could in fact be rearticulated as the not-so-simple pursuit of “being present.”

Ultimately Carroll describes the Bullet Journal as both a “system” and a “practice.” On the one hand, there are the system’s modules and mechanics, and on the other hand is a philosophy he believes routine practice of those mechanics can inculcate, “that define how to live an intentional life—a life both productive and purposeful” (13). This philosophy reveals itself through use of the system, as its mechanics over time have the potential to reveal to the practitioner what items in one’s life are worth maintaining and fostering, and what items can be left behind, never to appear on one’s lists again.

The core mechanic of the Bullet Journal is what Carroll calls *rapid logging*. It is “the language the Bullet Journal is written in... [it] helps us capture and organize our thoughts as living lists” (58). Once again, we have a sense of the vitality of the system’s mechanics. Items are not stagnant, they are “living.” Rapid Logging is rapid-fire journaling, where you mark down anything that comes to mind related to a specific topic. Traditional bullet points represent a task, a dash represents a note, and open circles represent an event or appointment. Carroll uses the term *signifiers* to refer to the iconographic annotations that can be used, such as an asterisk to indicate a priority item, an exclamation point to indicate an idea or insight, or a small drawing of an eye to indicate something that requires further research or attention. It doesn’t matter that notes appear after events and in between a mixed variety of tasks because the icons organize what type of thing they are, and the index tells you where to find what you’ve written down. The integration of notes into lists provides a space for short reflection, intention-setting, remembrance items, and other mindfulness journaling (along with any other reason one might make a note).

Rapid logs are organized primarily through calendar-based topics Carroll calls the *Future Log*, *Monthly Log*, and *Daily Log*. Along with the Index these form the core modules of the system. The *Future Log* reserves a space for each month in the year for recording events that will happen or have already happened. The *Monthly Log* is a two-page spread including a list of each day in the month for recording events or important reminders and a space for a monthly Rapid Log on the opposing page. The *Daily Log* is for unfocused catchall lists and can be as long or as short as you need them to be, as you simply begin by listing the current date (you do not list out each day of the week and allocate space for that day’s Log, as some days might need very long Logs and some days rather short ones). Additional rapid logging can occur in an even more focused way when aggregated together into what Carroll describes as *collections*. *Collections* may be ongoing

topics like vacation planning or simply lists that need more space, like meeting notes. *Collections* can also be records (e.g. of books read, restaurants tried, etc.).

After the act of writing down, a new set of icons are assigned to list items to indicate how and whether an item has been dealt with. Carroll calls this *migration*. Bullets (tasks) are marked with an “X” when completed, a “<” when scheduled, and “>” when the task has been moved to another list (say in the case where you don’t get something done one day but you want to list it as a task for the next day). This practice requires the critical step of having to rewrite items over again. Carroll argues that *migration* is paramount: “There are a lot of productivity systems that help us create lists, but few encourage us to reengage with them. By hoarding tasks, our lists quickly become endless and unmanageable” (106) so the process of rewriting a list item requires one to consider if that item is worth the effort of going so, and if it keeps getting rewritten but not addressed, it may not be worth dealing with at all.

Migration is the key mechanic that promises to help the practitioner live a more productive and mindful life, if it is done with diligence, if one’s use of the system becomes a practice. The iterative actions routinely practiced carry with them a rhetoric of clarifying one’s values: if an item is worth taking the time to write it out by hand (and rewrite it), it holds value for the practitioner’s life. This is the central promise of the system according to Carroll, and is facilitated by the various *collections* for looking at life in smaller and smaller increments:

Migration is designed to add the friction you need to slow down, step back, and consider the things you task yourself with. On the surface it’s an automatic filtering mechanism, designed to leverage your limited patience. If something is not worth the few seconds it takes to rewrite it, then chances are it’s not important. In addition, handwriting triggers our critical thinking, helps us to draw new connections between thoughts. As you migrate each

item, you give yourself a chance to identify unconventional relationships or opportunities by holding each item under the microscope of your attention. (137-138).

Here Carroll positions *migration* as promising efficiency but argues that to reap its full benefits *migration* requires both mental and bodily work. We see in this passage language remnant of the descriptions of constraint from the Introduction—they allow for “new connections” and thus refreshed insights. In the previous chapter, I articulate a sense through which constraints carry with them rhetorical and ideological force which, when internalized in a composition and embodied by a practitioner through repeated practice, can at least appear to become a part of a person’s nature. Here we might extend to that sense with an acknowledgement that the pedagogical potential of practices dependent on constraints depend not on their practice becoming habit, which is the absence of mindfulness. The objective is to stay mindful of how one’s priorities might be shifting. I take on this potential in future chapters, but the observation stands here as one of the reasons the bullet journal stands out to me as an appropriate case example for this category of systems I’m describing as “paper programs” in this dissertation.

While in the passage above Carroll attributes the revelation of one’s priorities to reflection rather than any “automatic” mechanism, he does in places attribute the capacity for change to the system itself. He writes that “your notebook evolves as you do. You might say you co-iterate. It will conform to your ever-changing needs. The lovely side effect is that as the years pass, you’re creating a record of your choices, and the ensuing experiences” (45). Iteration through *migration*—repeatedly returning to perform a process again (as computer programs iterate through data), understanding that each turn is not repetition but that something is likely to change in each successive return—is paramount. The collaborative ethos expressed here implies that both the system and the practitioner return to each other, that its mechanics accommodate new information

brought to it and reveal back to the practitioner something about its value in one's life, as processed in the present and as a record of one's decisions of what sticks around as meaningful objectives.

3.3 Texts as Topics, Topics as Texts

I turn now to an articulation of topic modeling to reveal how it works to reveal patterns of rhetorical and thematic trends as they are estimated to manifest in a collection of texts. Many scholars in the broad interdisciplinary field often described as the Digital Humanities have described topic modeling far better than I can here¹⁴ and while I cite those articulations here, my own interpretation of the process is necessary insofar as the output of the topic modeling algorithms, even as interpreted through quite legible visualizations, are challenging to interpret without this context.

Scott Weingart, who has written widely about topic modeling and the statistical analysis of texts, has to say about topic models that “They’re powerful, widely applicable, easy to use, and difficult to understand—a dangerous combination” (scottbot.net). This section serves to describe, in as simple language as I can muster, what topic modeling is, what it does, and how a specific topic modeling algorithm, Latent Dirichlet Allocation (LDA), models a collection of documents.

¹⁴ Many thorough and helpful explanations of topic modeling occur through blogging, including at Ted Underwood’s “Topic Modeling Made Just Simple Enough” at <https://tedunderwood.com/2012-04-07/topic-modeling-made-just-simple-enough>, Matthew Jocker’s post “The LDA Buffet: a Topic Modeling Fable” at <https://matthewjockers.net/macroanalysisbook/lda>, Scott Weingart’s “Topic Modeling and Network Analysis” at www.scottbott.net/HIAL/index.html@p=221.html, and Pitt’s own Matthew Burton’s “The Joy of Topic Modeling,” at <https://mcburton.net/blog/joy-of-tm>, whose section “A World from a Topic Model’s Perspective” is phrasing I adapt here. I benefited greatly from these posts, especially Burton’s, whose post’s structure helped me organize this opening section.

In the world according to topic modeling,¹⁵ some terminology is in play that we understand quite differently in humanities study in general. Those terms are *word*, *document*, *corpus*, and *topic*. Consider every word in the Weingart quotation above. Individual words are unigrams or unique *tokens*. The quotation has fifteen tokens. Not all of the tokens are words we would consider especially meaningful, like “and” and “to”. Tokens like these are referred to as *stop words* in natural language processing, and removing them from a document prior to modeling it with a topic modeling algorithm (or other computer-assisted reading techniques) is a common practice because it elevates the statistical significance of other words, which in this case example would be words like “powerful” and “dangerous.” The quotation happens to include all individual words that can count as unique tokens, but consider that a hypothetical follow-up sentence might use the term “combinations,” which would count as a separate unique token from “combination” because it differs in characters. *Stemming* is the process of reducing tokens to their root forms, which may or may not be helpful in preparing a text for topic modeling (for reasons I’ll describe below, I did not perform stemming edits on the texts of this corpus). Take, for instance, that the term “journal” is both a singular noun form and a verb. In addition, phrases we understand in natural discourse to be one unit such as proper names, like “Ryder Carroll” need to be edited as “Ryder_Carroll” such that the underscore links the two tokens so it will be counted as one. Unique tokens are called *unigrams*, and combined phrases are called *bigrams* or *ngrams* (n=any number of things combined to count as one token according to the computer).

Counting ngrmas is the basis of all topic modeling and can be revealing as a reading procedure in and of itself. Google’s Ngram Viewer, which counts the recurrence of any ngram or

¹⁵ Phrasing I adapt from Matthew Burton’s blog post “The Joy of Topic Modeling,” whose section “A World from a Topic Model’s Perspective” expands on the terminology here at length: <https://mcburton.net/blog/joy-of-tm>. I benefited greatly from this post and appropriated some of its general structure to organize this section.

set of ngram entered into a search bar over a set of time, has been used variously as a barometer for how the use of specific terminology has shifted over time. Jessica Enoch and Jean Bessette in their mediation on digitized archives and feminist rhetorical historiography use the Ngram Viewer to track mentions of “Aspasia,” Pericles’s rhetoric teacher, whose life and work has been sought out by feminist scholars such as Cheryl Glenn, Susan Jarratt, and Rory Ong, “who note that the particular lack of extant evidence of this woman rhetor and work to piece together her memory from scraps written by men” (64). Their exploration uncovered “a curious spike” (64) in the appearance of Aspasia in the late 1870s, and when they followed the recurrences to individual texts discovered romances where Aspasia was figured as Pericle’s lover. “This experiment in distant reading did not get us closer to the ‘real’ Aspasia,” they write, “We do not learn more about who she was during the time she lived, but it did give us a sharper sense of how Aspasia has been written and rewritten, how her name circulated and was leveraged through time and to what ends” (644-645). Their challenge to scholars is that while such methods can be powerful for testing and rethinking feminist historiography, it is imperative to also “think critically about the archive it reads” (645), reminding us that through the work of Katherine Harris that Google Books relies on library collections which lack or “do not value or retain texts deemed ‘ephemera’...texts that were popular, pedestrian, female-authored, and often short-lived or unpublished” (646). As in any interpretive study of texts, the rhetorical context of the works considered, and what those works exclude, should be considered carefully when the temptation to draw conclusions from any sampling might occur.

Such warnings are significant as text-mining procedures strip a document’s original form, punctuation, and structure as well as any metadata accompanying the text. It is for this reason that I pair topic modeling with meta- and observationally-obtained information gathering of the blog

posts in my dataset (which provided some of the statistical insights in the opening of this chapter). From the computer’s perspective when it comes to text-mining and topic modeling, it doesn’t matter that in Weingart’s sentence “powerful” shows up before “dangerous”; it only matters which tokens exist in the sentence, how many there are, how many repeat, and if they exist together within one or several documents. The text as a mixed collection of tokens is often referred to as a “bag of words” in natural language processing (see Figure 1). The metaphor serves as a reminder that “bag of words” models reduce the complexity of natural language (its grammatical and

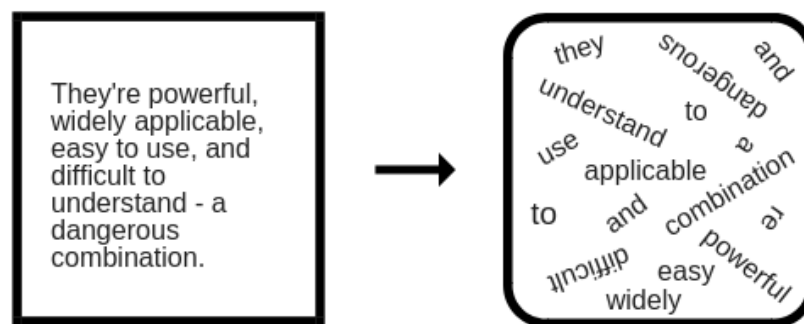


Figure 1 Visual representation of a sentence in its syntactical context as transformed into a “bag of words” to be read by machine operations.

syntactical structure) by attending to the quantification of individual tokens. A bag, or *document* can be any size of text from a phrase to a longer piece. *Document* in this sense refers not to the original text, but to each text or text segment to be analyzed. Weingart’s quotation can be considered a document. In this study the individual blog posts are documents. The *corpus* refers to the collection of texts used for statistical analysis, though often in the context of a topic model the corpus also refers to the “document-term-matrix,” which describes the documents by token frequency.

The necessary segmentation of texts into component parts in order to analyze a collection of texts with topic modeling strips the original texts from the nuances of their syntactical and contextual construction. When a word recurs across documents we do not have context to tell us

under what circumstances it is being repeated, for example we cannot know from methodologies that begin with a “bag of words” whether a term that recurs is being debated across texts.

3.4 Topics and LDA

Just because “bag of words” models extract tokens from their grammatical and syntactic structures doesn’t mean that those structures don’t come into play at all. The computer only cares what the tokens are, how they repeat, how many there are and that they appear in the same container. While the algorithm won’t care that “powerful” appears before “dangerous,” it *might* care that those terms appear together, especially if they’re statically likely to appear together, and even more especially if they’re likely to appear together in multiple documents in the corpus. Goldstone and Underwood summarize topics and the purpose of topic modeling as follows:¹⁶

The aim of topic modeling is to identify the thematic or rhetorical patterns that inform a collection of documents: for instance, the articles in a group of scholarly journals. These patterns we refer to as *topics*. If each article were about a single topic, we would only need to sort the articles into categories. But in reality, any article participates in multiple thematic and rhetorical patterns. Similarly, if a given word always expressed a given topic—if nature, say, were always part of discussions of the pastoral—we could classify topics by sorting individual words into categories. But words have different meanings associated with different contexts: *nature* is also associated, for instance, with science. The

¹⁶ It’s perhaps important to emphasize that Goldstone and Underwood are humanists, and so they describe the aim of topic modeling here for an audience of other humanists. For Blei et al. the LDA algorithm is a method of information mining – that information happens to be based in words.

algorithm response to this challenge by modeling a topic as an intersection of vocabulary and context: it identifies groups of words that tend to be associated with each other in a particular subset of documents (4, emphasis in original).

The baseline assumption for any collection of topics is that it contains a mixture of topics, that each document and thus the collection as a whole will contain patterns of language use that show up in different proportions across individual documents in the collection. In the MALLET toolkit parameters can be assigned to determine whether or not you want an *even distribution* of topics (topics are assumed to appear in an even distribution across the corpus) or an *asymmetrical distribution* of topics (topics are more descriptive, and indicate topical trends that may appear more concentrated in certain documents over others). Given that assumption, tokens are allocated into topics according to their statistical likelihood to be associated with one another in the corpus. While the parameters determine that we only look at the first twenty topics, each topic includes every token in the corpus. A topic is thus not a single word or concept and documents may represent multiple overlapping topics.

To help set the stage for a more technical description of LDA using my own data, let's begin with a hypothetical example. Say you are a part of a local farm-share CSA (Community Sponsored Agriculture) program and every month your box of fruits and vegetables comes with a newsletter with three main sections: a section that describes what's in your box, a recipe you might try, and a story or anecdote from the farm. This is the standard newsletter format and content. From your knowledge of all of the newsletters received over several years, it is possible to infer that key thematic trends might include seasonal language associated with the weather and sets of fruits and vegetables (sweaters and pumpkins! Picnics and watermelon!), the language of recipes (boil, cup, stir, bake), terms you'd expect from the mission of a farm-share (farm, community, harvest,

support), and terms you'd expect in the genre of a newsletter (newsletter, contact, share). Given the newsletter's conventional structure, several of these themes will appear in each individual newsletter, with varying degrees of emphasis.

Topic modeling depends on the assumption that texts are informed by several, potentially overlapping, thematic and rhetorical patterns of language use, and that those patterns will manifest in different proportions across a collection of documents. A well-informed reader of any collection of documents can infer rhetorical and topical trends well enough without computer assistance, so topic modeling can be used to test those inferences and track their trajectory across a set of documents (as I'm doing here). A topic model might also reveal some surprises. Say a model of the farm-share newsletters estimates that April and May newsletters are statistically more likely to contain themes related to children and kittens than language about seasonal vegetables. Thinking back, you recall that those newsletters relayed stories of the farmers' four children and their excitement over the fact that the barn cat had given birth to a litter of kittens. You hadn't realized that the anecdotes had taken over newsletter real estate generally apportioned to food-related discourse. You can read this topic in the model however you want. Perhaps some inference could be made about the care the newsletter author takes in building a relationship between farm-share members and the real people who live and work at the farm, but as with all interpretation, that suggestion is a *reading* of the topic. In and of itself it is not meaningful; it becomes meaningful through interpretive strategies more familiar to conventional modes of reading.

It is important to note that while a topic model suggests topics based on the recurrence of token and the likelihood that they are associated with other tokens in the corpus and its documents, it is speculative in that topic clusters *suggest* affiliations based on statistical probability. Topics might not fit readily into categories or labels such as "seasonal," though it is generally true that

most topics could be labeled descriptively, so long as it is understood that perceived outliers will appear. You might get a few words in a topic cluster that do not make immediate sense (what is “balloon” doing in the same topic cluster as pumpkins and potatoes?), or a topic that doesn’t seem that relevant or distinct at all. With some attention, however, such topics can still teach something about the documents in one’s corpus. As Ted Underwood mentions in a blog post, these “ambiguous” topics tend to “point... toward something I don’t yet understand, and I almost never find that the results are too ambiguous to be useful” (tedunderwood.com).

3.5 LDA Assumptions and the Context of Genre

Blei, Ng, and Jordan, who introduced LDA, define the algorithm as “a generative probabilistic model of a corpus” (996). That is, it’s a method of information retrieval. Given observable elements in the collection, it predicts thematic probabilities. The important thing to note, however, is that the generative nature of the algorithm isn’t describing the generation of topics; rather, it is describing that the algorithm *assumes the topics are already present*, it “assumes that the topics are generated first, before the documents” (Blei 78), not the other way around. This is why Goldstone and Underwood describe topics as “the thematic or rhetorical patterns that *inform* a collection of documents” (4, emphasis mine), and why Blei describes the generative nature of the algorithm as “the imaginary random process *by which the model assumes the documents arose*” (78). The topics are the source.

This topic-first orientation of topic modeling algorithms is perhaps one of the most challenging aspects to grasp, because from the humanistic tradition we’re used to starting with documents. Consider, however, that any time someone sits down to write they carry with them all

the experiences of writing they have prior to that moment and, importantly, any knowledge they have about the genre they're writing in. I have offered above that when a corpus to be studied involves texts that discuss a genre, this prior knowledge may reveal antecedent genre identifiers and other indications about the context of genre. I thus argue that it is the topic-first assumption of the LDA algorithm that makes it particularly well-suited for studying meta-genres. That is, if LDA is a method of gathering information about patterns of language in a collection of documents, if that collection of documents is to cohere, it coheres in part through the context of genre. For instance, when considered as a collection of texts about a genre, the corpus has the potential to reveal themes and rhetorical patterns that refer directly (that name) to antecedent genre types, key terms that refer to conventions, and other discourse trends for how a genre is described. In other words, they reveal the context of genre, to adopt Amy Devitt's phrase for the always already existing genre experience and knowledge that permeates our culture.

The assumption that a collection of documents contains some underlying number of rhetorical and thematic patterns that pre-exist individual instantiations is an assumption that itself relies on the context of genre. That is, Blei et al. assumed that LDA would be useful in mining a collection of documents for information about patterns of language the documents could be sourced from. In "Probabilistic Topic Models," Blei suggests by way of example that topic modeling could be used to "zoom in" or "zoom out" on newsworthy themes if one were to run a model of the entire history of the New York Times:

At a broad level, some of the themes might correspond to the sections of the newspaper—foreign policy, national affairs, sports. We could zoom in on a theme of interest, such as foreign policy, to reveal various aspects of it—Chinese foreign policy, the conflict in the Middle East, the U.S. relationship with Russia. We could navigate through time to reveal

how these specific themes have changed, tracking, for example, the changes in conflict in the Middle East over the last 50 years. And, in all of this exploration, we would be pointed to the original articles relevant to the themes. The thematic structure would be a new kind of window through which to explore and digest the collection. (77)

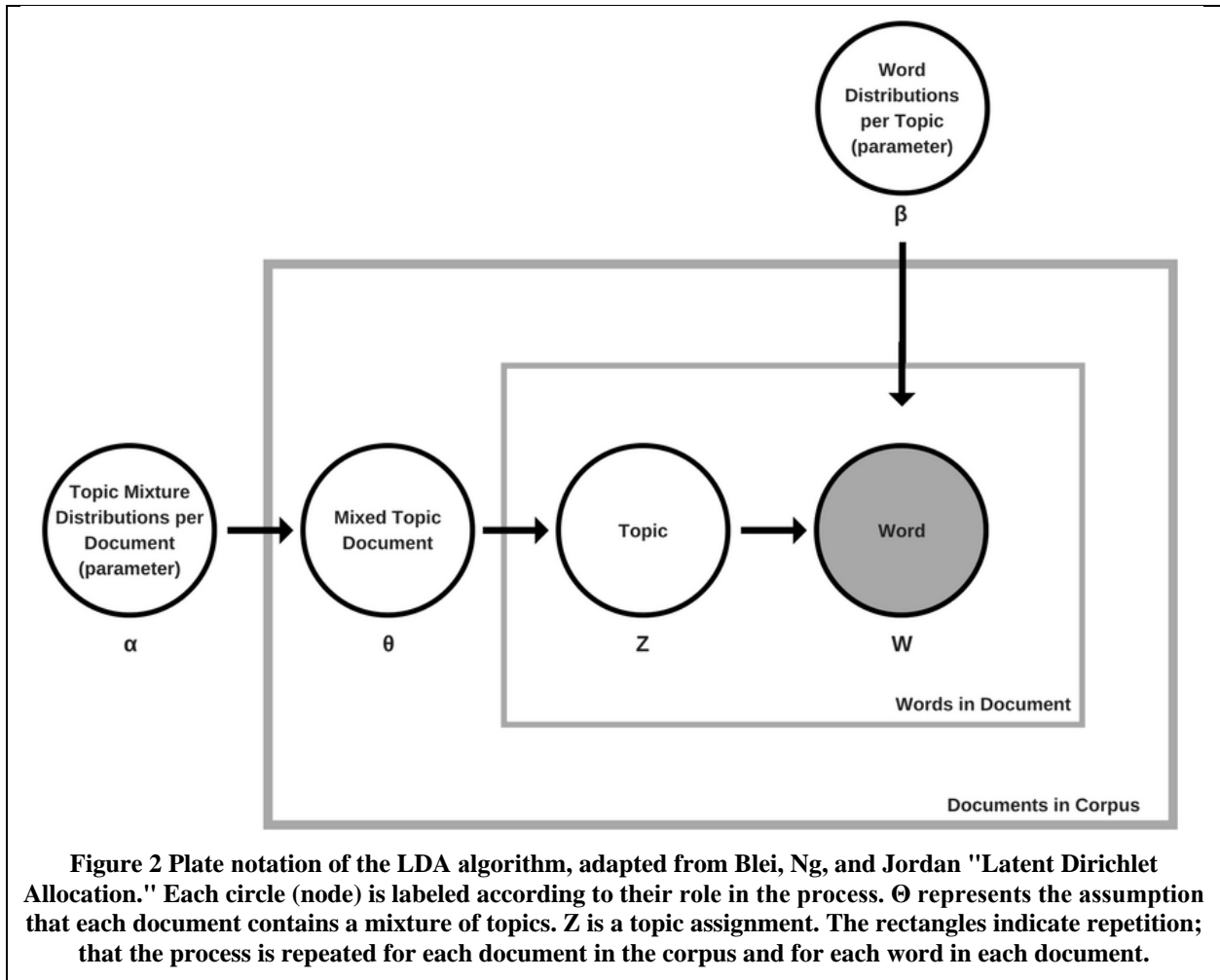
While Blei is invested in mining for themes he is also revealing how the models rely on the context of genre. That is, the topics are expected to reinforce the various content sections conventional for the umbrella genre of an international news publication. Consider that strong affective language in a topic about conflict in the Middle East could point to a range of opinion pieces about the conflict where a more “factual” topic would point to a range of conventional nonfiction journalism articles. The point being, for topic modeling to be useful the collection of documents should cohere in some way, and often that coherence relies at least in part on shared genre or genres.

The LDA algorithm predicts which topics inform a corpus through a complex mathematical procedure I do not have the expertise to unpack, but the so-called “plate notation” offers a visualization of the process (see Figure 2). Blei describes the plate notation in pseudocode as involving a two-stage process for each document in the collection:

- [1] Randomly choose a distribution over topics.
- [2] For each word in a document
 - a) Randomly choose a topic from the distribution over topics in step #1.
 - b) Randomly choose a word from the corresponding distribution over the vocabulary.

This statistical model reflects the intuition that documents exhibits its topics in different proportion (step #1); each word in each document is drawn from one of the topics (step

#2b), where the selected topic is chosen from the per-document distribution over topics (step #2a). (77)



Remember that a topic is “a distribution over words,” an estimation of the likelihood of a cluster of words to co-occur in a document or a corpus, and likewise a “distribution over topics,” is an estimation of the likelihood of some number of topics (which is provided as a parameter prior to executing the algorithm) to appear in the corpus. The model will predict topics according to certain parameters: the topic mixture distribution, which determines the distribution of topics across the corpus, and the word distributions per topic.

The MALLET toolkit offers various parameters to instruct LDA how to generate topics from a set of documents, thus providing different potential implications from the data. If the

parameters request a *symmetrical distribution* of topics all of the topics on the model will be weighted the same. Think of weight as an indication of how significant an estimated topic is in proportion to the number of topics. Alternatively, *asymmetrical distribution* results in a model with *differently* proportioned weights. In general, asymmetrically proportional weights are considered more descriptive because they reflect the quality of individual documents to share topics with other documents in variable proportions.

Take for example three of the topics in a 10-topic model (Table 1) of my corpus with even topic distribution. The number .5 is the dirichlet parameter which gives an indication of *weight* or

Table 1 Sample Topics from a 10-Topic Model with an Even Distribution of Topics

Topic	Weight	Tokens Assigned to Topic
2	0.5	bujo love pens feel tape start made pen washi leuchtturm notebook thing good dotted bullet_journaling stickers things make back makes
4	0.5	bullet_journal journal things list post life lists make work daily works book read lot simple books pretty needed track add
8	0.5	bullet_journal collections log future_log collection add month pen make daily_log index entries task signifiers monthly_log simply recommend write entry set

significance to the corpus in proportion to the number of topics it is looking for. For this model all of the topics include “bullet journal” or “bullet journaling” or “bujo,” a shortened term for bullet journal. The model suggests that Topic 2, which involves bullet journaling (misspelled) as well as paper and crafting supplies like stickers and washi tape (a craft “tape,” available in a huge variety of patterns and colors) is just as significant as Topic 8, which involves the bullet journal and the “official” language of the system (such as “future log,” “daily log,” “signifiers,” “migrate” etc.). Topic 4, however, is a little more challenging to add a descriptive label to. While it refers to lists, it is unclear what the content of posts with this topic could be discussing.

Table 2, in contrast, represents the first three topics in a 10-topic model that has been optimized to represent topics with an asymmetrical distribution. The dirichlet parameter as an indication of weight now has variable numbers. The higher the number, the greater the significance

Table 2 Sample Topics from a 10-Topic Model with an Asymmetrical Distribution of Topics

Topic	Weight	Topic
5	0.11123	collections task future_log daily_log collection signifiers monthly_log log entries pen write migrate index bullets entry simply bullet month recommend events
3	2.92294	bullet_journal page pages notebook list journal day system things time month make love work daily planner find post monthly write
9	0.19416	bujo pens pen leuchtturm love personally video washi bullet_journalling choose learning tape spreads week setup dotted stamps thing start filofax

of the topic to the corpus. So while once again we have a topic gathering some of the formal language of the system as described by Carroll, Topic 5, its significance to the corpus is dramatically lower than the topic describing supplies in Topic 9 or the more general Topic 3, the highest weighted topic for this model and one of the topics with “bullet journal” as one of its tokens, which involves “planner” and “system.”

Each time a corpus is run through the LDA algorithm using MALLET the output will be a different because of an element of randomness built into the algorithm itself, so even models approximating evenly-distributed topics will come up with (slightly) different results. I experimented with various topic amounts and parameters and ultimately chose for my discussion below 20-topic models with an even distribution of topics, and an asymmetrical (or optimized) distribution of topics. Considering the small corpus size I found that any more than 20 topics started to predict topics with flimsy coherence (that is, it became difficult to assign a descriptive label to the topic), and that for 10-topic models the topics involved a greater amount of overlap and, while descriptive in a general sense, had less differentiation between the evenly distributed topics and the optimized distribution of topics.

Texts according to topic modeling are unstructured documents without time. MALLET does allow, however, for researchers to keep the sequence of their documents in the directory, meaning that because the files were titled by date I could learn something about the relationship

between the significance the model assigns to document's likelihood of containing that topic and the time it was published. I titled the documents according to the date the blog posts were published (ranging from 2013-2017) and sorted the folder so that first documents were the oldest and the later documents were the most recent. This provides another layer of legibility to the models in that when graphed the likelihood of topics to appear in documents can be read in relation to the time they were released. The first 35 documents come from 2013-2014, documents 36-61 come from 2015, documents 62-84 come from 2016, and the remaining documents were published in 2017.

As Benjamin Schmidt has warned, however, reading topic probability as occurrences over time can be a slippery slope because a cluster of documents can show prevalence for words assigned to topics that otherwise wouldn't (temporally) belong there, due to the complex nature through which words are assigned to topics (Schmidt). It is thus with due caution that I draw time-based implications from the models and for this reason I did not label graphs according to the date range of the documents, preferring instead to refer to "early" and "late" documents as an indication of early adopters versus later posts. I try to be careful not to make any statements about change as a kind of progress narrative, but instead as an indicator of a *concentration* of terminology that may or may not have significance, given the time span within which they are concentrated.

To translate MALLET's output for the following discussion I make use of word clouds to visualize tokens assigned to topics in their respective proportions across the topics, and scatter plot graphs for a sense of how individual topics are predicted to occur within individual documents. To make MALLET's data legible to Wordle's Advanced capabilities (where you tell it the word proportions rather than it looking at a text and doing that for you), I made use of a macro-enabled spreadsheet created by David Hoover (Hoover "Prepare and Visualize..."). Word clouds have been

used to visualize topic models by Matthew Jockers and as well by Elijah Meeks, who argues that such visualizations are quite apt for topic models in that a topic shown only as a list of words (as I do in the table above) conceals that “the ratio of words is another dimension that is important for understanding topics” (“Using Word Clouds...”). Word clouds provide a sense of what terms dominate the topics and help to describe the cluster of terms associated with a topic, giving a sense of what terms takes up prominent positions in a topic and, depending on the distribution of a topic, a sense of that term’s importance for the corpus overall. They are also incredibly easy to engage with; the eye can wander and inspire speculations about what holds a cluster of terms together and how it functions for the corpus with or without my articulations of them.

3.6 The Bullet Journal Genre as Read through Topic Modeling

I set out to inquire whether or not the formalized discourse Carroll designed to describe the Bullet Journal and the ethos behind it persist in popular articulations of the genre as it is advanced by practitioners, and, if not, to come to some implications for what shifting depictions of the system’s conventions can teach us about genre stabilization and change, especially in light of the bullet journal’s popularity and the machine audiences that assist in elevating blog posts to the top of Google’s search results. In the discussion below, I narrate the exploratory path I took through the two models, the first being the more general 20-topic model with an even distribution of topics and the second being the 20-topic model with an asymmetrical (optimized) distribution of topics (see Appendix A for the topic keys and topic composition output from MALLET on which this discussion is based). The models provide a topic key as well as the corpus composition. That is, they output two sets of data: one offers the tokens as sorted into topics (the first twenty tokens per

twenty topics) and the second offers a statistical likelihood of each topic to appear in each document.

While the topics overwhelmingly reveal that the corpus is dedicated to the same subject, the nuances between topics reveal the context of genre as involving slightly different orientations toward the practice, that it can be conceived at once as a tracker, planner, journal, or task-management tool. While practitioners tend not to use the formal terminology Carroll designed to brand the system, the topics do cohere around the same component parts. Overall, the posts deal heavily with the “stuff” of bullet journaling, the supplies for bullet journaling and words that describe the system’s component parts, over the active programming mechanics and actions those mechanics promise to help practitioners perform. The topics as well reveal the corpus to be dominated by a craft-oriented view of the bullet journal stereotypically attributable to women’s interests, revealing the posts’ embeddedness in lifestyle blogs, which are overwhelmingly created for and read by women.

Recalling that for models depicting an even distribution of topics the topics will be more general in nature, the topics estimated in the 20-topic model I’ll use to begin this discussion suggests that these topics occur with similar significance for the corpus. That is, for any given document a reader is as likely to encounter one topic as another. Keep in mind, however, that the estimation of significance (the Dirichlet parameter) scales according to the number of topics in the model, so the topics have a lower estimated significance than a model with fewer topics would, albeit in a *uniform* distribution across the corpus. The 20-topic model for the entire corpus estimating evenly distributed topics offers seven topics that include tokens that label the system (e.g. “bullet_journal,” “bullet_journals,” “bullet_journaling,” etc.) and thirteen that do not. The

formal discourse presented by Carroll in the various media he has authored about the Bullet Journal is represented by Topic 4 (see Figures 3-4 below), with and without “bullet_journal” to give a



Figure 3 Topic 4 (20-topic model, even distribution)



Figure 4 Topic 4 (20-topic model, even distribution) without "bullet_journal_ token

sense of the relative weight of the other tokens in the topic. This topic indicates that next to the “bullet journal” token “collections” and “collection” are estimated to be significant to the topic, suggesting that when the blog posts do refer to the formal language Carroll designed to describe the system, they do so with an emphasis on collections. While “collections” is not necessarily a term specific to bullet journaling, it’s a term both Carroll and his practitioners use to designate lists that are organized by topic, which includes the time-based rapid logs as well as more focused list subjects such as pages dedicated to daily gratitude journaling, books read or books to read, vacation planning, and so forth. Of the 110 mentions of “collections” and the 61 mentions of “collection” only nine posts reference “collections” or “collection” in contexts other than those related to the organized list module in a bullet journal.

The names of the specific collections that make up the calendar-based modules that Carroll feels are the core of the system are weighted much less, with “future_log” having a slightly greater weight than the other modules in the topic. Tokens that reference processing mechanics such as *migration* and the use of *signifiers* to label and manage lists are also present at around the same weight. The component parts of the Bullet Journal as described by Carroll summarized above are all represented in the topic, suggesting that the model is viable in that it is a topic we expect the model to generate. It also makes clear that the discourse of “collections” has gained considerable traction for blog post authors in this dataset. Indeed, the posts frequently tout collections as the most important and most flexible part of the system, and several posts are dedicated directly to what kinds of collections might be helpful for others, relaying everything from meeting notes and wedding planning to a prayer list and even a collection for planning collections.

Recall that in *The Bullet Journal Method* Carroll describes the idiosyncratic system that eventually became the Bullet Journal as “a cross between a planner, diary, notebook, to-do list, and sketchbook,” (4). The topics in this model overwhelming indicate that the blog posts reference these genres as relevant to the corpus (see Figures 5-14), thus giving an image of the antecedent and adjacent genres that practitioners understand the bullet journal in relation to. If described by

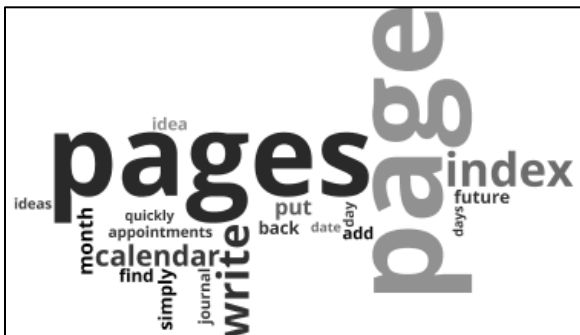
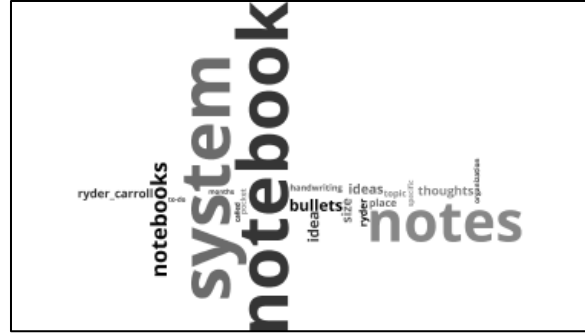




Figure 13 Topic 15 (20-topic model, even distribution)



Figure 14 Topic 16 (20-topic model, even distribution)

the words that hold the greatest weight and thus stand out visually in the topic clouds, the corpus involves “list,” and “lists,” “method,” “journal,” “method,” “planning,” “task” and “tasks”, “projects,” “notes,” “page” and “pages,” “tracker,” and “time.” For the most part, the clusters of terms in each topic cohere around these prominent tokens, for example the topic involving “task” (see Figure 12) largely describes a task-oriented “productivity” “system”, where the topic involving “lists” (see Figure 8) implies it is a “method” for dealing with “to do” items. The distinctions between these evenly-distributed topics are often mere subtle shifts in orientation.

For the most part, the topics tend to slant toward nouns and adjectives that describe component parts rather than verbs or actions. The topics thus depict the *stuff* of bullet journaling, and the processing aspects of the bullet journal appear in the topics with minimal emphasis. One topic emphasizing “month” (see Figure 7) involves several terms describing potential activities of bullet journaling, including “process,” “priorities,” “focus,” and “review,” tend to appear together across the corpus. The topic involving “tasks” (see Figure 12 above) also involves “completed” which implies the marking of tasks as finished, and the “notebook” topic refers to “information,” “thoughts,” and “ideas,” which implies that thinking happens through the practice, and the topic dominated by “monthly” also involves “tracking” and “actions” and “projects,” which implies making progress on projects through tracking (though this topic is fairly muddy and doesn’t cohere as well as others). By and large, however, beyond the topic involving Carroll’s terms “migration”

and “signifiers” and the topic “month” (see Figure 7), the topics tend not to focus very much at all on the activity of bullet journaling as a practice.

A few topics reveal different concerns and genres beyond that initial list above (those genres we might expect). There is a topic highlighting “Tracker” (see Figure 15) which most likely involves the popular customization of the bullet journal as including mechanisms for tracking habits and moods by coloring in squares on dot- and square-grid notebook paper. Another topic emphasizes “Digital” and Time” (see Figure 16) which associates the bullet journal with digital



Figure 15 Topic 18 (20-topic model, even distribution of topics)



Figure 16 Topic 19 (20-topic model, even distribution)

genres of note-taking such as “Evernote” which is also included in the topic. These provide an expanded sense of the context of genre into other media and new realms. Interestingly, the “tracker” topic also involves “affiliate” which implies that those posts emphasizing tracking also involve the disclosure of affiliate links.

The majority of the topics do not reference tokens that name the bullet journal, and ones that do offer a perspective of the bullet journal based on the materialities of the practice rather than on terms that describe its modules or associated genres. Perhaps of note is that the topic suggesting decorative materials like “colors” and “washi tape” involves the affectionate hashtag-able nickname “bujo” (see Figure 17) as well as the tokens “love” and “fun.” A topic involving “bullet



Figure 17 Topic 6 (20-topic model, even distribution)

journals” involves a lot of more general thing terms, including “things” itself, as well as “books” and “journal” and “pretty” as well as “beautiful.” The stuff of bullet journals can thus be interpreted to be about aesthetically pleasing things and creative craft.

A topic heavily weighted with “paper” as the most prominent term (see Figure 18) involves materials describing the supplies for making a disc - bound notebook, with a significant emphasis

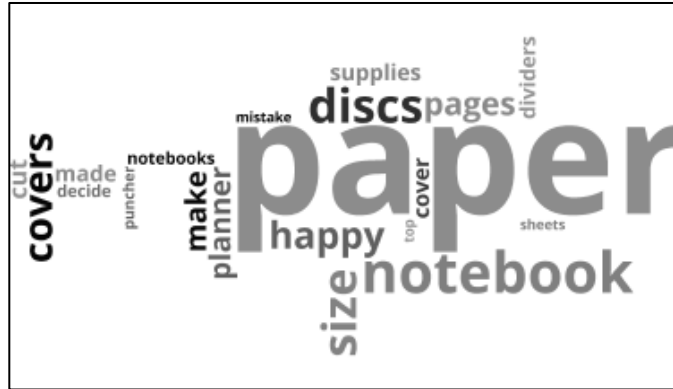


Figure 18 Topic 13 (20-topic model, even distribution)

on “paper” as the dominant term in the topic. Topic 13 begins to make clear the limitations of the evenly-distributed topic model, as exactly one blog post in the corpus involves constructing a disc-bound notebook for the purposes of bullet journaling. It is, however, a lengthy post of over 2000 words, thus just by the number of tokens it contributes substantively to the shape of the model. Its appearance in the model thus provides a place to transition into the 20-topic model with asymmetrical distribution of topics, which will give a better sense of topics as they vary in significance across the corpus.

The 20-topic model of asymmetrically distributed topics estimates that the topic involving Carroll’s formalized terms is estimated to have a fairly low significance for the corpus (with a Dirichlet parameter of 0.1448), though nonetheless appears as Topic 15, a very coherent topic emphasizing “collections” (see Figure 19) and the modules we expect (“daily_log,” “future_log,” and “monthly_log”) alongside “migration” and “migrate” as well as some terms for supplies like



Figure 19 Topic 15 (20-topic model, asymmetrical distribution)

“leucchturm” and “pen.” Unlike Topic 4 in the evenly distributed model the various time-based collections (e.g. “daily log”) as well as the index are estimated to be prominent in the topic, which used to share about equal weight with processing terms like “migration.”

The estimated significance or weight of the topic for documents in the corpus reveals that the topic appears in the corpus in a fashion far from dominant. The scatter plot graph (see Figure 20) offers a depiction of the estimated likelihood that this topic will appear in documents across

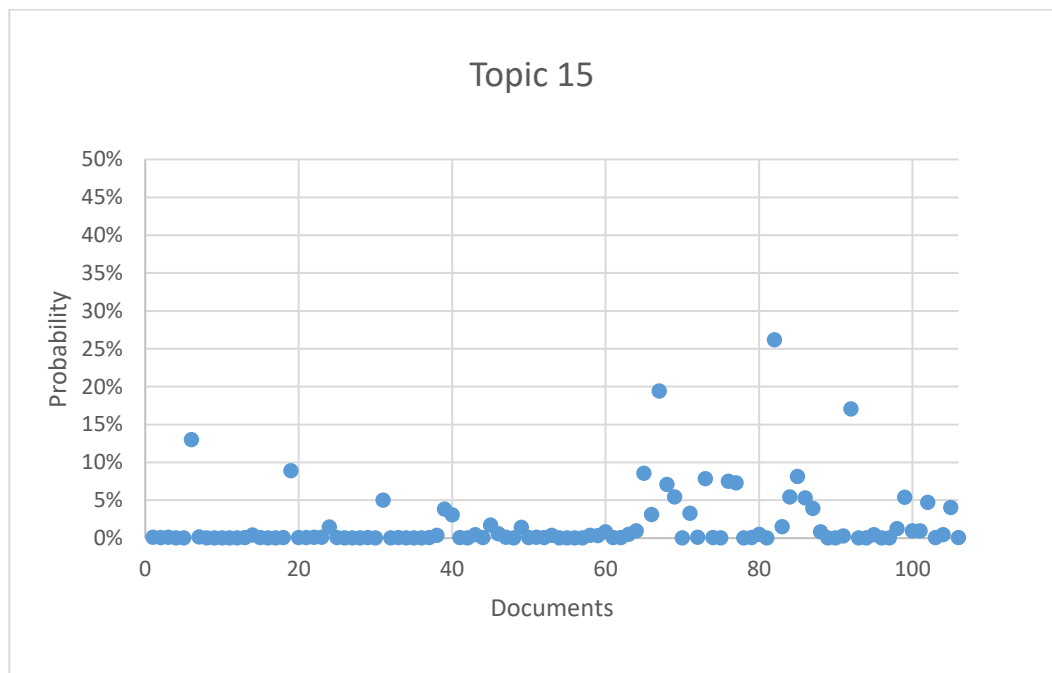


Figure 20 Topic 15 graph (20-topic model, asymmetrical distribution)

the corpus (for readability, the probability of the topic's occurrence in the documents is only represented up to 50%). The chart demonstrates that while the topic is predicted to occur in some documents, the probability of occurrence is rather low. While the topic does cohere in that it predicts the formal terms we might expect to appear in the same topic, it very clearly is not the dominant discourse the blog posts exhibit. Keep in mind that I titled the documents according to the date the post was published so earlier documents (roughly 1-60) come from 2013-2015 and later documents (roughly 60 and onward) come from 2016-2017. There is a concentration of documents with some probability of containing this topic in the second half of the corpus, suggesting that posts published later have a slightly greater probability of honoring the language Carroll uses to brand the system. The single dots with probabilities around 20% and higher point to three lengthy posts detailing the bloggers' own descriptions of the bullet journal system and the ways in which they've customized Carroll's modules for their own purposes, one of which mentions "collections" a whopping 38 times. Again, we see how the sheer number of tokens in a specific document can influence the topics. That said, many of the documents making use of "collection" or "collections" did so multiple times to reference various collections (though posts concentrated on collections tended to have more like five to eight mentions, so 38 is still the high end and extreme).

Overwhelmingly, the topic estimated to occur with the most significance and thus in the most documents (with a Dirichlet parameter of 3.350) is Topic 18 (see Figures 21 and 22), which includes "bullet journal" along with nondescript terms like "things" alongside calendar-based



Figure 21 Topic 18 (20-topic model, asymmetrical distribution)



Figure 22 Topic 18 (20-topic model, asymmetrical distribution) without "bullet journal" token terminology (month/day). As above, I include word clouds of Topic 18 with and without "bullet_journal" so that the other tokens and their weights are a little more legible than in the image where "bullet_journal," due to its significance for the topic, overruns the visualization. Once again, we have a view of the bullet journal as dominated by the stuff of the practice, a "notebook" "system" involving "pages" where one can "journal" and "list" "daily" and "monthly" "things" and "tasks." The scatter plot chart of topic 18 appears with a much higher probability of appearing in documents across the corpus (see Figure 23). While these are more general terms, they could

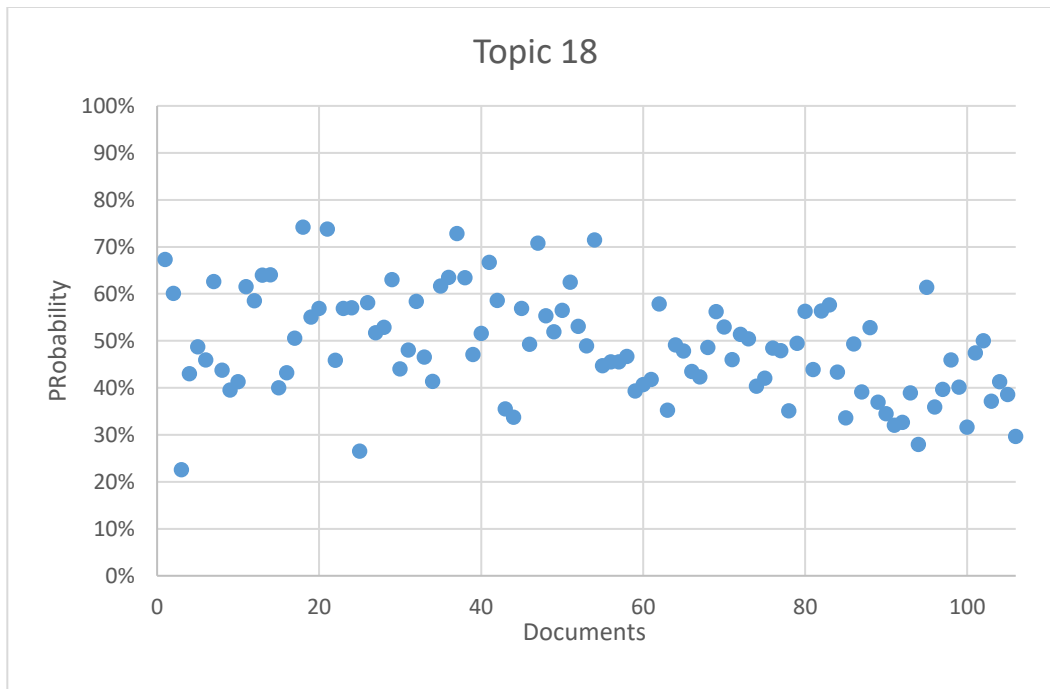


Figure 23 Topic 18 graph (20-topic model, asymmetrical distribution of topics)

very likely be used to describe the bullet journal modules as a more general preference than, for example, “daily log.” The bullet journal is nonetheless recognizable through this description as a notebook system containing these time-based component parts.

The remaining topics cluster around several areas: supplies, lifestyle content, and the affiliated genres we saw in the evenly distributed topics. Four topics prominently feature craft-oriented supplies (see Figures 24-27), including the topic for disc-bound journal making, “bujo” as pared with washi tape, pens, and stamps and now a topic emphasizing washi tape was predicted



Figure 24 Topic 1 (20-topic model, asymmetrical distribution)



Figure 25 Topic 3 (20-topic model, asymmetrical distribution)



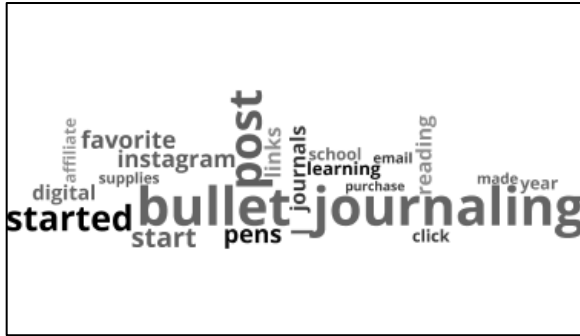
Figure 26 Topic 14 (20-topic model, asymmetrical distribution)



Figure 27 Topic 16 (20-topic model, asymmetrical distribution)

to co-occur with terms related to family. Once again, we have a topic emphasizing “month” which involves an assortment of terms without a clear coherence, though “tombow” and “brush” refers to brush pens made by Tombow Arts and Crafts, a U.S. art supplies company. The post estimated to be most likely to contain Topic 16 is a long post about how the blog author prepares a “plan with me” YouTube video, showing off her brightly colored and illustrated pages she draws and sets up at the beginning of the month alongside descriptions and links to her favorite supplies. This post does not disclose that the links to supplies are affiliate links, so the blog author is sharing her materials (perhaps) out of sheer joy in sharing materials. Several other posts mention Tombow brushes and share a similar approach to supplies and layout sharing, including another post which is titled “plan with me” with a similar show-and-tell style look at monthly spreads and collections before they’re filled out. With Dirichlet parameters of 0.039, 0.127, 0.135, and 0.054 respectively, these topics are not predicted to be especially significant in the corpus overall, though perhaps of note the “bujo” topic nears the estimated weight of the topic involving Carroll’s formal terms, so discussions of washi tape, pens, the Leuchtturm notebooks, and stamps is estimated to be as significant as Carroll’s branded discourse describing the system’s modules and processes.

Other topics predicted in the model evidence the lifestyle themes and sub-themes of the blogs the posts are situated in (see Figures 28-32). In addition to the topic above which includes language about family, there is are topics for homeschooling, sewing and fabric materials, student productivity and assignments, and two topics that seem to refer to bullet journaling for business and/or that reveal blogging as a financial endeavor, as Topic 2 (see Figure 28) involves disclosure



of “affiliate” links, and Topic 4 (see Topic 29) seems to describe tracking blogging goals. In general, the estimated significance for these topics for the corpus are quite low, though Topic 2 is estimated to have the third highest weight for the corpus with a Dirichlet parameter of 0.485, perhaps due to it including “bullet journaling” but also evidencing a trend in disclosing affiliate links. A scatter plot chart of the estimated composition of the corpus reveals that the concentration of documents estimated to include Topic 2 is greater in the second half (later half) of the corpus (see Figure 33) (note that this chart only estimates probably up to 50%, for readability). As a test

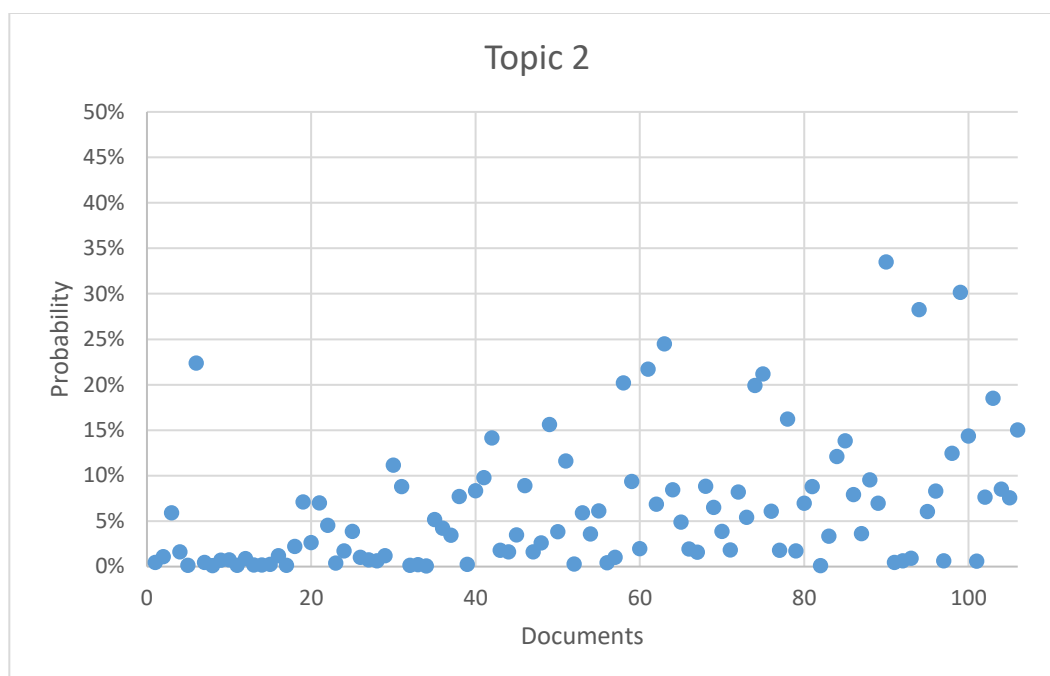


Figure 33 Topic 2 graph (20-topic model, asymmetrical distribution)

of coherence, I returned to the data I obtained through observation and conventional reading of the blog posts. 34 of the 106 posts involve the disclosure of affiliate links. The term “affiliate” is not weighted significantly in the topic, but keep in mind that posts disclosing affiliate links typically involves one brief sentence at the beginning or end of a blog post. If bloggers had to disclose each link as an affiliate link the token would appear in much higher frequency, as these posts tend to have lists of supplies all linked to locations where they can be purchased. Interestingly while this topic includes a general reference to a few supplies such as “pens” and “journals” this topic isn’t overwhelmed with the craft supplies as much as earlier topics. While it is the case that supplies sell, the absence of “affiliate” with topics dedicated to naming brands of favorite materials suggests a general pleasure in sharing supplies regardless of whether naming and linking to specific products provides financial benefits for bloggers.

The next most significant topic (with a Dirichlet parameter of 0.788) also emphasizes the stuff of bullet journaling (see Figure 34), though with an emphasis on planning and planners, which



Figure 34 Topic 0 (20-topic model, asymmetrical distribution)

provides a different tint than Carroll’s modular monthly and weekly bulleted rapid-logging lists (though “list” does occur in the topic). The scatter plot graph (see Figure 35) demonstrates

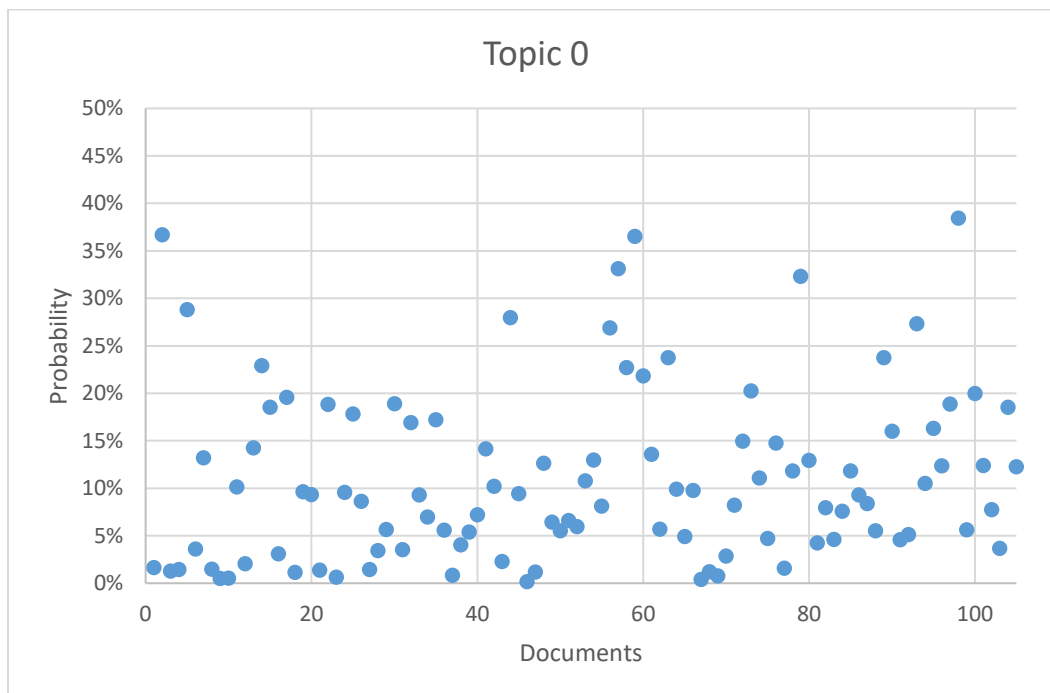


Figure 35 Topic 0 graph (20-topic model, asymmetrical distribution)

that this topic, which suggests a solid footing in a context of genre involving planners and planning, is estimated to hold significance across the corpus, with only a slightly greater concentration of topics later in the corpus than earlier in the corpus. The topic thus suggests that an orientation toward the bullet journal as thinking of its weekly and monthly lists in relation to pre-printed

planners' allotted spaces for the same. We thus might think of the bullet journal as a version of a DIY planner.

3.7 Limitations

Modeling a corpus of this size and scope has significant limitations. As visible in the scatter plot graphs, even the topics estimated to have more significant weight than others in the model were not estimated to have that much significance across a substantial number of documents, so as an indication of trends across the documents were sometimes a bit of a stretch, though I tried to be careful to hedge plenty where the topics seemed to be suggesting something, but that suggestion wasn't especially strong or wasn't estimated to appear in that many documents. As made evident by the one topic about disc-bound journals, the sheer mass of one post among so few documents can greatly skew the results of the models. It is thus hard to know if the topics seeming to evidence a greater focus on materials and supplies are the case merely because they come from the bulkier posts in the corpus.

In addition, the benefits I posit for topic modeling meta-genres about a specific genre has limitations in perhaps equal measure. The topics are overwhelmingly about the same subject, and even though that subject is treated variously (and interestingly different than its creator's terms, which I'll discuss below), that variety is rather nuanced. It is possible to make something of those nuances—like the slight shifts in orientation between words that coalesce around “method” as opposed to “system”—but as topic modeling always involves an element of randomness, it is

tempting to make *too much* out of those nuances and it is impossible to distinguish nuance from randomness in the first place in some cases.

A discussion of topic models in the mode I attempted above is also a challenge in that as estimations of the patterns that inform a corpus topic models have a lot to teach but seem best handled as exploratory. Thus, their discussions should be likewise exploratory. Perhaps this is one reason for why so much of the discussion around topic modeling (in the humanities, anyway) happens through blogs. In my ideal world I would have represented all 20 topics in word clouds from each model over several pages and left my readers to discover patterns with little guidance from me. As it stands, while it felt important to point to topics by their most significantly weighted words, I fear the discussion reads like a rather long list of me pointing to things that are better explored visually and perhaps by wandering. This is all not to say that there isn't something to take away from this experiment, as I'll explore below.

3.8 Conclusion

The models discussed above reveal much about the context of genre that informs the bullet journal practice, including the many genres Ryder Carroll claims the bullet journal can absorb that practitioners' posts reinforce in their posts. These visible threads provide insight into what makes the system legible to potential practitioners and to search algorithms. While the evenly distributed topics reveal a variety of genres in the context of the bullet journal, the activities of planning and the genre of planners are a significant trend in this set of blog posts about bullet journaling. As a

gesture toward concluding, I explore some of the implications for this trend and relay possible opportunities for future research.

Overwhelmingly the topics tend to coalesce around the stuff of the *system*, rather than the *practice*, that is, they discuss in general terms the component parts, but the topics do not reveal much about the processing mechanics that interested me in the genre as a paper program. Rapid-logging, the action Carroll describes as “the language the bullet journal is written in,” does not track as the language practitioners use to describe the system, and while “lists” make an appearance in the topics, the topics do not seem to show much attention to what a list does or can do. In short, if the lists referred to in the posts are rapid-logs, it is hard to know by the topics. Importantly, while I make a point of emphasizing that the models’ depiction of these blog posts as invested in the “stuff” of bullet journaling rather than the practices of intentional living the system promises to teach its practitioners, that trend in the topics doesn’t mean such an education isn’t happening, just that it isn’t the focus of lifestyle bloggers’ posts about the system. As genres are perhaps most visible as forms, these depictions are not surprising. Perhaps these bloggers felt as though the processing mechanics were a given, or that planning as a method of keeping track of present and future tasks, events, and goals already accomplishes what the bullet journal promises. Perhaps as well it is the case that illustrating and decorating one’s bullet journal is for some an important component part of living mindfully in that even beyond handwriting it requires one to slow down and truly attend to what one is writing. Perhaps because individualized collections are what make the bullet journal customizable for each individual that is why so many posts focus on personalized modules (which are often beautifully illustrated). The speculations posited here demonstrate in

part how topic modeling generates more questions than it answers, offering openings for further points of inquiry.

Considering that the *Bullet Journal Method* was published in 2018 after a surge of interest represented in part by the blog posts in this corpus, it is possible to see the book's emphasis on the *practice*—which he sees as rooted in intentional living—as a kind of corrective to trends revealed in the models regarding the bullet journal as a DIY planner and further trends that deal with the “supplies” of bullet journaling as involving high quality pens, stickers, washi tape, and other materials for illustrating and decorating one's notebook. While Carroll is generous within the book and beyond toward the those who have embraced the bullet journal, the version of the system as involving the far from efficient drawn out layouts, decorative illustrations and ornament, and endless custom collections is something he doesn't attend to directly when people ask about what the genre has become. In one of the final sections of the book Carroll warns against the temptation to customize the system before ample practice: “As exciting as it can be to dive into customizations, if you're new to Bullet Journaling, I suggest holding off on implementing your own complex Collections until you're comfortable using what you've learned [earlier in the book]” (233). While he refers to customizing collections, he doesn't mention illustrations or other ornamental decorating. He does cite examples in the book and on bulletjournal.com that involve interesting handwriting or calligraphy, pre-drawn layouts, colorful pen choices, and illustrations, but those elements tend to be minimal and are presented without comment. He attends instead to the elements that are integral to what he's discussing as a different take or new dimension of the system as he formalized it. As described briefly above, however, a cursory look on the web or

social media suggests these ornamental qualities are the norm, so it is unsurprising that they made their way into blog posts about the system.

After taking in the topics I went in search of possibilities for why the association with planners was so strong in the topics and to see if the materialities of bullet journaling had anything to share with planning and planner-oriented blog posts from similar content creators. Carroll's use of the term "spreads" to describe two facing pages in the notebook is also a term planner enthusiasts (sometimes so-called #planneraddicts) use to describe the facing pages of their filled-in planners. A Google search of "planner spreads" reveals extensive imagery of pre-printed planners illustrated in similar ways some bullet journals are, with washi tape, highlighters, and brush pens like the Tombow brand ones that came up in the topics. A search limited by years suggests the sharing of illustrated and decorated planners in "plan with me"-style posts started to become more popular when the bullet journal also first emerged, between the years of 2013 and 2015. The topics thus offer a potential springboard for a deeper look into the broader culture surrounding the bullet journal as one practice within a constellation of practices that gained traction around the same time. It appears from this cursory look that the bullet journal tapped into a ready and waiting culture of design and craft-oriented planners and planning activities, a culture reinforced by online sharing on the social web. As many of the most popular pre-printed planners including the LifePlanner, the Passion Planner, and the Happy Planner were all created by female-led companies and with stereotypically feminine design details and features, it may be possible to tell the story of the bullet journal as the DIY version of these expensive luxury planners.

As so many of the bloggers whose posts made up the corpus for this study present as women and seek to reap some financial gain from their blogs, their participation in the genre involves participation in the culture from which these luxury planners have emerged: a culture of

female-empowered entrepreneurial ambitions. Erin Brooke Duffy describes the labors of lifestyle content creators as *aspirational labors*. In her study of women content creators, she insists that content creators are “keenly aware” of the ways in which their actions, such as liking a product’s sponsored post or partnering with a brand even if for close to no money, impacted their personal brands. “In the popular imagination,” she writes, “these activities are widely touted as platforms for self-expression and individualism—resonant ideals in discourse of post-feminism. By re-routing *consumption* as a mode of cultural *production*, these activities promise to disrupt traditional gendered hierarchies and financially empower (mostly) female participants” (42-43). Lifestyle bloggers may legitimately find the bullet journal system useful and empowering and thus want to promote it to their readers and followers, but it is also likely that they take it up fully aware that they are benefitting from the system’s popularity. Indeed, many posts in the corpus reference “giving in to the hype.” In addition, by focusing on the materialities of bullet journaling, they can attach recommended supplies to affiliate links therefore supplementing other revenue streams for their blogs.

When Amy Devitt defines genre as involving the context of genre, she asserts that genres are “a reciprocal dynamic within which individuals’ actions construct and are constructed by recurring context of situation, context of culture, and context of genres. Genre is visible in classification and form, relationships and patterns that develop when language users identify different tasks as being similar” (31). As representations of individuals’ discussion of bullet journaling, the posts that made up the corpus I modeled here do depict that the genres that inform the bullet journal involve at once planners and planning, task and project management, journaling and diary keeping, and drawing and doodling—the genres Carroll himself suggests the bullet journal can absorb. They suggest, with a little contextual research, that the bullet journal gained

traction with an existing culture of craft-oriented planners with feminine design details that make handling life's abundance of information more pleasant to deal with. The topic models suggest that bullet journal practitioners contribute to discourse about the genre from the perspective of those various antecedent and adjacent genres, making topic modeling meta-genres a viable method of revealing the context of genre that informs genre practice, and that reveals the legibility of genres for both human and nonhuman audiences. A larger study topic modeling a corpus of blog posts by so-called #planneraddicts or under a search for "plan with me" blog titles from around the same date range would perhaps reveal further points of connection between planning aficionados and early adopters of the bullet journal and is a potential next step for this study.

4.0 Recollection, Remediation, and Re/Processing: Nonce Notebook-Based Information Systems and their Processing Mechanics

In an article for *The New Republic* called “Why the Humble Notebook is Flourishing in the iPhone Era” from June 2016, Josephine Wolff had this claim for why pen-and-paper methods like the bullet journal have become so popular despite the ever-increasing options in digital tools:

The bullet journal enthusiasts insist that filling notebooks is about far more than just getting things done or crossing off lists—it’s also about paying attention to, and taking stock of, your life. It’s an act of agency—deciding who you want to be and what you want to do and setting those decisions down in pen on paper where they cannot be deleted or ignored or erased... It’s this combination of productive, therapeutic, aesthetic, historical, and spiritual elements that makes notebook-keeping such an addictive and potent activity, even—or perhaps especially—in a world of countless productivity apps, online to-do lists, and gamified habit-building tools. (Wolff, “Why the Humble Notebook...”)

The notion that the labor of handwriting and designing, appropriating, or customizing a system such as the bullet journal empowers a practitioner as “an act of agency” is a commonplace across popular media about pen-and-paper systems. I have been discussing, however, how the systems’ advocates depict the constrained mechanics of such systems as performing a kind of rhetorical training, where practitioners collaborate and cooperate with such mechanics to *defer* and *distribute* responsibility for life’s abundance of information to the constrained mechanics of one’s system. For genres like the commonplace book and the bullet journal, constraints are taken up, appropriated, and customized by practitioners as they have coalesced into genre conventions that are further reinforced and circulated by the nonhuman mechanics of search algorithms when

discussions of them appear online in popular and social media. The prior chapters made use of published and publicly accessible and widely circulating discourse. This discourse has helped me to explore the promises these systems make for their practitioners and their legibility for machine audiences, but offers less about such systems as they contribute to individuals' routine daily lives.

This chapter relays the experiences of everyday writers for whom robust notebook-based information systems serve productive and functional purposes for their practitioners, whom I interviewed via Skype through a semi-structured interview protocol. These individuals were referred to me or who self-identified as having a robust notebook-based routine writing practices. My points of inquiry were exploratory in nature, aiming simply (but not so simply) to glean an understanding of the motivations behind such practices and how system mechanics are understood to serve those motivations. The systems the interview participants describe are very much personal information collection and management systems, systems that the practitioners believe serve their purposes better than, or best in conjunction with, digital tools, and/or as suits the writers' preferences. The language the participants use to describe their systems reinforces an understanding of these systems as paper programs. Their methods of notetaking, journaling, planning, and tracking are filtered according to organizational mechanics and processed through some method of returning to reread, rediscover, analyze, and/or make use of the information captured in some way.

Ultimately, three thematic trends emerged that I will use to structure a discussion below. These themes serve to describe both programmatic and affective dimensions of the notebook systems as discussed in the interviews. They include: 1) *recollection*, which deals with the use of some systems as memory-storage technologies as well as the positive memory associations practitioners have with the longer-histories of their handwritten practices, 2) *remediation*, which

refers both to the ways in which some systems transform life's data into visual forms as well as the systems as aiding in the reparation of behaviors, habits, and mental-health management and outcomes, and 3) *re/processing*, which describes unstructured present-tense writing such as journaling, brainstorming, and freewriting which serve to provide cognitive and affective distance from experiences. These themes are not exclusive and there is substantial overlap between them. In the conclusion of this chapter, I draw implications for the complexities the writers' deferral and distribution of responsibilities to their systems' constraints.

4.1 Semi-Structured Interviews and Thematic Analysis

Participants for this study were referred to me by word of mouth, either through someone familiar with my research interests who was aware of someone else who might be willing to speak with me, or through referring such a person in response to calls I posted to Facebook (to my private network of friends) and to Twitter (to my public network of personal and professional contacts).¹⁷ One participant self-selected herself as appropriate for the study in response to my Facebook request. Three participants discovered my request via Twitter, having seen my tweet or someone who had retweeted the call to their own followers. This method of solicitation had its limitations, but none that I felt were detrimental to the value of the study. Soliciting by word of mouth meant

¹⁷ The Facebook post read: "Do you, or someone you know, have a robust notetaking practice/system for personal information management, reading notes, career goals and planning, health information tracking, self-care and mindfulness, quantified self experiments, creative journaling, or other purposes? I'm especially interested in those practices that have coalesced into rather precise systems (or those derived from precise systems, like Getting Things Done or bullet journaling) as opposed to unstructured idiosyncratic notetaking. Would you or that someone you know be willing to talk to me in depth about it? Full disclosure: this would be for a chapter in my dissertation and/or a future academic article." The Tweet read: "Do you, or someone you know, have a robust notebook-based system for personal info management, reading, productivity, health info tracking, self-care & mindfulness, quantified self experiments, or other purposes? Soliciting interviews for a diss chapter. Pls retweet!"

that I had prior knowledge of four of the seven participants due to overlapping friendship circles or having been classmates or colleagues at some point in our lives. Regardless of prior knowledge of each other, I felt a sense of comfort and ease with all interview participants, which I attribute to participants' enthusiasm about their practice and (as was expressed to me several times), an excitement that someone thought to study such practices.

Because interview participants came from my own social and professional spheres and connected networks, they are relatively established in their lives, careers, and relationships, and are also well-educated. Most of my participants hold terminal degrees in their fields. All of my participants present as Caucasian. I spoke with two individuals who prefer the personal identifiers "he/him," four individuals who prefer "she/her," and one gender non-binary individual who prefers the pronouns "they/them". In all but one case these individuals were suggested to me by mutual friends or acquaintances. Regardless of some familiarity with some interview participants, in all cases I had no knowledge of the notebook systems we discussed prior to our recorded conversations. In cases where our familiarity provided contextual information I would otherwise not have, I asked participants to articulate their experiences in their own language as though I was unfamiliar with that context and/or I lightly edited the transcripts to redact that information.

In preparation for the interviews I assembled a semi-structured interview protocol based on the same starting question requesting a description of the system and an articulation of what the interviewee felt the purpose(s) of their system(s) to be, followed by several areas for follow up questions in several subject areas, including materiality, place and space, media influence and research (did outside resources influence system design), affective orientation, companion and other practices, and teleology. The semi-structured interview approach allowed me to identify several key areas I wanted to ask about, but in a way that those areas could be touched on out of

order depending on the flow of conversation, and that also allowed for new questions whether unexpected topics or themes presented themselves. While various aspects of these subject areas will make an appearance below, I focus primarily on purpose, mechanics, and affective dimensions. I do not have the space here to consider the extensive breadth of detail interview participants went into to describe the various aspects of their practices, though I hope to take advantage of the responses to other content area questions in future work.

Some unstructured talk entered the conversations where participants asked about my research or I'd offer my own experience as a place of contrast or comparison. This talk often led participants to new insights or additional information they had not yet thought to share (for example, Robert realized he also keeps a type of commonplace book). I tried my best to inhabit the discourse participants themselves used, though on occasion the way I framed my questions would provide vocabulary which participants would agree with, refine, or refute. These occasions were rare and where relevant, I take care to disclose the contexts within which certain questions were asked in the discussion below.

The Institutional Review Board (IRB) at the University of Pittsburgh reviewed my participant solicitation methodology, informed consent agreement,¹⁸ and the interview protocol and determined the study to be exempt from further review and oversight by the IRB. The review process provided me with ample confidence that the limitations I cite above would not produce undue bias and would not be significant enough to require a modification to my interview procedures. According to participant preference, I use either first names or a first name pseudonyms, and any identifying information has been excluded from video capture of the

¹⁸ The IRB determined the informed consent form to be unnecessary because of the exempt status of the study, but due to my own sense of ethics and a desire to fully disclose to my participants how I would record and make use of the interviews I had participants sign the informed consent forms anyway.

interviews (e.g. Skype names are outside of the capture window) and the transcripts of our conversations (see Appendix B for the protocol and consent form).

To code and analyze the interview transcripts I read through each interview several times and performed a thematic coding procedure loosely informed by Virginia Braum and Victoria Clarke's 2006 article "Using Thematic Analysis in Psychology." While this is not a psychological study, I had various *subject areas* I discussed in the interviews, and I needed a method that could track those areas as well as help me articulate the thematic trends that emerged that I could not have otherwise anticipated. This qualitative method proved flexible enough to accommodate ongoing adjustments and structured enough to provide me with the constraints I needed to sort, filter, and categorize dominant trends across 148 pages of transcripts. As another method of discovering patterns of discourse revealing thematic and rhetorical trends, it also felt appropriate as a method in concert with the others in this dissertation.

The phases of thematic analysis as outlined by Braum and Clarke involve the following: involve the following: as outlined by Braum and Clarke are included in the table below, which I edit with italics to describe my own versions of these phases (see Table 3). Importantly, Braum and Clarke emphasize that the process of thematic analysis is recursive, and researchers should find themselves returning to prior phases to make revisions and refinements (86). I found the iterative quality of the process to be revelatory, as it took several passes. While my initial method of coding the transcripts and aggregating trends into themes relied on Braum and Clarke's method as described above, in the resulting discussion of those themes I allow myself substantial flexibility to zoom in ethnographically to describe poignant excerpts in context. I found it challenging to prioritize concision and synthesis because such examples tended to bring new insight to the themes

Table 3 Phases of Thematic Analysis, adapted from Braum and Clarke

Phase	Description of Process
1. Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas. <i>Transcribing served as a first pass, re-reading served as a second.</i>
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire dataset, collating data relevant to each code <i>through manual annotation.</i>
3. Search for themes	Generating codes into potential themes, gathering all data relevant to each potential theme <i>by aggregating codes in MS Word document.</i>
4. Defining and naming themes.	Checking if the themes work in relation to the code extracts [level 1] and the entire dataset [level 2], generating a thematic ‘map’ of the analysis. <i>Defined each of the three dominant themes and the codes that exemplify them.</i>
6. Producing the report.	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of extracts, relating back to the analysis to the research question and literature, producing a scholarly report of the analysis. <i>Relevant scholarship is interspersed into the discussion below, and excerpts are considered with flexibility rather than reported systematically.</i>

of re/processing, recollection, and remediation that often challenged and complicated a broad view of the theme in question. As such, I felt they were important to treat in depth.

4.2 Why They Write

As each individual system and purpose is unique to the practitioners, I include below brief descriptions of the interviewees and their systems so that when I refer to participants by name later on in the discussion a general sense of their approach will be available as context. As you’ll see, some of the practices are identifiable as genres of notebook-based information systems, and some are individual practices that might take place in a pre-printed planner or steno-notebook, for example, but that do not necessarily fit within a particular genre of notebook system. Such individual systems do, however, make use of mechanics that are recognizable and that overlap with those in established genres. For this reason, I describe the practices as “nonce” systems.

Meaning “for the ans” or “for then once” or “for the one time,”¹⁹ nonce is a term with roots in linguistics and poetics, it is meant to signal a combination of existing forms for an occasional purpose. A nonce system thus can be interpreted as an assembly of mechanics from various systems, which even if they are not referring to recognizable genres could be nonetheless repeated by another practitioner.

Robert is a pediatrician who also holds a position in a public office and who works voluntarily for a technology-based nonprofit. He takes his notes in a business steno-notebook, primarily to “memorialize” information he feels might be important to return to at some point, though also to work through information he needs to remember and keep track of. His current notetaking practice is greatly influenced by strategies he practiced during college and as a medical student. Of the participants in this study his practice is the least formalized in terms of internal rules and constraints.

Catherine is an Assistant Professor of Composition and Rhetoric at a small college. Her system is a tracking system which began when she was a graduate student to help her stay motivated to complete the work of the dissertation. She tallies the number of hours she spends on “work” which includes research and writing, teaching and preparing to teach, as well as household labors like laundry and cleaning. She also tracks habits she hopes to inculcate or modify like exercising and eating out. Once she reaches 500 hours of work she gives herself a large reward, like a weekend vacation with her partner or a large purchase she’s been saving for. The system

¹⁹ In poetics, this term is meant to describe a poet’s “new” combination of familiar formal components (originally, metrical feet). As *Patterns of Poetry: An Encyclopedia of Forms* describes it: “Many poems are written in patterns invented by the poet, which are called *nonce forms*. The adjective is derived by misdivision from the medieval phrase ‘for then anes’, meaning ‘for then once,’ or ‘for the one time.’ By the renaissance this had become ‘for the nonce,’ and so a poetic form devised for a single poem was a form ‘for the nonce,’ or a nonce form. All the traditional patterns of poetry were once nonce forms” (Williams, 1986, p. 20).

transitioned with her into the job market and the first years of her tenure-stream job, though she has relaxed its use and has transformed it slightly, which she attributes to the system having helped her feel more in control of her work routines.

Lee, who identifies as a trans non-binary gender individual and prefers the pronouns they/their, dropped out of a doctoral program in Literature in November of 2017 and is now working as a mental-health intake professional. They maintain both personally- and work-oriented notebook systems, involving unstructured freewriting called “morning pages” (inspired by an approach outlined by Julia Cameron’s *The Artist’s Way: A Spiritual Path to Higher Creativity*) and a port of the bullet journal rapid logging mechanics to a steno notebook they use for work tasks. During high school their parents discovered their personal journals and had them committed, leading them to feel for a long time that notebook-based writing was not a safe space. Having returned to writing has been a major source of joy now that it once again feels like a safe space.

Linda has a PhD in Cell and Developmental Biology and works as an industry grant writer for a small company. Her system involves taking notes during meetings that she may need to recall at some future date, which includes what happened in the meeting as well as associated tasks. She thinks of her system as an “external hard-drive,” capturing important information she’ll need to return to in some capacity in the future. As the system involves chronological recording but requires nonlinear reading, she has developed a robust system of finding mechanics so that the information captured in her notebooks is easy to retrieve when needed.

Dane is an analyst and self-tracker, who has been logging how he spends his time for the last ten years. He started by tracking the hours he spent consuming media (reading books, watching films, playing video games, listening to podcasts, etc.) and that tracking has exploded into tracking how he spends all of his time, in addition to tracking calorie consumption and spending habits. His

system is part analog and part digital, recording how he spends his time in an analog format with color-coded time blocks dedicated to what he spent his time doing and then moves that data to excel where he designs extensive data dashboards with visualizations (largely bar and line graphs) charting and comparing how he spends his time. He does admit that some of the tracking is for the purposes of behavior modification, but largely tracks his time out of curiosity.

Amy has a PhD in Physics and is currently pursuing a postdoctoral position at a polymer physics institute in Germany. She has two separate systems: the first is a health-tracking system wherein she explored and experimented with food related symptoms to manage her disease, ulcerative colitis. While she started tracking her food intake and systems through the use of a preprinted planner, she has since moved on to a digital app for tracking symptoms that she describes as “faster, not easier”, after feeling like she had gotten a handle on her health symptoms enough that the “experiment” of which foods exacerbated her system was largely complete. Her second system is a planning system wherein she keeps track of her daily tasks and appointments, which she also keeps in a pre-printed planner with space dedicated to each day. She breaks down her daily tasks in a specific way, including color-coding to offer herself visual cues for what type of tasks are upcoming on a specific day. In addition to these systems, she occasionally journals in a document on her personal computer.

Megan is a former lawyer with bi-polar disorder who in 2015 fell and suffered a head injury significant enough that she has been unable to return to work. She described two practices: a version of the bullet journal and “morning pages” as informed by *The Artist’s Way*. At her doctors’ recommendation she attempted to use a preprinted planner to structure her time and return to a sense of a daily schedule, but while it helped her to track how daily activities were taking up her energy, it was not helping her accomplish recommended tasks like meditation and rest, or

motivating her to continue with hobbies she used to care about. Her bullet journal system works for her when planners couldn't, providing her with a system for establishing healthy routines and habits by creating visually appealing trackers that required her to fill in squares or icons when a task was completed, which has served to be incredibly motivating for her.

All practitioners emphasize that their notebook-based information system practices are routine and regular aspects of their daily lives. Practitioners return not only to make use of information previously captured (in ways described in further detail below) but do so through daily or regular routines which serve to reinforce a sense of predictability or reliability that regular use of such systems inculcate. When I asked participants about the routines surrounding their practices, they discussed not only the repetitive return to their systems, but their writing as associated with preferred time of day, environment, space, and materials. Participants also overwhelmingly discussed pleasure in using their materials, and in the act of handwriting. While the intricacies of place, space, and materiality in relation to these practices is currently outside of the scope of this chapter, it is worth a point of emphasis as a lens to the discussion below that these notebook-based practices are routine.

4.3 Recollection

4.3.1 Tertiary Memory and Finding Mechanics

The notebook-based systems described by participants rely on the bound nature of the notebook to facilitate chronological and non-linear reading and writing, and involve mechanics like topical headings, indices, and finding mechanics to recover information recorded previously.

While search mechanisms for digitally-stored notes make finding easier and more efficient, they insist that the act of writing with pen-and-paper better serves memory recall functions. Studies such as Meuller and Oppenheimer's much cited "The Pen is Mightier than the Keyboard: Advantages of Longhand Over Laptop Note Taking" have demonstrated that longhand notetakers tend to write notes to process information while laptop notetakers tend to write what they hear verbatim, thus supporting the belief that pen-and-paper notetaking improves information recall. Importantly, however, such studies—which attempt to mimic a classroom lecture hall setting—are invested in whether students can test well, which may involve recall involving large and complex swaths of information. Interview participants' systems do involve many processing mechanics to aid in understanding what is being written down (discussed in a future section below), but in terms of memory recall describe only the fact of a notetaking session having happened in the notebook.

Bernard Stiegler describes this kind of memory as *tertiary memory*, that is "whatever its form or material may be, artificially retains something through the material and spatial copying of a mnesic and temporal element" (31). Samuel Kinsley emphasizes that tertiary memory is a "mnemotechnical exteriorization" through memory-assisting technē, thus the storage of memory for later use. Kinsley uses mneumotechnical exteriorization to describe, for example, how people at a concert are present in person but are simultaneously using "mediating devices" like smart phones and their apps (e.g. social media) to capture such events, though he admits that the digital aspect is mostly about scale and speed (166). This section provides a view on how notebook systems employ mneumotechnical exteriorization to facilitate memory deferral, as the delay between writing something down in a way that mediates an experience (further discussion of mediation will be expanded upon in a future section) and returning to what has been captured isn't so long that such practices have become obsolete.

In a broad sense, most interview participants describe aspects of their systems that involve prompting memory or attention. Catherine ranks the top six priorities for her day at the top of the entry in her pre-printed weekly planner, to “remember” what she intends to do on any given day and so that what she attends to first are her top priorities in life and career (typically priorities #1 and #2 are dedicated to research and teaching). Amy’s planning system involves a robust range of color-coding which not only allows her to make use of her many fountain pens and colored inks, but provides a “spectrum” code for her tasks and appointments, so dark blue is the standard color, where hot pink or vibrant reds (depending on the ink she has in rotation) reminds her that she needs to be somewhere, so she can quickly assess how tasks, meetings, and events will factor into her day and in what priority she should aim to complete them. Lee has ported the bullet journal system to a work notebook for tasks they have to deal with on any given day and then processes that list with signifiers and through migration. They also make use of highlighters to categorize information or flag it as important. These simple mechanics serve as methods of bringing attention to the moving targets of tasks and events that have to be addressed on a daily basis. Most describe practices of attending to this kind of task and priority logging first thing in the morning or in the evening the night before as a way of making sure to “remember” to do something or to go to something. While these mechanics serve short-term memory functions, interview participants nonetheless describe them in terms of remembering.

Interview participants overall described that their memory load is rather light due to the robustness of their notebook practices. Rather than having to remember all of the details of an important happening, they simply have to remember that those details have been captured in ways that they can be easily found when the occasion for their use comes up. For two interview participants, Robert and Linda, recollection moves beyond the short-term which thus requires that

their finding mechanics be robust. In these cases, recollection was described not in terms of the system facilitating recall of the full range of detail of a notetaking session, just the fact that something had been recorded. Robert, for example, describes his notetaking as a process of “memorializing” information from meeting notes, so that his notes can serve as checks and balances especially when someone remembers something differently, since in his capacity as an elected official he “sometimes needs to hold people accountable” and can refer to notes to claim something went a certain way.

Linda described her approach in a bit more detail. As someone who has to capture overlapping and ongoing details about various projects in her job as a grant writer, describes her notebook as a kind of “external hard drive,” a place to back up her own memory storage:

I kind of think about it like an external hard drive. I can’t necessarily keep all of this in my brain at one time—I have too many things going on—but when I write something down it’s because it’s going to be important for the future, and so somehow that makes some sort of connection in my brain that ‘oh, later, I can go look up that page in my notebook.’

She relays that tasks that come up requiring future attention operate in the same way, she’ll recall that there was something to be done that came up in a certain meeting that she annotated with a star in her notebook, “so that way if I’m looking through my notebook for the last week and I see something that is starred, I know, “OK, that’s something telling me to do that.” This kind of “talk” between the notebook mechanics and the practitioner came up again and again in the interviews and is something I’ll draw implications from in the conclusion of this chapter. For the moment, the point to emphasize is that the event of writing triggers a connection for the memory that notes have been captured and can be returned to when needed.

Importantly, however, interview participants do not rely on this trigger alone. Their notebook systems involve sometimes quite elaborate finding mechanics so that information captured can be recovered and made use of for some future moment. These include the labeling of notes with headings, tracking topics in indices, post-its, flags, iconographic annotations like stars or exclamation points, different handwriting like cursive, highlighting, or simply starting each set of notes on a fresh page so that when flipping through a notebook only one location has to be scanned to find one's topics. Amy describes that "cues" strike the memory regardless of whether or not those cues come from deliberate finding mechanics: "...you flip through the notebook and it was on the left side and you crossed out that word that you crossed out because you messed it up and there's all these triggers to help you orient."

Not all participants relied on even a brief moment of recall to jog the memory that important information had been stored in the notebook. As someone who experienced a significant brain injury, Megan cannot rely on memory functions like the spatiotemporal memory Linda, Robert, and Amy's examples describe. Having gone to a brain rehab clinic after her injury, Megan said that clinic facilitators encouraged getting on a schedule and keeping track of things, and suggested using pre-printed planners to do so, but "time is very hard for me," she says, "and it's also just hard to remember what I have done or not done because my short-term memory isn't great. Things aren't getting recorded, and that can make you really depressed, I think, not feeling like you accomplish anything ever." In her case, even daily memory tasks that most people use planners for was a challenge.

In *Rehabilitation for Traumatic Brain Injury*, Walter M. High et al. describe that low-tech "external aids" used for brain trauma "include a broad range of paper-and-pencil systems such as checklists on note cards, planners or memory books, wall calendars, and alarm reminders" (52),

but in Megan's case the pre-printed planning just didn't work precisely because everything was pre-planning.²⁰ For Megan, the bullet journal community's introduction of habit-tracking pages to the genre are what finally worked for her. When her doctors have questions about whether or not she is resting enough or exercising regularly she can show them her trackers. In addition, notes from those doctor's appointments can be scattered throughout the notebook because the index will help her recover them. "Because you don't have to keep it linear it doesn't matter [if the pages dedicated to a certain thing are in order], I can start with two pages, when it's time I'll just use the next two pages and put it in the index. I don't have the stress of trying to guess. My prediction skills are just toast right now." For Megan, the mechanics that would otherwise serve to jog the memory for other practitioners were useful primarily for facilitating non-linear capture. The index replaced the need to recall or even to flip through the notebook to find what she needed.

Whether through conventional diagrammatic finding devices like indices, dates, or headings or through more idiosyncratic "cues," participants stressed again and again the importance of mechanics that facilitate the efficient return to what had been captured for future use, and a level of comfort in knowing that information was recorded somewhere, even if they were unsure of whether returning would be necessary. The externalization of memories as mediated through notetaking, organizational schemes, and finding mechanics—and thus the deferral of the responsibility to remember the details of life's happenings—perform emotional and affective regulative functions. While some expressed what we might recognize as "information overload," many interviewees had specific points of information to deal with for specific purposes,

²⁰ High et al go on to provide a review of the literature for high-tech options, but cite only two studies that consider the low-tech strategies: Kapur, N "Memory aids in the rehabilitation of memory disordered patients," Baddeley, Wilson, & Watts (Eds) *Handbook of Memory Disorders*, Chichester: Wiley, 1995 and Evans J. et al., "Who Makes good use of memory aids? Results of a survey of people with acquired brain injury," *Journal of the International Neuropsychological Society*, 9, 2003, 925-935.

which meant that even if there was an abundance to deal with, for their lives and work that information was important enough to be captured, recorded, and recoverable in a way that didn't rely on the fallibility of human memory itself. Whether guided by finding devices or the simple fact of knowing where something had been written down, the routine writing practices were repeatedly articulated as “calming” or described as methods of “stress-management,” or something practitioners turned to when experiencing moments of anxiety. As Amy put it, “[Writing things down] made me feel like... that if there was anything important I felt like I needed to remember that it was down on paper and I didn't need to think about it and I didn't need to stress over it and it was there if I needed it.”

4.3.2 System Origin Narratives and Memories

Memory recollection is about more than whether one can remember the details of a happening, it is about relaying experiences. Throughout our conversations, the anecdotes and narratives behind how interview subjects' practices evolved, emerged, and became more refined were powerful moments of recollection, often associated with their relationships to others. In the senses that “recollection” refers to the memory narratives associated with these practices, I find Sara Ahmed's theorization of happiness of incredible value to aid in the interpretation of these moments. In the conclusion of *The Promise of Happiness*, Ahmed enters into a discussion of happiness and its association with “the good life”:

Of all the words we can think of as “emotion words,” as words that operate as if they are signs of emotion, *happiness* seems the most pointed because happiness has been so closely tied to ethics. For some, the good life is the happy life. Or the virtuous person is the happy person. Or the best society is the happiest society. Happiness becomes not only the thing

we want, whatever it is, but a measure of the good, such that happiness becomes a sign that the good must have already been achieved. (185).

I see in this passage an echo of Atwill's articulation of the challenge for rhetors, that "the successful performance of the rhetor who has appropriated both rules and proper timing is often a testimony not to his mastery but, paradoxically, to his 'natural' ability—even his 'natural' virtue" (59). One's appropriation of the rules leads to some semblance of virtue and thus perhaps of (at least the perception of) the attainment of happiness.

When I requested narratives about the evolution of participants' practices, most interviewees expressed positive associations with both the people and/or media that inspired their practices or the materials they use to execute their practices, and with a sense of stability or control that sustaining the practice over time brought to experiences otherwise unwieldy, uncontrollable, and overwhelming. I'll emphasize here that while "good life" narratives are recognizable throughout the conversations in terms of the expectations of society for what the good life might entail and normative expressions of happiness, I'm less cynical than Ahmed (a self-described "killjoy") about the expressions of happiness my participants made. The use of the term "happy" when it appeared in my conversations and the expressions of sheer joy on my interview participants' faces were enough for me to believe their experiences were felt as genuine, when associated with the stories they told about their systems' origins. Other affective orientations, however, were more fraught in these stories, especially regarding how other's perceive practitioners' reliance on their system, which I'll describe further on below.

Happiness is in part acquired through a positive association with the materials practitioners used, and especially when those materials are associated with loved ones. Each of the participants described a way in which their systems are central enough to practitioners' lives that friends,

colleagues, and significant others have come to recognize their importance and have offered writing supplies as gifts or have made recommendations practitioners were pleased to receive. Catherine, Lee, and Megan all expressed joy in having received notebooks or other materials from friends or significant others for birthdays, Valentine's Day, or other occasions. Robert decided on the notebook he uses because his brother uses the same kind, creating a kind of familial bond across practices and materials. Amy first learned about fountain pens from a colleague who, rightfully, thought she might be interested in them, which has become important to her practice in terms of the flow of her cursive writing and her systems of color-coding. Practitioners also expressed positive memory associations with first encounters that informed their practices. For Robert and Dane this included especially interesting courses they took as undergraduate students, and for Linda it was a general enthusiasm for the freedom of her undergraduate courses at a liberal arts college that allowed her to experiment with different notetaking practices that informed her current practice.

When speaking to the fact that her husband brought the bullet journal genre to her attention, Megan describes that recommendation as "very supportive and loving." She continued:

In a place where I was having trouble being supportive and encouraging myself, and feeling like I was letting myself down or letting other people down because I couldn't roll with everything, and of course a brain injury is hard to roll with it turns out, but that didn't stop me from spending a lot of time feeling like I should, so I love having that association... the fact that [my husband] brought [the bullet journal] to my attention is so great on so many levels. One, he tend to feel sort of powerless about—like he is *so* supportive and just *so* amazing about all of this, and I think this kind of thing will make or break a relationship, and a lot of people who are in my [brain injury recovery] program got divorced because

their partners couldn't deal with the challenges. And so for us it brought us a lot closer than we were before because we have to work together on this... I love seeing that [my husband] every time he mentions [her bullet journal] or I show it to him, I can tell he feels *really good* that he was able to help me in this way, and that of course makes me feel happy.

Megan's positive memory associations thus infuse her practice with additional motivation, because it is something she can share with her husband, and it is something he can feel like he contributed to her capacity to adjust to life after her brain injury. Throughout this passage the commonplaces of the "good life" are prominent; the stable and healthy marriage, a sense of growing and changing after trauma, a sense that they have been able to make it work when others in similar situations haven't, etc. are all strong normative ambitions Megan feels a very real sense of accomplishment about. Not only is she on the road to accepting and understanding her limitations, she has, against all odds, managed to maintain her marriage.

While for the most part practitioners recalled such associations with joy and even pride, some referenced that the systems and their impact on personal relationships were not always positive. Some were easily dismissed, like the small interruptions that Dane's tracking behaviors on his dating life when he has to apologize to a date for looking at his phone: "I always apologize for it, and I'm like, 'look, I track my calories, I just got to do this really quick.'" Catherine could also easily dismiss the impressions of her graduate school colleagues who questioned whether or not her system was worth the effort, if it actually helped her complete her dissertation better or more efficiently. It's not that Catherine didn't understand where they were coming from, but she says "it inevitably leads me to get work don't and I don't know how else I would get work done. I mean really, I'm at a loss."

When Catherine spoke of her close friends who would ask her to hang out rather spontaneously and she would sometimes answer that she couldn't because she hadn't reached her work hour tally for the day, it had the potential to harm those relationships, so she actually created rules for her system that would give her permission to say yes to social occasions. For example, she rewards herself after so many hours tallied as productive, with "fun" things like outings or purchases she's been saving for. She also decided not to count social meals with friends as her weekly "eating out" tally. "I realized," she said, "I am missing out. I think it can make me feel much less, for lack of a word, like 'human,' it can make me feel very much *machine, machine, um, productivity machine*, and that is the part I think I've gotten better at, but I also built in the fun and the meals and stuff because I didn't want to be the machine." Here is a different point of view on the procedural qualities of constrained writing practices. On the one hand, as I've been exploring, constraints have generative potential; on the other hand, however, they are and have limitations and, as we see here, real life consequences. Although Catherine doesn't want to see herself as less human, she also still relies on a rule (the rule to not count social meals as "eating out") to generate time to spend with her friends.

Catherine's boyfriend, also an Assistant Professor at a small institution two and a half hours away, both benefits from and has a complicated relationship with Catherine's system. Because their relationship is long-distance, she spends half of her time in the town where she works, and half of the week where he lives and works. She feels that her planning and tracking system gives her the ambition to complete major tasks before traveling to see him. She also articulates, however, that the system has been a strain on their relationship at times. "My boyfriend and some of my friends make fun of the planner, understandably, because they feel like the planner has so much

control, but I think it gives me purpose.” Further into the conversation, however, she admits that it’s not always just something they poke fun at:

I’m someone who is pretty Type A, so I think this work fits with me pretty well, but for my boyfriend, he’s definitely more laid back than me, so he has told me at times, ‘you’re being obsessed with getting #3 done on your to do list is preventing us from going to a movie and that’s not fun.’ I actually think I created the [the reward system] because I’ve never been good at spontaneous fun and I’ve never been good at relaxing and I realized that that was a problem and I needed to work on it.

The social values of flexibility and spontaneous fun, although not natural to Catherine, is something she recognized her relationships would benefit from if she found a way to be more flexible. The rules that permit her to enjoy social occasions with friends and her boyfriend even if she hasn’t completed all of the objectives on her priorities list are a way of introducing friction to her natural tendencies, to force her to address and change her habits.

When the relationships are closer and more important to the practitioner, however, the more complicated associations and impact of the practice on close relationships was palpably felt in a different register. Lee describes how the joy they once felt with journaling when they were younger was taken from them when their parents discovered their journals and had them committed. When they decided to write in notebooks again, including through bullet journaling as well as personal journaling, they had a sense of recovering their identity as a writer, even though they’d been pursuing the writing of a dissertation as a PhD student. “I was like, oh... I’m not a writer because I have gone years without writing and those years *sucked*. Like, I was not happy, and I did not like what I was doing. And like I feel like I *am* a writer, because it’s something I do every day... it feels great.” There was a pause in the conversation and they then revealed to me that their parents

had them committed after finding their journals and was then homeless for two years of high school:

Yeah, so they put me on psychiatric hold and like, that's something I've done for myself as I've grown older, I've checked into hospitals when I've felt like, OK, I don't feel good, but to have that opportunity sort of taken away from you, when someone sort of invades your space, it's like, oh yeah this means like I really shouldn't be keeping a diary. And like, I don't know, I think one of the reasons it does feel so good to be writing again and to be journaling again is because like it obviously feels safe now.

This part of the conversation happened halfway through our interview, when Lee had already mentioned several times that during college and most of graduate school personal writing wasn't a part of their life and hadn't yet articulated why. This moment in our conversation felt like a confession that was both a relief and a challenge for Lee, and they even described it as such:

I mean, even just sort of, like this conversation with you is really helping me think through it because it's sort of like one of the biggest narratives of my life has been that connection to writing and journaling and feeling [that it's] something that is available to me, like it is this weird meta-story, like a narrative or narrativizing [mutual laughter]. And I feels like there have been so many ups and downs, for it to feel like something that is at the center of my life like, just I have a sort of *welcome back to yourself* kind of feeling.

I find it difficult to discuss these passages because their significance for Lee goes well beyond the reach of the overall analysis of these interviews. It is an act of remembrance that is both painful and celebratory, and that they'd felt welcomed back to themselves is such a beautiful sentiment I do not feel qualified to analyze it for its full potential relevance. Within the context of constraint-based writing and notebook-based systems, however, Lee's sentiment reveals a way in which

notebook-based writing can be very central to one's life, not only as a routine practice but as holding an important place for one's *sense of being* or *sense of becoming*. This discussion might benefit, therefore, from a return to Hawhee's notion of *phusiopoesis*, that is, the bodily art of becoming. While the training Hawhee describes through this concept doesn't quite fit our purpose in that an embodiment of constraints would indicate their transition into habits, there is an element of embodiment evidenced here in that the routine of regularly writing in one's notebook seems to inform a body of relations where it is difficult to locate who or what is teaching and who or what is the trainee or student, or in this case who or what can *welcome back* someone *to themselves*.

The sense of notebook-based writing as relating in some very central way to one's being was emphasized in several conversations, either in more casual ways of interviewee's expressing that they've always been a note-taker or have always enjoyed writing by hand, or in more significant terms as relayed in the excerpts above. Both Catherine and Lee's experiences relay a disposition toward notebook-based writing as suited for their personalities, their personal needs, their proclivities, and their happiness. These excerpts do indeed reinforce constraint and its generative potential. Unlike scholarship I cite in this dissertation's introduction that celebrates that potential for expressive media, however, I do not have the luxury here of attending to that potential with the same overwhelming positivity.

4.4 Remediation

The concept of remediation I employ as a structuring concept for this next range of system mechanics responds both to repurposing media in visual forms and to the remediation of personal health concerns. Important here for both conceptions of remediation is an emphasis on iterative

practice, a practice that intervenes in and evolves through repetitive processes of mediation. In this section I discuss the ways in which the practitioners I spoke to remediate the information they capture from words into images, from words into word counts, from quantifiable and time-based logs of activity into graphical visualizations, and in a much broader sense from personal *experience* to statistical *data* and *back out to experience* again. While it might be tempting to discuss such transformations as making information more “objective” to the practitioner, interview participants expressed powerful affective, emotional, and physiological change associated with remediating practices. In other words, remediation in participants’ systems is both an inventive practice and a conditioning practice.

Remediation has been described by Bolter and Grusin to emphasize the ways in which all media are “refashioned and improved versions of other media,” where the “new” comes from both “the particular ways in which they refashion old media and the ways in which older media refashion themselves to answer the challenges of new media” (14-15).²¹ An extended and complicated understanding of remediation presented by Prior, Hengst, Roozen, and Shipka through their concept of *semiotic remediating practices*, shifts the focus away from a means of interpreting artifacts responding to technological innovation toward a more complex and distributed understanding of how mediation involves the “situated and sociogenetic dimensions of everyday activity and discourse” (743).²² In Shipka’s *Toward a Composition Made Whole* she explores this sense of remediation through the example of a student in her first-year composition course who, as a dance major, answered the assignment to “take up the role of class historian and

²¹ Collin Gifford Brooks has a helpful critique of this view in that uses of remediation in this sense is helpful only as a framework for “describing combinations” of new and old media. See *Lingua Franca: Toward a Rhetoric of New Media*.

²² Prior et al. provide a fairly substantive view of the forces that shape this concept, which include Bolter and Grusin along with Vygotsky and Latour, which is beyond the scope of this section.

to communicate to others about who they were or what they did in this context” (65) with a “re-performance” of a prior class session, which for the members of the class and Shipka “re-presented us to us” (66). I present within this section the claim that the notebook-based systems described through these interviews function as remediation practices for their creators/users by “re-presenting” *themselves to themselves* a perspective on their own personal data through “chains of media and mediation” (a term Prior et al. employ). There is at once the capture of life’s information in longform handwritten script and then further the repurposing or re-expression of that information in other forms.

By and large the activities described in this section could be defined as “self-tracking.” A rush of scholarship attending to sociological implications self-tracking has emerged in the last five years or so (see Neff and Nafus *Self-Tracking*; Lupton, *The Quantified Self*; Selke (ed), *Lifelogging*; Ajana (Ed), *Metric Culture: Ontologies of Self-Tacking Practices*, Ajana (ed), *Self Tracking: Empirical and Philosophical Investigations*, among many articles dedicated to the matter) and while mentions are often made to the fact that digital technologies are not required for self-tracking endeavors, they nonetheless attend almost exclusively to digital apparatuses. Pen-and-paper self-trackers may be better seen in light of visual artists for whom data is a medium, as practitioners track their own data and themselves make tools to visually represent them, or the mechanics themselves involve a visual apparatus. Take for example the *Dear Data* collaboration between designers Giorgia Lupi and Stephanic Posavec who corresponded over postcards with hand drawn visualizations of their personal data, from everything from depictions of all of the doors they encountered in a week to assigning symbols to something more abstract like “a week of indecision” (dear-data.com/theproject). Participants’ systems often involve not only a

remediation of personal data through visual forms of their own construction, they speak of these visual forms according to their aesthetic and even artistic qualities and purposes.

4.4.1 Self-tracking

“Self-tracking” or “life-logging” or experiments with the “quantified self” are what the interviews reveal participants to be doing with their systems, though none of my participants used these terms to describe their practices, even Dane whose system would be legible to members of the quantified self movement—a community of makers of tools for quantifying and transforming personal data who are dedicated to “self-knowledge through numbers,” (quantifiedself.com). They do, however, consistently use the term “track” to signify the actions they perform through the remediating mechanics I’m about to describe. Most participants use their notebook systems to track in one sense or another, though the focus in this sub-section is on tracking data that are transformed visually either as the process of tracking or through the creation of charts, graphs, and color-coded timetables. These examples might thus be best understood under Johanna Drucker’s sense of *graphesis*, visual forms of knowledge production, which “does not depend on an assumption that images represent things in the world. Graphics make and construct knowledge in a direct and primary way. *Most information visualizations are acts of interpretation masquerading as presentation.* In other words, they are images that act as if they are just showing us *what is*, but in actuality, they are *arguments made in graphical form*” (7-8 emphasis in original). To remediate one’s information graphically is thus to *make an argument to oneself*, to *generate* arguments through a transformation of forms.

Visual remediations of personal data appear in participants’ systems in rather small and efficient ways of depicting data back to themselves. For example, Catherine’s time-tracking

involves simple hashmarks for each hour she spent on work in a given day, thus providing a way to glimpse at the margin of her planner and see how productive she is in a week. She feels as though this system of tallies is especially revealing because “it’s so easy in academia to feel like your days aren’t [productive]... it feels like nothing is ever moving” because there are all of these discrete parts including research, teaching, and service, “so if I feel like some small things are moving for me and there’s some positive incentives there then I think that’s what makes me happy.” For a work schedule that isn’t easily compartmentalized between the hours of 9 to 5, Catherine feels satisfaction in the marks that ultimately depict her level of productivity back to her. Amy likewise uses the simple mechanic of highlighting in her food diary to reveal foods that irritated her ulcerative colitis. She expresses that “color was nice to make a differentiation between things I had immediately written down.” These forms of remediation are simple methods of making information differently legible through visual transformation, demonstrating how for these individuals the transformation didn’t need to be dramatic to be revealing.

For two interview participants, however, the transformation of tracking data into graphical forms is a central mechanic of their system. Megan spends a considerable amount of time being creative with her bullet journal, using colored pens and pencils, stickers, and other materials to decorate her notebook. She also dedicates space in her bullet journal to graphical transformations of items she hopes to inculcate as habits, which she describes as “habit squares,” which help her track accomplishments by coloring in a shape to signal whether or not an activity has been completed. She tracks items in her monthly spread like whether or not she got enough sleep, if she took her medication, or whether or not she mediated (see Figure 36). She didn’t provide an image

of one of her daily pages, but she tracks habits there as well. “I love coloring in the squares. It is really bizarre to me how motivating it is. Like I have little water drops to make sure I drink water,



Figure 36 Megan's habit tracking squares

I have little triangles to make sure I eat plant food, and it really does make me think ‘oh no, I only have three! I need to hurry up and drink a whole big thing of water!’” The resulting image is a chart of her progress in making these daily tasks a priority. During the conversation we talked about what exactly it is about filling in the habit squares that is so motivating, and Megan described how the end of the day pressure to get all the squares filled in is in no way “punitive” it’s empowering:

For me, creating my own system in the bullet journal means that sticking to it isn’t punitive... like the habits thing... it is the first time I can remember that doing any of these things feels like I’m doing something for myself. It feels like I am choosing to do it, and I am affirming myself for doing it, instead of, I mean, I was supposed to be meditating the whole time, I was supposed to have been working out this whole time. And I haven’t done any of it [until I started to bullet journal] because no one was going to tell me what to do. “I’m in pain, this is hard,” you know. Don’t pile stuff on me. And with this, it’s much more, “oh, *I think this is a good idea.*” It feels good to me when I take care of myself by doing the habits. But I have a contrary personality, so that’s kind of part of it [laughs].

Not only is there the very palpable and tactile pleasure of coloring in the habit squares, which slowly reveals a sense of her accomplishments over time, there is a belief that somehow the tracking of her activities in this way signals back to Megan that these are choices she's made, and that signal—created through the act of coloring in and seeing the squares filled in—is an “affirming” force.

In a synthesis of scholarship on whether wearables promote improved personal autonomy in terms of taking control of personal health, John Owens and Alan Crib argue that health promoting wearable technologies “risk reproducing existing health inequalities across society and creating additional burdens of anxiety and stigma” (36) due in part to the fact that producers of these wearables have their own agendas which may in fact “undermine their users’ deliberative and decision-making procedures” (36). Although Megan’s habit tracking is a popular customization of the bullet journal system, she is responsible for *making* a visual method of charting her progress making certain activities a regular part of her daily routine. She feels that this practice frees her from anyone (or any thing) telling her to do something, even when the activities involve recommendations made to help her cope with life after her brain injury, and even when those empty squares are, of a sort, telling her to do something.

Not all activities of self-tracking involving the transformation of personal data through visualizations are “affirming” in the way Megan describes in terms of inspiring personal growth and change. Dane’s elaborate practice of tracking how he spends his time and then remediating

that data in Excel with a robust set of charts and graphs isn’t for the purposes of time management (or so he insists): “I don’t really buy into the fact that I manage my own time... I buy into the fact that I’m doing this for the novelty of having an elaborate record of my own existence.” He thus injects a kind of ambivalence toward the practice, and even says to me at one point that

he wouldn't necessarily recommend that other people take up time-tracking as he's doing it. That said, however, after self-tracking how he spends his time for 10 over years, he says he can't imagine not doing it, and that it would feel strange to go back to "not knowing."

Dane's practice is entirely a tracking practice. The paper-based component is for time-based logging (see Figure 37) which he does through pre-printed daily timelines he designed which

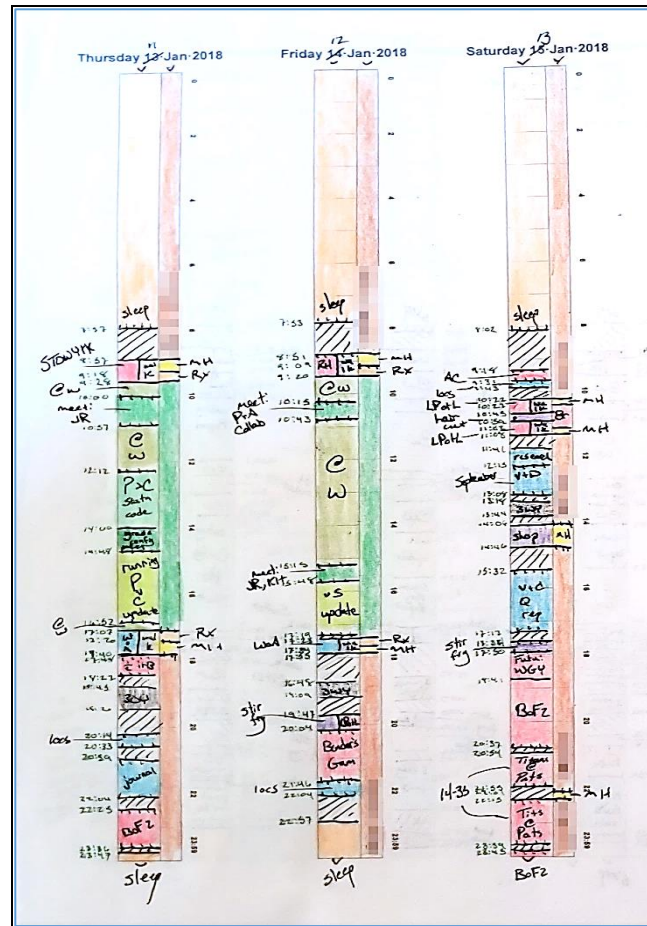


Figure 37 Dane's time tracking paper log

he keeps in a three-ring binder. He keeps the binder close by (for example on his desk at work), though he occasionally logs on his phone if he doesn't have his notebook with him. "I have general categories," he tells me, "like work, versus leisure activities, exercise, housework, things like that, and each one of those has a color to label it." He then enters his data into Excel, where he has created a dashboard of various graphical forms to show his data back to himself (see Figure 38).

“I really like visualizing it,” he says, “taking it and turning it into charts and graphs in Excel, and making it easier to digest for myself. Kind of making it look pretty.” He expresses that this kind of tracking is a creative endeavor for him: “I’ve always had a kind of artistic streak,” he says, “and right now I’m working as a data analyst, which primarily is not generally considered to be a



Figure 38 Screen capture of Dane's Excel dashboard

particularly artistic or design-centered profession, so you know, I’ve been into making these kinds of visualizations and this kind of art for as long as I can remember.” When Dane describes the visualizations as making his data “easier to digest,” he’s talking not only about making the information more legible, but also more pleasurable. Lest it slip our notice, digestion has returned as a metaphor for a notetaking practice as we saw with the commonplace book.

Dane holds in common with Megan a maker-oriented ethos toward his own data. While I present Drucker's articulation of the visual forms of knowledge production to help situate graphical forms as knowledge generators, for Dane and Megan the act of composing the graphs are what is the most satisfying and educational aspect for them. The artifacts themselves thus have this sort of ambivalent status. They are the product of a process of making a visual form of knowledge production; their existence at a point of arrival that could be interpreted as an artifact is (nearly) beside the point. Importantly, the figures above depict graphics *in media res*; they are snapshots that depict single moments in long chains of mediating activities. When re-presenting themselves to themselves, notebook-based information practitioners involved in remediating personal data into visual forms repeatedly re-present themselves to themselves such that the ongoing activity of making never presents a static artifact.

4.4.2 Self-Monitoring

In medical and mental health fields, self-tracking as involved with health symptom tracking with paper or digital tools is described as “self-monitoring,” “self-observation,” or “self-recording,” and attention to this kind of monitoring is understandably invested in medical outcomes. Studies in this vein are too vast to synthesize here, so I reference as a point of synthesis *The Encyclopedia of Behavior Modification and Cognitive Therapy*, which defines such practices as “the process of systematically attending to one's current actions, thoughts, emotions, or physiological reactions and/or their immediate antecedents” (522) which may be done manually, mechanically, or electronically, and that “holds up a ‘mirror’ to a troublesome reality” (523). Information captured can thus be used by doctors, therapist, and counselors to influence decisions for treatment. The entry here argues that while studies generally support the use of self-monitoring,

more research needs to be done, including research that “concentrates on factors such as personal values, goals and self-regulatory patterns, cognitive skills, and environmental conditions are potential moderators or mediators of therapeutic change” (524). While I am certainly not qualified to assess the efficacy of self-monitoring practices from a health expert’s perspective, this section involves these very factors as they appear in the language participants used to describe their self-tracking mechanics’ purposes for what might be described as *self-remediation*, the transformation of personal data for personal outcomes.

Various health-oriented tracking occurs throughout participants’ systems, some assisted by wearable technologies. Dane and Catherine both use a FitBit. In addition to his time-based tracking, Dane tracks calorie intake and expenditures (which he also exports into Excel for a different dashboard than the one shown above), and Catherine includes in her tallies time spent working out, which she considers a labor she would otherwise never do if she wasn’t tracking it. These methods of everyday health tracking were not discussed in depth as Dane and Catherine saw them as component parts of their broader systems and didn’t make much of their contributions to them in our conversations.

Both Megan and Amy’s systems involve mechanics involving self-monitoring in ways that are more substantive given that they are both dealing with major medical concerns that require routine attention. As we’ve already seen, Megan’s habit tracking involves important aspects of her health like meditation, physical activity, hydration, and adequate rest. Megan also uses her bullet journal to track a variety of other information that has helped and continues to help her adjust to life after her brain injury. Since her injury, she has to budget her energy wisely because even running errands can be incredibly taxing. Each morning she writes down what is on her schedule and assesses how much she’ll be able to do before she has to rest. Prior to our conversation she

had already been to the grocery store and knew she had a doctor's appointment coming up, so she didn't schedule anything else for the day, knowing that these three things would take a lot of focus and would exhaust her. She tries to anticipate her energy expenditure at the beginning of the day so that if someone calls and asks if she can do something she'll know whether or not adding one more thing to her day would overstimulate her. To make things legible to herself, she assigns a point scale to her activities so she can calculate the day's potential energy requirement: "I try to stick within a certain number of points a day and I try to plan ahead. It's tough because it means I have to be a little rigid." Similar to Catherine, she's built in a constraint for her system that allows her to determine whether or not she can do something someone else spontaneously brings up.

This information, along with her habit trackers and pages dedicated to notes from her doctor's appointments referenced above provide Megan with ample information to reference in conversation with her health care providers. Perhaps in line with her "contrary personality," however, she sees her bullet journal practice as taking responsibility for her own monitoring in ways that the practices suggested to her by her health care providers couldn't deliver:

I still have a lot of questions about what I am able to do, and so this is another way of helping me push to try, and I made this up, none of my doctors—I feel like I've wasted my money with them—but this is helping me to push myself. And I've adjusted a lot of it, like "this is way too ambitious and it's making me feel like a failure so I'm going to have to do it differently." I mean, I was a lawyer perfectionist, I never adjusted expectations, so I feel like that's a life skill. I feel really empowered from having this. So much of what I'm doing I'm not doing the way I used to and it's easy for me to feel like, you know, really bad. And this has been helpful in a way of saying, 'no look, you can do things, you can be more proactive about it,' all that stuff.

In this sense, Megan not only remediates her data into variable forms, she takes control of her own health objectives in ways doctor's orders haven't been able to inspire. Building the system herself and incorporating what she feels is "a good idea"—even when those activities overlap with doctor's recommendations—inspires her to interpret the information she captures in her bullet journal as drawn from her own motivations. As previously described, "her own motivations" are of course necessarily complex, as even in the passage above she emphasizes the socio-cultural pressures that influence her nascent sense of control, as it's all relative to mitigating expectations that are holdovers from her previous career as a lawyer and as expected of a citizen of society.

Megan's belief in the effectiveness of her own self-monitoring practices as a form of resistance to doctor's recommendations was also something Amy explored in our conversation. She felt similarly about her food-related symptom tracking, in that her doctors weren't attending to the possibility that some foods might aggravate her systems, but her food and symptom tracking tells her otherwise. Every day she would write down the foods she ate and the symptoms that she had within the next 48 hours, and then she would return to her log to highlight and color-code triggers and associated symptoms. Ulcerative colitis is an auto-immune disease that basically attacks a person's large intestines, "so I have basically what is equivalent of an allergic reaction to my own large intestines if it's untreated," Amy describes. She has to keep a careful watch on her medications, the foods she ingests, her hormonal shifts, and her stress levels. When she began to track these things, she did so in a physical pre-printed planner, and eventually moved to an app on her phone once she had a general sense of her main triggers. For Amy, starting with pen-and-paper allowed her to not only have the data but to "think about it analytically." The move to a digital tracker was only possible because she'd spent the time logging on pen-and-paper, that moving to

digital was “faster to manage, not easier to manage,” and was only possible because she’d spent two years manually gathering information on especially foods as possible triggers for flare ups.

As a scientist, the discourse of “experiment” was both natural and helpful for Amy. It helped her test triggers she learned through discussion forums with others who suffer from the condition and discover triggers specific to her own experience. Different doctors had different reactions to her tracking: “My doctor at that point was basically saying, ‘it doesn’t mean anything, what you eat doesn’t have anything to do with how you feel,’ and that was kind of B.S. I’ve had doctor’s since who have been like, ‘there’s no scientific evidence pointing to a particular food hurting you, but if it hurts don’t eat it.’” Undertaking her own scientific experiment, however, provided Amy with the evidence she needed to feel like she was in better control of her symptoms:

I think I’ve always felt like if I could keep good enough data I might be able to figure out how to make myself feel better. Now better like cure the disease, but I might be able to be as healthy as I can with what I have... It feels kind of like an experiment, but I mean I have a sample size of one [holds up index finger] but it’s an important sample to me.

Similar to Megan, Amy needed to feel that she was in control of her own health, and tracking is one thing that helped her feel like she was doing everything she could to maintain a sense of health and well-being that wasn’t just for the purposes of following doctor’s orders. She acknowledges that finding the right medication for her with her doctor along with the tracking finally allowed her to feel healthier and more emotionally stable. “It’s a combination clearly of my doctor’s system getting me on the right medication and my system finding what I could eat that were working... I started to be able to get back to a more comfortable place where I felt I could confidently eat things.”

Both Megan and Amy describe that making their own procedures of handling information related to their health symptom management and health maintenance was substantially more motivating than doctors' recommendations, suggesting that personal values and goals matter greatly when handling the efficacy of self-monitoring for improved health outcomes. Megan and Amy trusted themselves and their systems (after much experimentation with mechanics) to operate as the tools they needed to live healthier and more aware lives. In both cases, their systems' mechanics for tracking information related to their health symptoms and preventative behaviors function as reliable resources which helped them to feel in greater control of their own health. The implication, then, is that having a choice for how one's information can and should be managed might make a significant difference for whether self-monitoring can be a productive means of improving health outcomes.

It might be tempting to interpret pen-and-paper methods as more or differently agentic than digital self-tracking because the self-trackers I spoke to who relied on pen-and-paper methods have a kind of maker-mentality, that is, they've appropriated or designed their own methods of remediating data into new and differently interpretable forms. It might also be tempting to interpret notebook-based practitioners are reflecting *through* rather than *on* their data quantifications and visualizations, but reflection wasn't an activity the self-trackers in this study emphasized. In the interview passages above, participants certainly entered acts of reflections *about* their practices as prompted by our discussion, but regarding engaging with their own personal data they did not use discourse related to reflection. Instead, they primarily described self-tracking to *manage* information, and—in the cases of Megan and Dane, whose remediations involved transforming data into more aesthetically pleasing forms—to make their information more *pleasurable* to deal

with. They did not, however, describe interacting with their own information in this way as a practice of understanding oneself in any different capacity metacognitively.

When Casey Boyle unfolds his theory for rhetoric as a posthuman practice, he situates a posthuman orientation to rhetorical practice as *serial* rather than reflective, that “unfolds not through the traditional conception of rhetoric as critical reflection that equips a practitioner with skills, but practice that becomes ongoing, *serial* encounters within ecologies” (34). This theory is complex, but the notion of a serial orientation toward rhetorical practice is extractable for our cases here, as conscious decision-making regarding the repetitive (re)mediating actions need not be the measure by which we evaluate what is happening here. Boyle writes: “[u]nlike reflective practice in which an individual subject aims to consciously hone one’s relationship to an external object, a serial practice *perceives difference by affirming prior experience and relations* not based on a central actor or that actor’s agency or awareness. *Seriality*, the engine of posthuman practice, *is a continual mediation of becoming*” (54, emphasis mine). In the context of the remediating practices of self-tracking and self-monitoring, notebook-based system practitioners think along with their remediating mechanics that track and visualize their data back to themselves. An act of reflection on any particular moment would reduce these remediations to static artifacts, but in order for these systems to work, practitioners have to keep their mechanics moving, continuously adjusting them to better suit prior experiences as differences are perceived. Such perceptions may not be conscious, they might be based on an inkling or itch, a felt sense, or not attached to a feeling state at all.

4.5 Re/Processing

While the mechanics described above can all be accounted for under practices we might describe as *processing* activities, I've preferred the more specific terms of recollection and remediation to define the procedures for which and through which processing mechanics have been applied. This section thus considers processing as a looser function of handling life's unstructured information through constraints in order to obtain some level of distance or to offload information in such a way that will alleviate the stressors associated with dealing with especially personal experiences.

4.5.1 Processing Through Present-Tense Writing

In the long history of composition theory and pedagogy, the process movement was groundbreaking in that it shifted the focus away from writing as a *product* and toward the complex practices involved in strategies of invention and revision (see Macrorie, Murray, Elbow, for example) as an attempt to understand and help students understand *the how* of writing rather than *the what* of writing. Integral to this movement was an articulation of early-stage unstructured writing that Peter Elbow called "freewriting," which he relays in relation to his personal use of it in "Toward a Phenomenology of Freewriting." Somewhat like automatic or stream-of-consciousness writing, freewriting is meant to be quick, messy, low-stakes, and "merely a first thing" (42). Far from operating simply as a "just a tool," Elbow relays the various fronts that freewriting operates for him on two fronts: "The basic impulse was to find words for what I was experiencing; somehow it helped to blurt rather than to try to be careful. Second, even in this ranting I see a kind of drive toward analysis that the reader might not notice; by letting myself

rave, I helped myself catch a glimpse I hadn't had before of the crucial pattern in my inner life" (45). Freewriting is simultaneously "pouring myself into my discourse but also popping myself out of it. For some reason, freewriting has the capacity to increase our awareness of what we've written—what we're doing" (67). In the concluding gesture he resists the temptation to see freewriting as that which raises into consciousness: "We might be tempted then to argue that freewriting helps us move to 'higher' cognitive realms of metadiscourse... I would argue that it helps us do *in writing* what we can already do perfectly well in our minds" (69). Freewriting thus serves as an exteriorizing practice.

Several interview participants left space either within their notebook systems or as companion practices in other spaces for unstructured freewriting or what I have described in moments as "present-tense" writing. Linda uses a steno notebook for unstructured writing for "doodling like for grant aims or thinking out an experiment for somebody to do... if I'm reading a paper and I know it's important for the grant I'm writing but I'm not ready to start writing yet, I just start writing stuff down... if we have a week where all our meetings are cancelled I find myself needing to write thing by hand. Write, just, anything." Robert describes a listing practice he used to memorize concepts in medical school, where he would list the things he needed to memorize the "stories" in the items listed, "by looking for patterns you're basically creating a narrative out of that random data that now helps you remember it because now there's a narrative that it hangs on" and that imposing order, like alphabetizing or clustering by subgroups, "starts breaking it up and giving it some order." The list as what moves unstructured information to structured (or at least structure-able) information transforms what first appears to be a linear thing into yet another form of non-linear thinking and reading.

Two participants, however, make use of what we might describe as freewriting or journaling as focused by simple constraints determined by time of day, time to write, and the number of pages to fill as central to notebook practices. Both Megan and Lee described writing by “morning pages,” a version of freewriting described in *The Artist’s Way: a Spiritual Path to Higher Creativity* by Julia Cameron where every morning you dedicate time to writing three pages of anything that comes to mind. Megan situates the morning pages as “the most important thing they talk about with respect to accessing your creativity and nurturing that.” Between 2009 and 2015, the year Megan sustained her head injury, she never missed a morning of writing these pages:

During that time, I was diagnosed with bipolar disorder, and one of the biggest things they [my psychologists] talk about lifestyle support for staying healthy are keeping a regular schedule, which the morning pages gave me, and journaling enough to get some distance between what you’re feeling or experiencing and how you’re thinking about it... I found it to be beautiful and helpful. It’s also been helpful, you know, we’ve moved around a lot and I’ve had a lot of different things going on, changing careers, not being a lawyer anymore, and this has also been a way for me to stay connected to the part of me that isn’t the changing part... I think that’s good for anybody regardless of your creativity, and it was helpful for the bipolar disorder.

The routine of writing each morning for three pages thus provided a “beautiful” space for Megan to process her experiences, as informed by her diagnosis and as a method of adjusting to major life transitions. Unstructured and untethered writing, constrained only by the time of day and the number of pages, is the input, and “distance” is the output.

Lee goes into a lot more detail about their morning pages, which they constrain even further by tying the practice to their morning commute to work by train. For Lee, the morning pages are

“a way to sort of get whatever might be there out so I cannot worry about it and go about my day... when a day comes that I don’t get to them or I don’t get to do them until later... it definitely shows, I feel different, I feel kind of like pissed off, anxious, or feeling like, ‘ugh, I’m carrying around a lot... that I want to put down.’” The morning pages thus serve Lee as a kind of offloading technique to give them space to write about whatever they want but to accomplish that early in the day so whatever they’ve written about isn’t hanging over them, needing to be attended to and processed but the other responsibilities of life and work take precedence. “What I love most about writing,” Lee says, “is that when you are writing something and you are writing well and you’re writing it fluidly there’s very little delay between that it is that you’re thinking and what it is that’s coming out on the page.” A slippage into the second person implies that Lee feels a kind of universal potential of this kind of writing.

Importantly, Lee did not always feel this way, and part of the joy they express is about having returned to “writing” (by which they mean, personal writing). Later on in the conversation, Lee described this kind of writing as what they have “allowed” for themselves:

I really feel super thankful that I’m being good enough to myself to have that time to get all my feelings out, like validate myself... I do think ultimately that the reason that works is because I’ve imposed that on myself, like I’ve allowed that. I’ve drawn a boundary around that and allowed that to be something. You know, like, ultimately I think I’m a very stubborn, ordered, anxious person, and my work notebooks are the ways I like to sort of be organized about writing are definitely a part of that, but I’ve given myself a little space like, ‘ok, you can have an hour in the morning. Do what you want with that hour in the morning like write about whatever, and write in like an enjoyable way,’ and I feel like that’s a good start.... I eventually want to get to be someone who does not have to grant

myself permission to be like ... “I have an idea that’s just spontaneous and it’s not 7 o’clock in the morning but I still have an idea and I’m going to write it down.” I’m not that person yet but I really want to be.

Once again there is a notion of the constraints suiting personality traits, as something that is generative, but complexly so. Lee’s somewhat obsessive ordering proclivities have ordered even this freewriting practice. It is not just that the train commute provides time to themselves that is reliable for the writing practice, it’s that it’s yet another boundary to contain it. It requires negotiation with themselves, it requires “permission.”

For both Megan and Lee the “morning pages” offer a place for thinking that might otherwise overrun other experiences, which thus alleviates stress and anxiety. For Megan, it’s a way to take stock of the parts of herself that are not overwhelmed by a move or transition, the parts that remain stable. For Lee, it’s a way to get a kind of thinking out of the way so that the rest of the day isn’t occupied with thinking, to offload it first thing to improve focus and attention. It offers a *place* for such thinking to live, a place to defer it to so it doesn’t interfere in other life experiences. Affect scholar Teresa Brennan refers to this process as “discernment”:

When one judges, one is possessed by the affects. When one discerns, one is able to detach from them, to know where one stands, to be self-possessed. Discernment, in the affective world, functions best when it is able to be alert to the moment of fear or anxiety or grief or other sense of loss that permits the negative affect to gain a hold. Discernment is allied to a position in which one receives and processes without the intervention of anxiety or other fixed obstacles in the way of the thinking process. (119-120)

The morning pages, in other words, seem to be a way for Megan and Lee to practice discernment, to be “alert” to potential sources of negative affective sensory experiences and to *organize* them.

While it may appear at first that the morning pages, structured only by time of day and length, are less evidently modes of information management than other mechanics participants described, but Mega and Lee's examples evidence the ways in which freewriting does in fact organize, compartmentalize, and appropriately aid in the discernment of and processing of negative affects. By giving them a place to exist without judgment, their own or others', practices like the morning pages can be methods of reconceptualizing personal experiences and affects *as information*.

4.5.2 Processing through Discernment

Beyond freewriting, nearly all of the interview participants describe their notebook-based practices as methods of mitigating negative affects; having discerned when those negative affects can creep in, they turn to their notebook-based systems as strategies for alleviation, or as practices that distract from uncomfortable situations. Below are several excerpts to this point:

- **Robert:** It's a stress-management practice. Absolutely. When I start feeling overwhelmed, I get out the notebook and I start making lists and I start writing shit down and I just, you know, like "ok, don't freak, you've got to do this, ok, alright, well not that I've got it all here that's not really important, I can put that off," and blah blah blah... so yeah, absolutely it's a comforting thing, and it's a stress-management tool. [It] gives a sense of control, and control, you know, your mental health is all about control [laughter], or recognizing that you don't have control.
- **Amy:** I use it if I'm in a really stressful meeting with someone or if I'm listening to a talk and I don't know what's happening and I can't really take notes because it's on chemistry and I'm a physics person. So I take out the planner and set it in front of me and I'll say, "oh look, there's my day, and it's ok," and I can even take a break...if it's a lecture I don't

understand and I'm lost in thought or not following, then I can write down a couple things about what I plan to do and that will sometimes calm me down enough to feel like I can jump back in to whatever they're talking about... so rather than freaking out and being like, "I don't know, I don't know, I don't know, I don't know!" I can have this sort of as a tool to center myself.

- **Lee:** My main anxious reaction to something is to try to list it, to be like, "what do I need to do to get it done?" But being such a perfectionist, a list can be like, final, sort of like, "oh, if you didn't do it today than you've never going to get it done," so, ugh [exasperated sigh] it's anxiety producing, so with these symbols [from the bullet journal migration mechanic] it's like, "oh yeah, I didn't get that done today," that's fine, I'll just put an arrow there and then [it goes on the list for tomorrow]. It's really a sort of, it's like a fractal, you know, like the same structure repeating over and over again with just one part showing up until it's done.

The commonalities between these passages are striking, in that these moments unfolded even with similar structure of the sentiments. At the moment of discernment—once encountered by the feeling of being overwhelmed or anxious—the notebook is there to turn to as a different method of encounter. The planning and listing mechanics involved serve to make material and thus easier to handle those items that may contribute to those feeling states, or in Amy's case to distract her from a present feeling of being overwhelmed by unrelated stimuli.

In a similar but slightly different sense, Megan describes that the bullet journal genre has taught her to be less of a perfectionist herself, which she feels is a major accomplishment:

That's the other thing I have learned from this that is really important to me, that I think the bullet journal is particularly good at teaching. I have done a bunch of stuff in here that,

I hated it. It didn't go well or it's really ugly, or the first couple pages I did are just scrawly ball-point or whatever and *to me* it is really important to just keep going, not to try to fix everything before I do the next thing, and so I have a couple pages where I just decided halfway through I decided I didn't like this color of ink so I'm just going to do it differently... And it sounds like a small thing, but I feel like it's a huge thing for people who have any perfectionist tendencies especially if you're going through a transition because that can be a thing to like, obsess about... to me that is a life lesson. It's a *life* thing to be like, "you can just keep going."

For both Lee and Megan, then, the bullet journal system offers a procedure for handling perfectionist tendencies, or as Megan describes it, the bullet journal *teaches* this skill of being flexible, nonlinear, and to think of one's notebook as a place that isn't precious and is in a continual state of being reworked. That this lesson is extractable to life is a powerful assertion of the ways in which the genres' mechanics train the mind in that there are procedures for dealing with the items leftover on the day's list and an index to finally capture the page spread that was eventually designed and filled in to satisfaction.

The excerpts above include what I coded in my annotations of the transcripts as "talk," that is, moments where the notebook mechanics seemed to speak back to practitioners—perhaps in practitioners' own voices or perhaps from voices not their own, it's impossible to know. But it says something that nearly all of the interviews included examples such talk, most of which appeared within moments dealing with processing mechanics. These moments are subtle indications of how the system at the very least inspires a kind of out-of-body dialogue with themselves, an interlocutor mediated by the system, its cute, and its mechanics. Language as written down in particular ways that can be read as speaking back or structuring information in

ways that make what has been recorded differently legible. These moments of discernment and the mitigation of negative affects through this kind of talk is a palpable and poignant point of evidence to the potential for notebook-based systems to function as paper programs for their practitioners.

4.6 Conclusion

In the discussion above, I propose recollection, remediation, and re/processing as three thematic structuring concepts for how notebook-based system practitioners offload life's information and process it through various constrained mechanics in order to make that information differently and productively legible to themselves. The systems help with information recall either through reinforcing for short-term memory daily tasks and priorities or through finding devices to aid in the retrieval of information stored for future use, they involve the remediation of personal data acquired through self-tracking or self-monitoring, and they aid in the processing of information captured and in the processing of discernable negative affective encounters.

In the discussion of remediation above, I introduce Casey Boyle's conception of posthuman practice as involving seriality, which is "a continual mediation of becoming" (54). By shifting the attention away from critical reflection, which depends on a self-aware autonomous agent, Boyle posits a revised understanding of metacognition that returns "meta" to a sense from the Greek etymological roots as meaning as much "among" as "beyond", such that terms like "metamorphosis" imply "a perception for moving *among*." Boyle contends that "[m]etacognition practiced in that way would shift from being *about* an individual's cognition and instead be a capacity to affect *among* distributed cognition" (58, emphasis in original). Perhaps the moments

of “talk” I point to above could begin to offer a sense through which the notebook systems as described evidence some level of perception about, but not necessarily cognitive reflection on or awareness of, a distributed cognition.

In the recollection I include narratives relaying the impact of practitioners’ systems on interpersonal relationships. For the most part, the impact is positive. Friends, family, and colleagues contribute to and enable such practices to continue by supplying materials as gifts with the understanding of how substantial such practices are for these individuals’ lives. Catherine’s story, however, leaves us with a warning, in that her relationship with her partner and friends have been at times strained by her stringent adherence to the system she relies on. I posit that while scholarship attending to the generative potential of constraints in the context of expressive media have the luxury of exploring that potential with overwhelming positivity, I do not have that same luxury here.

The excerpts above demonstrate overwhelmingly that the constrained mechanics of these systems are generative for their practitioners, not only in the ways in which they help practitioners handle life’s information, but in the ways in which those same mechanics help mitigate discernable negative affects. The positive implications of this work should not be downplayed; it suggests that for those who take pleasure in routine notebook-based writing such systems can provide a means for pursuing balance in life and as an answer to the threat of “information overload” and not just as a promise but as a fulfillment of that promise. In places, however, practitioners’ reliance on constraints seems to border on co-dependence and obsessiveness. On the one hand, as Lee themselves articulates, it provides an outlet for certain tendencies, a place that feels enabling of those tendencies in a safe space, which may feel like an indulgence to someone otherwise trying to cope with obsessive tendencies. On the other hand, it might be best to proceed with caution.

On that note, I want to explore one more excerpt from Catherine, whose descriptions of her system and her reliance on it is at times depicted as very rigid. Quite late in our conversation she offers a moment that is revealing in terms of the willful distribution of agency to her system which is also about loosening the hold her system has on her and learning to be more flexible:

I feel like last year I was burned out and some of the things I told you I just backed off of on the weekends, and it helped a lot... I also just accepted that when I get home from work I don't care, I'm not going to work like I used to, and it's fine and everything will be OK. I kind of put that into practice in the fall and I feel much better, and I feel much more at peace. I'd be behind in my planner sometimes writing in the next day, but I was fine with it, and I feel like we have a, it's like we have a, oh my gosh I referred to it as a "we"! [laughter], but I feel like we have a better structural thing going. I'm not as attached to it, you know, I'm still very attached to it but not as attached to it. I mean, I think that the job market and the dissertation are so scary it was kind of like, I had a—this is going to seem bizarre to say maybe—but I had a stuffed animal when I was a kid. It was like a safety thing, and I feel like in a way my planner became that for me. You know, it was my control mechanism, it was really important to me. It got me through the hardest things I've done... I mean, I hadn't really thought about it like that before, but it is like an emotional thing for me, I have a connection to it... I think I'm finally starting to realize that it's ok if the planner changes. It got you through those hard things, so it's ok if it changes.

Interestingly, this moment occurs when she feels that she and her system have achieved a better balance, "a better structural thing going," using language she introduces earlier in the conversation to introduce her system as "this thing that really structures my life." That is, now that she's backed off from it a little, now that it gave her the focus she needed to get through the incredibly

challenging events of dissertation writing and the job market and early years of her work as an assistant professor, she has renegotiated with herself and her system a greater sense of flexibility, attending to it only during what have become her normal work hours and less so on weekends. Her attachment to it has thus loosened and improved her overall quality of life. The plural subject “we” Catherine employs is a striking indication of the system having an identity of its own outside of herself or as her creation, and not just in the sense of an “it” that serves a variety of rhetorical functions, but in the sense that Catherine has a “connection” to it, a far from inconsequential emotional relationship. That it helped her get through the “hardest things” she’s experienced offers a sense of the *weight* of how much she gave over to her system. The expression implies not only a relationship but a companionship or even a collaboration. Later in the conversation I bring up the “we” as a segue into a question about how much the people around her are aware of her system and its function for her, and she expresses some embarrassment over the slippage: “I was a little disturbed by it... but that’s the reality, I mean I’m attached to it.” When I mentioned that part of my focus is on how we collaborate with these kinds of systems she enthusiastically adds, “Right! Good!” as though the notion of a collaboration made sense to her.

The interview participants in this study provide substantive insight into the function of notebook-based information systems for everyday writers and their routine daily lives, and also open up questions of the limits of limits. That is, the interviews confirmed that the constraints that regulate nonce notebook-based systems operate as generative mechanics for the distribution and deferral of personal agency and as rhetorical training through serial repetitive practice, but also offer insight into the affective dimensions of such practices which introduce considerable complexities. Those dimensions speak to a range of contemporary topoi involving so-called “self-care,” which I will explore as this dissertation’s conclusion.

5.0 Implications for Rhetorical Ecological Frameworks, Rhetorical Genre Theory, & Constrained Notebook-Based Practices and the Commonplace of “Self-Care”

The central point of inquiry for this dissertation has been to explore what notebook-based information systems, as routine and repetitive acts of writing, promise for their users, and to explore what they *do* as rhetorical and affective agents of change for the lives of their practitioners. In general, these systems promise to help practitioners gain control over life’s abundance of information, to help practitioners live more productive and balanced lives. I have argued that constrained notebook-based information systems involve a practitioner’s willful deferral to and distribution of agency to their systems’ mechanics, which function in procedural and programmatic ways as rhetorical, cognitive, and affective training. I have made this argument through the case examples of two specific notebook-based genres, the commonplace book and the bullet journal, as well as through the nonce practices of individual everyday writers whose systems gather mechanics from a variety of activity systems.

I have looked to system advocates’ discourse as presented in published meta-genres to locate the programmatic qualities I sought to unpack and have tested that discourse—in the case of the bullet journal—through computer-assisted methods to reveal what makes these systems legible to both potential human practitioners and machine audiences. In speaking with everyday writers who routinely practice notebook-based writing, I have explored how even if the practitioner isn’t fully aware of, or interested in reflecting on, the ways in which their subject positions are being distributed, they nonetheless describe that they have *relationships* with their systems and that they rely on them to process personal information and mitigate negative affects. While constraints do prove to be generative mechanics for notebook-based system practitioners, the

everyday writers revealed some senses through which their generative nature cannot be considered purely positive forces. While writing constraints can provide a safe space for tendencies that would be harmful for other contexts, they can also negatively contribute to the practitioners' pursuit of balance.

In this dissertation's introduction, I posit that we might think of writing constraints as technologies of mediation, as an external force introduced into an ecological system which requires it to reorient itself. I do so in part in response to Anis Bawarshi's figuring of genre as involved in a rhetorical ecosystem, which "captures the dynamic relationship between rhetorical habits and social habits that genres maintain" (9) but nonetheless does not fully determine a writer's activity, as that activity rearticulates and transforms those same habits. As the concluding gesture of this dissertation, I return to expand on the notion of writing constraints as technologies of mediation as a bridge to what I see as this dissertation's contributions and implications. Before I take us there, I must take a moment to explore how ecologies and habits have been operationalized in post-critical scholarship. What follows is by no means a thorough literature review or even a thorough synopsis of the works I mention (which would take a whole additional dissertation). I am, rather, taking a moment to travel through and account for some of the scholarship that hovers around this dissertation.

5.1 Habits and Ecologies

Ecological frameworks have become prevailing models for the complex dynamic of human and nonhuman forces that co-construct our world. In general, ecologies are a preference over other figurations like assemblage (see Jane Bennett) or network (via Latour's actor network theory,

though Latour also turns to ecologies) because assemblage doesn't seem to do enough to describe the relationships between forces as agents of change, and network implies those agents are stable or discrete sites as they behave like ends and nodes. The notion of an ecology thus takes us to models of elements always on the move, always in flux, and always pushing against and giving in to one another. In application, there has been, for example, Byron Hawk's notion of a post-*technē*, which reforms technique through its embeddedness in institutional contexts ("Toward a Post-*Technē*"), as a revised understanding of deception as not involved with what a person does to another person but as "an emergent phenomenon within moments of encounter" (633) by Nathaniel Rivers and Maarten Derksen, and through Collin Brooke's *Lingua Franca*, which positions the classical rhetorical canon as an "ecology of practice." Ecological frameworks are thus often advanced as a matter of revision, reinvesting in long-considered rhetorical concepts by reorienting them as within a system that cannot be reduced to static elements.

In Jennifer Edbauer's proposal for an ecological rhetoric, she attends to the always moving "places" of rhetoric as an alternative to the rhetorical situation, since, she argues, exigence and audience (for example) do not in fact operate as discrete sites—as aspects of the Bitzerian version of the rhetorical situation often are depicted—but as "distributed across a range of processes and encounters" (13). She thus proposes a concept for *affective ecologies*, which includes the environment within which one writes as well as the technologies one uses as well as other affective influences like whether the group one writes with or for is "apathetic/energetic/distant/close" (13). Ecology better accounts for the "amalgamations and transformations—the spread—of a given rhetoric within its wider ecology" (20). Ultimately, she refigures situation as a verb rather than the noun which implies place(s), that "rhetorical situation is better conceptualized as a mixture of processes and encounters" (13).

Perhaps the most prevalent advocate of ecological thinking from an environmental and rhetorical perspective is Thomas Rickert, who in his significant book *Ambient Rhetoric* argues that we must account for the “ambient” as “the active role that material and informational environment takes in human development, dwelling, and culture... it dissolves the assumed separation between what is (privileged) human doing and what is passively material” (3). In doing so, he reimagines “persuasion as a kind of attunement or listening to things and environs” (254). Attunement is a “wakefulness to ambience” which is “not a subjective achievement but rather an ambient occurrence” (8). Attunement may involve consciousness, but is also inclusive of “the countless modalities of responsiveness” to a “worldly rhetoricity, an affectability inherent in how the world comes to be” (9). In this sense, *kairos* is “not about mastery but instead concerns attunement to a situation, with attunement understood not as a subjective state of mind or willed comportment but as an ambient catalysis within what is most material and concrete, a gathering that springs forward” (98).

When Rickert describes the writer, he describes the writer within an environment not unlike my own opening gesture of this dissertation, as seated within environments like coffee shops and conference rooms where “The ‘writer’ writing cannot be understood as a discrete, individualized entity bounded by skin and self-image, wielding external tools and thoughts” (119) because we “entwine ourselves” with our materials of writing, and our thoughts emerge “in the complexity of interaction beyond our individual control, since the ambient situation worlds us. We contribute, of course, but as a catalyst and site of disclosure, not as sole producer and controller” (119). Rickert later insists that “[t]he writer is not merely *in* a situation; instead, the writer *is* a situation.... From an ambient perspective, the writer is written by the environment” (128). As an alternative to the traditional subject-object relationship between writer and topic, the ecological perspective thus

understands the writer as within the “relations of tension, balance, and flow, with an author coconstituted through forms of worldly engagement” (129). The emphasis on ecologies as always moving but always pursuing balance is perhaps the key component of natural ecologies that proponents of ecological frameworks aim to bring to rhetorical studies.

The figure of the writer within rhetorical ecologies is positioned in terms of production and the ways in which rhetoric is practiced. This move is a move I’ve also made, by taking up Janet Atwill’s figuring of rhetoric under the Aristotelian concept of productive knowledge, such that “subjects are ‘users,’ not ‘knowers,’ and every different use of a *technē* defines the subject differently” (185) thus *technē* can never be possessed as property. Because the conditions of production involve forces not in the conscious control of an individual writer, production cannot be reduced to conscious autonomous authorship.

In Casey Boyle’s positing of rhetoric as a posthuman practice, he understands writing to be the “continuous cultivation of habits” (55). Paraphrasing Collin Brooke’s approach in *Lingua Franca*, Boyle takes on Brooke’s “ecology of practice” as that which “positions nonconscious activity, including habits and nonhuman relations, as being as much a part of rhetoric’s ecology of practices as conscious attention and symbolic activity” (56). I’ve already attended to Boyle’s articulation of the serial quality of practices, but it’s worth a point of emphasis here that repetition is seen as a generative force in that repetition is never exact repetition, but repetition with a difference. He thus depicts habit as “a productive force” (57). Following Elizabeth Grosz, he positions habit as “firm but flexible, positioned but persuadable” (57). Boyle’s sense of habits as productive thus recuperates habit from the senses through which is generally advanced, as entrenched not necessarily conscious behaviors and dispositions.

Of great influence has been Bourdieu's theory of the habitus as a "universalizing mediation which causes an individual agent's practices, without either explicit reason or signifying intent, to be none the less 'sensible' and 'reasonable'" (Bourdieu 79). Following Paul Connerton, N. Katherine Hayles describes an "*incorporating practice* [as] an action that is encoded into bodily memory by repeated performances until it becomes habitual" for which she cites learning to type on a keyboard as one such practice (199). Wendy Chun presents a case through which "[t]hrough habits users become their machines" (1) to the point where "habits also habituate. They enable us to ignore new things; they dull us to sensation and the environment" (9). Regarding embodiment as installed by physical and rhetorical training, Debra Hawhee's notion of *phusiopoesis* involves the ways in which "repetition inhabits rhetorical training" (159). As explored briefly in my attention to the commonplace book, Hawhee argues that because such training prepares one with a readiness to meet the *kairotic* moment, such training is not reducible to procedures. In all cases, behaviors are already inculcated or become inculcated into habits which are or become automatic, subconscious dispositions. To return to Bourdieu in a moment I reference previously, Bourdieu uses the example of the Sophists to say that in any description of a system of rules "the habitus inevitably reappears" (20), it thus always precedes any articulation of procedures.

5.2 The Texture of Constraints

Ecological frameworks do a lot to acknowledge the complexities of any happening as requiring a dynamic interaction of forces, and habit certainly describes a sense wherein practices are inculcated into automatic behaviors and dispositions. The scholarship I've cited above has made its way in and out of the drafts of this dissertation as I've looked for places where the

depiction of constraint I've offered from the perspective of experimental poetics can sync up with these theories from rhetorical and media studies that help us understand our complexly contingent co-constructed world. I've struggled in this dissertation, however, to orient notebook-based information practices—paper programs—as functioning within ecologies and as practices that inculcate habits through repetition and embodiment. The sense Bawarshi advances for how writers, through genres, both maintain and transform rhetorical and social habits feels necessarily true but not sufficient for the genres of constraint-based paper programs I explore in this dissertation.

Constraint as understood from the perspective of poetics is a *willful* deferral of the autonomous authorial subject position. In my consideration of the commonplace book, I sidestep embodiment preferring instead Perloff's *internalization* to understand how constraints carry with them ideological force that can then train a practitioner's rhetorical faculties. I experiment with blog posts about bullet journaling through topic modeling as a constrained method of disrupting my own habits of reading. While the interview participants in the previous chapter generously describe the importance of *routine* and the repetitive use of their notebook-systems, our conversations at once evidence that practitioners defer to the mechanics of their system to help them process personal and even affective information and simultaneously evidence that such actions install a sense of control in the practitioners we might otherwise recognize as agency.

Ecologies maintain themselves through constant negotiation between forces. In this sense, my articulation of constraint as a mediating technology could operate just fine within an ecological framework as a mode of ensuring checks and balances. But the effusive sense of *that which constrains* feels to be of a different texture than the appropriated, customized, and self-imposed constraints I consider throughout this project. These are constraints that disrupt and retrain “natural” language tendencies. These are constraints that remediate life's information into new

forms. These are constraints that *rub up against the habitual* and that *can be* articulated as procedural *and* as training in readiness to meet the *kairotic* moment, or we might say *in being present*. They are *inventive and expressive* forces even if they are not enacted as methods of creating literary expressive media. As inventive forces involving the stuff of life—personal information gathered from reading, from time spent, from health symptoms, from daily tasks and responsibilities, from the events of life that need to be recorded—notebook-based systems involve the practitioner as a participant in the construction of their own being, as both writer and reader, student and teacher. The mechanics of their systems function as co-constructors or collaborators, as *whatsits* that machine language—to return to Brown’s definition of rhetoric I adopt in the introduction.

While it might be tempting to describe users of paper programs as engaging in *reflective* activity, the discourse of reflection is not what advocates of these systems promote. Even in Ryder Carroll’s attention to “mindfulness” comes down to the failure of certain tasks to migrate—that is, at the point where a task has been repeatedly written down but never attended to is the point at which the system is telling a bullet journal practitioner that the task might not be that important or meaningful. This aspect of the system is reinforced by interview participant Megan’s story of what the bullet journal has taught her previously perfectionist self, that the nonlinear quality of the bullet journal allows her to simply start a new page if something doesn’t seem to be working. The mechanics of the system permit her to not be a perfectionist in the same ways she might have been before. In this way, written production involving constraint is perhaps closer to the realm of Casey Boyle’s notion of posthuman practice, which involves *serial* repetitious activity as a “continual mediation of becoming” (54). In a similar move that I’m making here, Boyle excludes Bourdieu as relevant to his understanding of practice because Bourdieu’s depiction of procedures as only

understandable after the fact depends on reflection, which reinforces a traditional understanding of a conscious human agent. In the examples above, repetitive, serial, and routine (re: procedural) practices *teach* through their mediating activities.

The challenges I've faced in reconciling how constraint-based writing mechanics rub up against habits but nonetheless evidence a distributed sense of agency do not mean that this work is incompatible with ecological frameworks. I argue, rather, that writers of highly constrained notebook-based systems are a case where writers are *attuned* to the array of forces that influence their coming into being and thus introduce constraints as a way of intervening in those forces. In cases where this attunement relates to a discernment of negative affects, such practices offer a corrective to affective dimensions detrimental to one's sense of well-being, and thus serve as mechanism for what we might recognize under the contemporary commonplace of "self-care," which I'll explore as an implication for future work below.

Because notebook-based practices are *routine* and *repetitive* practices, they match the momentum of other forces in flux by meeting movement with movement. As Rickert insists, attunement may involve a conscious awareness but may also describe the ways one can be responsive (we might even say *intuitively* responsive, such that actions made from such responsiveness appear to be evidence of one's "nature") to a situation and an environment. I have argued that something in the disposition of the writer allows them to see the generative potential of constraints, I can now revise that assertion to argue that it is the writer's capacity to attune to—to listen to—the variable and veritable forces at play in co-constructing our world. To describe constraint as a technology of mediation is thus a slight shift in orientation from describing constraint solely in relation to its generative potential. Constraints are generative *insofar as they mediate*.

5.3 Contributions and Implications for Future Work

I see this work as contributing to scholarship in rhetoric in composition in three areas. The first is in the sense already described, in that writing constraints as they operate in notebook-based information genres provide a case where writers are attuned to the distributed quality of their own agency and take up constrained mechanics to intervene in to mediate (and remediate) personal and affective information. The second contribution is to rhetorical genre studies. I have interacted variously with the meta-genres that circulate discourse about notebook-based information genres, and thus this study contributes not only potential methodologies for genre study, but offers a lens through which to view genres as social actions as reaching well beyond the sociocultural exigencies of human groups. Third, I see this work as contributing to an understanding of the emergent contemporary commonplace of “self-care” that currently saturates our culture. The development of this last contribution is one area I’ll explore as a potentially poignant future direction of this project. I reflect on the remaining two contributions below.

5.3.1 Genres of Notebook-based Information Systems

While the discourse of constraint is not absent from discussions of genre, as relayed in this dissertation’s introduction, is it often activated in the context of *that which constrains* from the sociocultural contexts within which genres are embedded. Genres as social actions has overwhelmingly been the persistent definition for genre work since Carolyn Miller introduced that definition in the early 1980s, as evidenced in part by Omizo and Hart-Davidson’s reliance on it despite an interest in testing genre through computer programs. While a few studies have emerged

for an expanding sense of the social as involving not only human actants but environmental, affective, and technological actants²³ more work in this area needs to be done.

Likewise, scholarship attending to distributed agentic forces attends minimally to genre, or seems to speak to situations involving genre without exploring genre in earnest. For example, when Byron Hawk imagines a post-*technē*, he offers an aside that lest we might think he's speaking in about genre from an activity theory perspective (see for example, Bazerman), he qualifies that a post-*techne* "differs from them in emphasis":

Genre theory starts with the structure of a preestablished genre... and activity theory starts with a structural model not unlike an updated version of the communications triangle. A post-*techne* that is more attuned to *kairos*, emergence, and ambience starts with the structure of particular constellations and the invention of techniques for and out of those specific occasions. (384)

Hawk doesn't discredit genre study but implies that genre cannot be attuned to "kairos, emergence, and ambience", elements I take up variously throughout this dissertation. I argue that a greater focus on meta-genres as a "constellation" of talk in and around genre practice is a way to shift the focus from preexisting genre instantiations and toward an understanding of genre as informed by ambient and kairotic forces which thus influence genre emergence, stabilization, and change. I have enacted this argument variously in this dissertation.

In Chapter 3, I experiment with topic modeling as a method of meta-genre analysis through the claim that the topic-first orientation of the topic modeling LDA algorithm both comes from

²³ Most notably Clay Spinuzzi and Mark Zachry's "Genre Ecologies: An Open-System Approach to Understanding and Constructing Documentation", though see also Ashley Rose Kelly and Kate Maddalena's "Networks, Genres, and Complex Wholes: Citizen Science and How We Act Together through Typified Text" and certainly Bawarhi's *Genre and the Invention of the Writer*.

and points to a context of genre. I demonstrate that topic modeling meta-genres can expose the context of genre that is legible to both potential human practitioners and algorithmic audiences. While scholars have insisted that genre work is informed by antecedent genres (Jamieson) and by the already existing genre experience and knowledge that contributes to genre knowledge (Devitt), the context of genre for genre work is rather difficult to make visible enough that it can be studied. Topic modeling thus offers a way of reading meta-genre for discourse that signals the context of genre.

In the case of the bullet journal, topic modeling the top blog posts that come up for a search for “my bullet journal” reveals that practitioners reference a range of genres in relation to their own bullet journal practices, evidencing not only that it seems to fulfill its promise to absorb every notebook-based genre from journaling to long-term goal tracking and planning, but that nuances between topics help to reveal slightly different orientations toward those activities. In addition, they evidence a care and concern for the materials of bullet journaling. That the pre-printed planner appears to be the most prominent antecedent (or adjacent) genre to the bullet journal leads into a hypothesis that the version of the bullet journal that emerged to look and be described as a kind of DIY hand-drawn planner gained so much traction because it tapped into an already reemerging culture of primarily female planner and planning enthusiasts. Had it remained in the realm of productivity systems (within the orbit of systems like “Getting Things Done,” for example) the discussions surrounding its utility would have taken on a dramatically different color. The models thus also offer a view through which lifestyle content on the social web is a powerful and popular force, which as a culture dominated by women creators and readers offers critical questions for the role of gender in the context of (at least this) genre.

The lifestyle blogs that surface at the top of search results about bullet journaling, however, only reveal one culture that the bullet journal has gained traction with. Lee, the individual I interviewed who identifies as non-binary trans, discussed with me how queer media sites like Autostraddle also took up the bullet journal with great enthusiasm. They describe in detail how their uptake of the bullet journal was a kind of “aspirant” practice: “There’s a lot of aspirational focus for me in how I consume media. I like to believe that the way I’m reading or the way I’m self-selecting or the way I’m participating in media puts me in the company of people who I admire.” They reference wanting to engage in this company in more than a passive way, through putting themselves in the company of such people in person, but having moved to a new city the media they consume helped them to feel “in the company of people who are thinking about some of the stuff I’m thinking about, or asking better questions, or having better problems, or anything I want to align myself.” They acknowledge that there is a consumerist angle to this “aspirational” media consumption, but seems almost amused by that aspect.

I wasn’t able to engage with this component of our interview in Chapter 4, but I share this moment now as potential fruitful territory to explore in future work. Lee provided me with robust stories about how the information system genres they participate in not only involve this kind of aspirational consumption of media to put themselves in the company of likeminded people but explored in our discussion how their recovery of personal writing as a safe space and their emergent gender identity are intimately entwined. Future work making use of this interview has the potential to explore the affective dimensions of the pains and pleasures of the context of genre. While much has been done in the area of literary and film genres and affect, this would be relatively new territory for rhetorical genre and meta-genre study. Such work would take up the ways in

which writing constraints within Lee's chosen genres operate as mediating forces for processing personal and affective information, which for Lee in particular is endlessly complex.

5.3.2 Notebook-based Practices as Contributing to the Commonplace of "Self-Care"

I have framed the methodologies of this dissertation as interacting variously commonplaces as inventive and persuasive forces. As components of the complex dynamics that inform human inventive practice, commonplaces operate as touchstones for arguments shared and repeated. Keeping in mind that commonplaces were once considered efficient universal argument schemes through which to gain favor with one's audience, we might think of contemporary *topoi* as those terms that populate headlines, memes, and social media hashtags to—with brevity—immediately conjure up a host of practices and that carry with them self-sustaining arguments. In a move similar to my own, Casey Boyle argues that a media archeology perspective of "the media practices involved with *topoi*" offers rhetoricians the opportunity to shift the focus away from individual instantiations and look instead to *topoi* as "the process through which an ecology of practices incorporates and sustains *topos*" (131). That is, a *topological* engagement understands the *topoi* to be "temporally dynamic media events whose topologies unfold in nonlinear movements" (135). This dissertation's methods can be seen as enacting and revealing some of the media events surrounding notebook-based practices, but there is potential for a further exploration of the sphere of events notebook-based genres and nonce practices are of a part. If called upon to define it, I would describe notebook-based practices as contributing to the contemporary *topoi* we might name as "self-care."

As a parallel turn to the one I make to constraint via experimental poetics, Boyle turns to Erin Manning and Brian Massumi's notion of "enabling constraints" which they define by the

example of improvisational dance and the constraint gravity puts on the body. The same constraint through vertical movement and pushing off to leap also enables lift “the generation of a positive role in the generation of an event” (Manning and Massumi 93). Boyle travels first through Aristotle’s advice to keep a “sketch book” of examples (see my own example of this moment in Chapter 2) and then to Foucault’s *hypomnemata* writing (see “Self-Writing”) as a kind of flexible commonplace book where scraps of media engaged with along with thoughts on them are captured in a notebook. Boyle summarizes that “we find that the selection, collection, and generation of disparate items in *topoi* occasions dis-continuous events wherein *the* composer is neither a subject nor object but instead becomes informed through a transductive practice of assembling multiple media fragments in one place” (138). The notion of such practices as “events” is a productive extension of the language I’ve used to describe these genres, though in this depiction the ways in which “the composer” is “informed” is elusive and mysterious, shrouded in theory. It is my hope that this project and future work from it will contribute an understanding of such media events with greater clarity.

While we both attend to commonplaces as involving inventive potential, and with a care and concern for a becoming that unfolds from that assemblage, Boyle is operating one again from the frame of *that which constrains*. The multi-media assemblage constrains as a condition of its assembledness. However, in the notebook-based practices I discuss in this dissertation, multi-media aggregation practices depend on constrained mechanics that are appropriated and customized from *genre conventions* to determine how media are organized, processed, and remediated. Having adopted a genre like the bullet journal practitioners may not even be aware of the ways in which the mechanics of the system will condition their own faculties. The difference in how practitioners are rhetorically trained by their systems is perhaps a difference in degree of

precision, but if we are to understand *topoi* as “media events” that these media involve constrained mechanics provide a view much like a fractal (to cite interview participant, Lee) in that the smallest instantiation of the mechanic repeats itself outward and the parts repeat the conditions of the whole. Put another way, constraints are *internalized* in compositions (media) and within the bodies of practitioners.

As a case where writers are attuned to the distributed quality of their own agency and take up constrained genres and mechanics to intervene in and thus mediate (and remediate) personal and affective information, I see this study as a step toward understanding the “self-care routine” as iterative and programmatic rebalancing efforts. In Loretta Pyles *Healing Justice: Holistic Self-Care for Change Makers*, she opens with an anecdote about a time when the stresses of her job as working in a program to help women victims of domestic violence and the event of undergoing the dissolution of an intimate relationship left her in a moment where she was not in any sense taking care of herself. She then describes how slowly committing to meditation, yoga, and “self- and group inquiry” brought her to a greater sense of “being present” in her body, “more successful and impactful” in her work, and in feeling more connected to the world and those around her. She then describes a successful moment in her work as policy advocate on behalf of community-based organizations which happened to coincide with having recently completed a meditation retreat. As she and her colleagues pitched their need for funding successfully, she describes herself as feeling “particularly open, empowered, and clear.” She continues:

Who knows, perhaps if I had walked into that meeting crazy-eyed and burnt out, maybe we could have received the funding too. But the experience piqued my interest in the connection between my meditation work and my social change work. I am not intimating that when you meditate everything is going to go your way, or you’ll be able to change

what political party is in office, or get your client to stop drinking heavily, or end racism. Rather, I am pointing to the prospect of what creating a little bit of space in the mind-heart can do, potentially allowing one *to move beyond conditioned patterning* that can disempower and deplete a person, creating *an opening for new possibilities to emerge*. (xvi, my emphasis).

Perhaps importantly, Loretta doesn't frame what opens in the mind-heart as a reflective practice, although we think of meditation as such a practice. She frames it instead as attributable to routine and repetition. In terms that should feel familiar to the ways in which I've described the generative potential of constraint here, there is a sense that the practices of self-care she saw herself participating in were an opportunity "to move beyond conditioned patterning" and create "an opening for new possibilities."

I have emphasized the routine and ongoing repetitive nature of notebook-based practices but have not been able to take ample time to investigate this quality with due merit. In hindsight, the repetitive *assignment* of commonplace books in school contexts is perhaps what shifted the once common capital of poignant excerpts to that which is trite and too often repeated. In Locke's view, the commonplace book doesn't work as an assignment, but when committed to as a part of a personal practice it can be incredibly productive. I imply that illustrating and decorating one's notebook as a part of the practice of bullet journaling may contribute to practitioners' sense of being mindful, even if seemingly unrelated to the constrained mechanics Carroll (and I) have pitched as that which trains the mind in mindfulness. Throughout the interviews I cite in Chapter 5, practitioners emphasized the importance of the environments within which they use their notebooks, the materials they choose to use, and the time of day and otherwise ideal circumstances for making space, routinely, for their notebook-based practices. I make quick work of these

routines in the chapter, but the interviews will continue to provide a wellspring of information for future consideration.

In the sense approximate to Bolter and Grusin's definition of remediation from a process perspective, mechanics are transformed again and again through their instantiations in different media. I mentioned in brief that popular customizations seen in bullet journaling for gratitude logs, habit tracking, and formal modes of goal setting have since made an appearance in pre-printed planners, which now often market themselves from the get-go as mindfulness practices. The self-care market, explored in brief through Lee's story above, is a potential dimension of the complex array of forces that play a part in advancing the commonplace of self-care and the ways in which pen-and-paper systems contribute to it. In addition, papers have surfaced from information technology developers aiming to learn from the mechanics of paper-based systems to adopt for a new wave of digital tools. A version of this study centered around the commonplace of self-care could explore the variety of media instantiations of the mechanics I explore in paper-based systems in this dissertation.

Routine repetitive actions involve a different mode of embodiment from habits in that the routine is procedural. It *can* be reduced to systematic "steps." One might not be cognizant of how committing to a notebook-based practice contributes to one's sense of well-being—perhaps practiced in the morning, with coffee, with a clear and clean desk—but are responsive to the meeting of the body and the mechanics of the system as they repeatedly and routinely commit to meet. For some, that commitment is as meaningful as morning stretching or going for a walk. Routines participate uniquely in an ecological framework of rhetoric in they interact with environment, acts of making, the body, and a sensitivity to the ways in which routines impact one's sense of balance as a part of the rhythm of life. Importantly, however, such routines are a privileged

space. Not all have access to the time or mental energy to commit to such practices, nor the money to pay for meditation retreats or elaborate materials. The practices of self-care we've seen explode in our culture's media are, however, rooted in evidence-based practices. We see an inkling of this in, for example, Megan's doctors' recommendations to meditate and to keep a schedule. Another instantiation of the commonplace appears in the recommendations of works like Loretta Pyle's project, which argues for self-care as greatly important for those working in social justice professions. Future work would require a greater attention to such bodies of scholarship and bring to it the argument I make here regarding the practitioners' attunement to distributed agency and constrained mechanics as mediating technologies.

5.4 Conclusion

This concluding chapter has brought the work of this dissertation into greater conversation with some of the scholarship advancing ecological frameworks as models for the distributed nature of our complexly constructed world. In doing so, I have argued that writers of highly constrained notebook-based practices provide a case for those who are attuned to the array of forces that influence their coming into being and thus introduce constraints as a way of intervening in those forces, as technologies of mediation. I have argued that in cases where this attunement relates to a discernment of negative affects, such practices offer a corrective to affective dimensions detrimental to one's sense of well-being, and thus might be considered under the contemporary topoi of "self-care." I have proposed a more robust investigation of self-care as "media event" as a potentially productive future direction of this work. Along the way, I have emphasized the contribution this study makes to rhetorical genre study, claiming that meta-genres appropriately

shift the focus away from preestablished genre instantiations and toward a consideration of genre that is inclusive of ambience, kairos, and emergence.

I began this dissertation with a scene conjuring up a montage of everyday writing as taking place in conference rooms, coffee shops, corporate offices, and kitchen tables. A scene of everyday writing where various forms of temporary present-tense writing practices meet the constrained practices of notebook-based system practitioners, a scene where laptops and mobile phones and tablets are in use alongside legal pads and notebooks. I have made less than I'd hoped of the environmental and material contributions to these writing routines, but I hope I have shown in this conclusion some inklings for how these facets may make an appearance in future work. For the moment, I'm struck with quite specific images as an update to that montage. I now picture these scenes populated with the individuals I interviewed about their practices.

I see Megan at the coffee shop writing out her plan for the day. Taking a sip of coffee, she realizes the day is going to be taxing, and that she'll have to schedule some time for rest. Amy is in bed under the glow of a dim lamp on her bedside table, going through her food log with a highlighter to mark which foods might have exacerbated the symptoms of her ulcerative colitis (it was a good week, hardly anything to highlight at all). I see Robert flipping back through his meeting notes while on the phone with someone who remembered the outcome of the same meeting differently, asserting the facts as he recorded them to be the truth of the matter. Catherine, smiling, stands up from the kitchen table realizing her work tally has reached five-hundred, and settles onto the couch with her laptop to begin planning the next weekend trip with her boyfriend. I see Dane sitting at his desktop computer (which is decked out for gaming), as he adds the data for how he spent his day into his Excel spreadsheet, watching as the dashboard of charts and graphs adjust to accommodate the new information. I see Linda in a conference room, rapidly taking notes

in shorthand. At this very moment, she is recording a task and labeling it with a big star to cue herself to follow up later when the task is done. Lee is on the train, writing their morning pages as time and the train stops tick by.

Appendix A Topic Models

Table 4 Topic Key: 20-Topic Model with an Even Distribution of Topics

Topic #	Dirichlet Parameter (Weight)	Tokens Assigned to Topic
0	0.25	planner week time day monthly list notebook weekly month planning spread plan love color page add end tasks layout space
1	0.25	notebook system notes notebooks bullets idea ideas size thoughts ryder_carroll ryder place topic handwriting pocket specific organization pick to-do called
2	0.25	month process review step important log weekly focus waiting habits small travel view priorities productive appointment personal video line mine
3	0.25	life goals process bullet_journaling mind includes map pretty long-term yoga care hand separate cycle moon practice minutes area stick desire
4	0.25	bullet_journal collections future_log pen collection log month index daily_log signifiers monthly_log add leuchtturm migration recommend end worth migrate events fountain
5	0.25	bullet_journaling reading favorite learning felt class note tools effective info journals semester access ways mark meetings due found days language
6	0.25	bujo pen pens love notebook thing washi leuchtturm dotted personally tape bullet_journaling fun filofax stamps setup spreads hard instagram ink
7	0.25	list lists method paper to-do daily work items calendar book box found days moleskine contents master organizational problem capture phone
8	0.25	journal information needed important brain record journals january visual entries entry feel separate diary flipping black dots book save draw
9	0.25	things lot journal place stuff pretty list read bullet_journals thing books write book kind good give year fit beautiful enjoy
10	0.25	planning create start homeschool set kids pens time brain family spot husband choose clear friend created system totally soul dump
11	0.25	found thing photos youtube diary let's october exercise gratitude solution stationery march july double half job thoughts calendex knew added
12	0.25	monthly notes projects lists section project actions side comments room books overview left found read space family gtd source tracking
13	0.25	paper notebook discs size covers happy pages make planner cut supplies made cover dividers decide notebooks puncher mistake sheets top
14	0.25	tasks task day system note productivity point bullet reference give list events written remember event completed circle analog short hand
15	0.25	page pages index write calendar put month simply future find back idea add journal appointments ideas day quickly date days
16	0.25	notes grid dot set black learned perfect style tool sense project recommend tip real concept highly taking amount sewing organizing
17	0.25	bullet_journal make post things started work track find system start great simple life writing love people works back check video
18	0.25	year tracker goals blog spreads layouts links habit bullet_journaling spread january affiliate set instagram business part blogging leuchtturm color decided
19	0.25	time digital information calendar evernote longer taking apps wanted app helps item simplicity concept approach action forward makes move control

Table 5 Topic Composition: 20-Topic Model, Even Distribution (Topics 0-9)

Doc #	Filename	Probability of Topic Appearing in Document (for Topics 0-9)									
		0	1	2	3	4	5	6	7	8	9
0	2013-08-21_attorneymarketing.txt	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.01	0.05	0.07
1	2013-09-08_plannerisms.txt	0.41	0.11	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00
2	2013-09-18_tomtunguz.txt	0.00	0.21	0.00	0.04	0.00	0.14	0.00	0.13	0.03	0.00
3	2013-09-24_tomhazledine.txt	0.09	0.03	0.00	0.18	0.01	0.02	0.00	0.14	0.02	0.00
4	2013-09-29_thinkingversusdoing.txt	0.27	0.00	0.07	0.00	0.00	0.00	0.03	0.11	0.03	0.00
5	2013-10-01_tobybaxley.txt	0.03	0.07	0.01	0.00	0.05	0.02	0.00	0.09	0.02	0.04
6	2013-10-17_accordingtoandrea.txt	0.13	0.29	0.00	0.00	0.00	0.01	0.04	0.00	0.02	0.00
7	2013-11-25_nosmallactors.txt	0.03	0.18	0.02	0.06	0.01	0.02	0.00	0.10	0.21	0.01
8	2013-11-27_sanspoint.txt	0.04	0.16	0.00	0.03	0.00	0.05	0.05	0.02	0.00	0.06
9	2013-11-30_welcometosherwood.txt	0.04	0.14	0.00	0.02	0.02	0.08	0.00	0.06	0.01	0.03
10	2013-12-04_msbookish.txt	0.11	0.00	0.01	0.00	0.00	0.03	0.00	0.11	0.00	0.04
11	2013-12-29_bump.txt	0.03	0.11	0.00	0.05	0.00	0.05	0.01	0.08	0.00	0.02
12	2013-12-31_eddyhope.txt	0.09	0.09	0.00	0.00	0.01	0.00	0.00	0.03	0.02	0.00
13	2014-01-03_apronsnpearls.txt	0.24	0.01	0.00	0.00	0.00	0.01	0.00	0.06	0.00	0.20
14	2014-01-26_clarifilo.txt	0.27	0.00	0.01	0.01	0.02	0.06	0.05	0.00	0.00	0.02
15	2014-02-02_tamingdata.txt	0.08	0.00	0.03	0.00	0.00	0.00	0.01	0.20	0.01	0.01
16	2014-02-08_apenchantforpaper.txt	0.30	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.06
17	2014-03-26_lifeinlimbo.txt	0.07	0.10	0.00	0.01	0.01	0.01	0.02	0.22	0.02	0.01
18	2014-03-27_ughiloveit.txt	0.24	0.00	0.00	0.00	0.06	0.10	0.00	0.00	0.00	0.00
19	2014-04-08_prairiehometherapy.txt	0.08	0.06	0.00	0.00	0.01	0.00	0.00	0.24	0.00	0.04
20	2014-04-28_laddventure.txt	0.08	0.30	0.00	0.01	0.00	0.02	0.00	0.05	0.00	0.03
21	2014-05-07_riotandfrolic.txt	0.14	0.03	0.02	0.14	0.00	0.07	0.01	0.21	0.00	0.00
22	2014-05-22_kyleconarro.txt	0.03	0.13	0.00	0.00	0.07	0.00	0.00	0.24	0.00	0.00
23	2014-05-3_stonesoupforfive.txt	0.11	0.11	0.00	0.01	0.00	0.01	0.00	0.16	0.01	0.32
24	2014-06-10_mytwomums.txt	0.19	0.00	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.01
25	2014-06-11_classicallyhomeschooling.txt	0.12	0.04	0.00	0.00	0.00	0.00	0.01	0.04	0.04	0.04
26	2014-06-13_douglane.txt	0.11	0.05	0.15	0.00	0.00	0.00	0.02	0.15	0.01	0.04
27	2014-06-29_zpalexander.txt	0.01	0.11	0.00	0.02	0.00	0.03	0.01	0.11	0.09	0.02
28	2014-07-15_andsewwecraft.txt	0.18	0.00	0.01	0.00	0.01	0.01	0.07	0.11	0.00	0.02
29	2014-09-02_krissiebently.txt	0.26	0.04	0.03	0.09	0.00	0.05	0.00	0.01	0.00	0.06
30	2014-09-21_angelabooth.txt	0.03	0.00	0.04	0.00	0.02	0.08	0.03	0.02	0.02	0.00
31	2014-10-03_musingsofamuddledmum.txt	0.21	0.01	0.03	0.01	0.00	0.00	0.00	0.07	0.09	0.04
32	2014-10-27_onedollarcottage.txt	0.27	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.03
33	2014-10-29_ninawithfreckles.txt	0.04	0.01	0.02	0.04	0.03	0.00	0.00	0.01	0.01	0.10
34	2014-12-16_lemonadeparade.txt	0.16	0.06	0.02	0.04	0.00	0.01	0.00	0.04	0.00	0.09
35	2014-12-27_libertyhillhouse.txt	0.06	0.08	0.01	0.01	0.01	0.03	0.01	0.04	0.01	0.08
36	2014-4-23_risingshining.txt	0.00	0.16	0.01	0.01	0.00	0.03	0.00	0.08	0.01	0.04
37	2015-01-06_misszoot.txt	0.11	0.00	0.00	0.05	0.00	0.08	0.00	0.00	0.00	0.10

38	2015-01-09_jasonmcdermott.txt	0.05	0.18	0.03	0.00	0.07	0.04	0.02	0.08	0.02	0.00
39	2015-01-13_kimwerker.txt	0.04	0.06	0.01	0.02	0.04	0.00	0.03	0.06	0.04	0.16
40	2015-02-15_inspirationeverywhere.txt	0.04	0.04	0.01	0.00	0.04	0.00	0.05	0.02	0.03	0.12
41	2015-03-19_abbythelibrarian.txt	0.13	0.03	0.00	0.00	0.00	0.11	0.01	0.13	0.02	0.08
42	2015-03-28_spencerdub.txt	0.02	0.04	0.03	0.04	0.04	0.07	0.01	0.08	0.20	0.01
43	2015-05-31_decadethirty.txt	0.24	0.09	0.04	0.05	0.00	0.01	0.00	0.02	0.01	0.02
44	2015-06-08_musicalpoem.txt	0.15	0.01	0.03	0.00	0.00	0.07	0.03	0.13	0.00	0.08
45	2015-06-25_livingbetween.txt	0.01	0.08	0.00	0.00	0.01	0.08	0.02	0.06	0.07	0.05
46	2015-07-31_misspond.txt	0.08	0.00	0.03	0.09	0.00	0.00	0.00	0.05	0.03	0.09
47	2015-08-04_plantbasedbride.txt	0.16	0.03	0.01	0.00	0.01	0.00	0.04	0.07	0.03	0.02
48	2015-08-14_homelearner.txt	0.08	0.03	0.00	0.00	0.03	0.06	0.03	0.03	0.04	0.02
49	2015-08-21_kimberliekohler.txt	0.13	0.00	0.00	0.03	0.00	0.00	0.02	0.00	0.22	0.00
50	2015-08-21_sortedandstyled.txt	0.13	0.00	0.01	0.04	0.00	0.08	0.04	0.02	0.05	0.09
51	2015-09-16_yslee.txt	0.05	0.00	0.08	0.02	0.01	0.01	0.02	0.07	0.02	0.12
52	2015-10-08_nyfoodiefamily.txt	0.10	0.00	0.00	0.00	0.00	0.02	0.02	0.19	0.05	0.05
53	2015-10-27_coffeeaddicted.txt	0.21	0.00	0.01	0.00	0.00	0.02	0.00	0.14	0.01	0.04
54	2015-11-03_decaffeinated.txt	0.16	0.00	0.00	0.01	0.00	0.35	0.00	0.01	0.00	0.08
55	2015-11-13_noxstudies.txt	0.32	0.00	0.03	0.00	0.01	0.00	0.03	0.01	0.01	0.16
56	2015-12-02_kristinavanhoose.txt	0.34	0.02	0.00	0.00	0.00	0.04	0.03	0.06	0.04	0.06
57	2015-12-13_perfectioninbooks.txt	0.17	0.00	0.01	0.00	0.00	0.01	0.02	0.01	0.00	0.10
58	2015-12-18_hopedreamjournal.txt	0.30	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.01
59	2015-12-18_passionthemedlife.txt	0.26	0.00	0.04	0.02	0.03	0.02	0.00	0.01	0.00	0.11
60	2015-12-29_plaidfuzz.txt	0.08	0.02	0.03	0.00	0.03	0.00	0.09	0.02	0.00	0.19
61	2015-12-29_rockalily.txt	0.04	0.06	0.02	0.00	0.01	0.01	0.04	0.06	0.07	0.02
62	2016-01-02_juliedkohl.txt	0.14	0.00	0.00	0.01	0.01	0.07	0.11	0.00	0.01	0.02
63	2016-01-02_not-your-average.txt	0.06	0.00	0.00	0.03	0.01	0.00	0.00	0.06	0.04	0.21
64	2016-01-11_lazygenius.txt	0.06	0.00	0.01	0.04	0.17	0.04	0.01	0.04	0.10	0.08
65	2016-01-19_cerriesmooney.txt	0.08	0.04	0.01	0.00	0.02	0.01	0.30	0.02	0.01	0.02
66	2016-01-21_tinyray.txt	0.02	0.15	0.00	0.01	0.37	0.00	0.01	0.00	0.00	0.03
67	2016-02-01_zealousmom.txt	0.04	0.09	0.09	0.01	0.05	0.02	0.05	0.03	0.02	0.08
68	2016-02-09_artofsimple.txt	0.02	0.04	0.00	0.02	0.07	0.03	0.02	0.15	0.02	0.17
69	2016-03-22_karalayne.txt	0.02	0.13	0.02	0.00	0.00	0.05	0.05	0.08	0.01	0.11
70	2016-04-05_rhiannaolivia.txt	0.09	0.01	0.02	0.00	0.04	0.00	0.02	0.00	0.02	0.09
71	2016-04-05_tamingtwins.txt	0.19	0.00	0.00	0.00	0.03	0.05	0.06	0.05	0.00	0.03
72	2016-04-14_shesbernadette.txt	0.23	0.01	0.00	0.01	0.07	0.00	0.00	0.08	0.02	0.01
73	2016-05-29_sublimereflection.txt	0.14	0.00	0.17	0.02	0.00	0.00	0.14	0.00	0.00	0.02
74	2016-06-12_littlecoffeeox.txt	0.09	0.05	0.00	0.03	0.01	0.06	0.05	0.02	0.03	0.06
75	2016-06-20_hannahemilylane.txt	0.21	0.00	0.01	0.00	0.05	0.04	0.08	0.00	0.00	0.00
76	2016-06-20_lafayette.txt	0.06	0.01	0.07	0.00	0.12	0.00	0.00	0.02	0.03	0.00
77	2016-07-11_breeeberry.txt	0.11	0.01	0.00	0.00	0.00	0.06	0.27	0.02	0.01	0.09
78	2016-08-05_organizedmom.txt	0.26	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.02	0.09

79	2016-08-11_kidscashandchaos.txt	0.11	0.03	0.03	0.01	0.00	0.00	0.06	0.08	0.00	0.08
80	2016-08-22_kitchenstewardship.txt	0.03	0.08	0.01	0.08	0.00	0.02	0.02	0.02	0.07	0.10
81	2016-09-19_bohoberry.txt	0.09	0.01	0.00	0.00	0.26	0.00	0.01	0.01	0.00	0.00
82	2016-10-10_bastianallgeier.txt	0.01	0.05	0.03	0.00	0.03	0.04	0.00	0.03	0.02	0.10
83	2016-10-22_hiphomeschooling.txt	0.07	0.01	0.00	0.04	0.07	0.04	0.00	0.00	0.01	0.07
84	2016-12-16_pageflutter.txt	0.05	0.00	0.01	0.00	0.07	0.04	0.10	0.00	0.08	0.04
85	2017-01-04_intentionalbygrace.txt	0.14	0.00	0.01	0.00	0.07	0.03	0.00	0.14	0.01	0.16
86	2017-01-09_sarahstarrs.txt	0.13	0.01	0.03	0.24	0.02	0.02	0.10	0.02	0.00	0.01
87	2017-01-11_littlegirldesigns.txt	0.10	0.02	0.00	0.01	0.00	0.02	0.01	0.02	0.01	0.14
88	2017-01-19_creativepink.txt	0.12	0.00	0.05	0.00	0.01	0.02	0.06	0.00	0.05	0.11
89	2017-01-22_lifeismessy.txt	0.09	0.00	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.05
90	2017-02-07_mylifeinabullet.txt	0.04	0.00	0.00	0.01	0.00	0.01	0.04	0.01	0.01	0.02
91	2017-02-08_timmaurer.txt	0.08	0.00	0.30	0.00	0.12	0.00	0.01	0.03	0.03	0.00
92	2017-02-13_seasaltandstitches.txt	0.29	0.05	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.02
93	2017-02-14_marketyourcreativity.txt	0.11	0.00	0.00	0.03	0.01	0.13	0.02	0.02	0.03	0.00
94	2017-02-23_bellacoco.txt	0.14	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.06
95	2017-03-08_shutterbean.txt	0.07	0.00	0.01	0.00	0.00	0.00	0.30	0.00	0.11	0.12
96	2017-03-15_twentysomethingmeltdown.txt	0.23	0.00	0.01	0.02	0.00	0.00	0.01	0.03	0.09	0.06
97	2017-04-27_christina77star.txt	0.25	0.00	0.01	0.00	0.02	0.02	0.02	0.00	0.00	0.15
98	2017-04-27_modernmrsdarcy.txt	0.04	0.01	0.01	0.01	0.06	0.16	0.07	0.01	0.05	0.18
99	2017-05-27_productiveandpretty.txt	0.17	0.00	0.05	0.00	0.07	0.26	0.00	0.00	0.05	0.00
100	2017-06-07_wholeheartedlyhealthy.txt	0.12	0.00	0.03	0.29	0.00	0.00	0.00	0.00	0.04	0.09
101	2017-06-23_balzer.txt	0.05	0.00	0.01	0.04	0.07	0.04	0.00	0.02	0.00	0.09
102	2017-07-11_fluentlanguage.txt	0.06	0.01	0.02	0.00	0.00	0.33	0.00	0.00	0.01	0.03
103	2017-07-17_thebadass.txt	0.19	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.02
104	2017-09-01_thinkingcloset.txt	0.14	0.00	0.21	0.00	0.04	0.00	0.08	0.03	0.00	0.02
105	2017-09-11_prettyprintsandpaper.txt	0.08	0.00	0.06	0.00	0.00	0.03	0.08	0.04	0.01	0.00

Table 6 Topic Composition: 20-Topic Model, Even Distribution (Topics 10-19)

Doc #	Filename	Probability of Topic Appearing in Document (for Topics 10-19)									
		10	11	12	13	14	15	16	17	18	19
0	2013-08-21_attorneymarketing.txt	0.04	0.00	0.04	0.07	0.11	0.03	0.01	0.24	0.00	0.27
1	2013-09-08_plannerisms.txt	0.00	0.01	0.00	0.01	0.01	0.14	0.00	0.25	0.03	0.00
2	2013-09-18_tomtunguz.txt	0.02	0.00	0.01	0.00	0.04	0.03	0.01	0.18	0.00	0.14
3	2013-09-24_tomhazledine.txt	0.00	0.00	0.00	0.00	0.15	0.05	0.08	0.18	0.01	0.06
4	2013-09-29_thinkingversusdoing.txt	0.03	0.00	0.11	0.00	0.07	0.16	0.00	0.10	0.00	0.02
5	2013-10-01_tobybaxley.txt	0.00	0.01	0.00	0.00	0.04	0.18	0.01	0.18	0.10	0.12
6	2013-10-17_accordingtoandrea.txt	0.00	0.00	0.00	0.03	0.01	0.15	0.00	0.28	0.00	0.00
7	2013-11-25_nosmallactors.txt	0.01	0.02	0.06	0.00	0.01	0.06	0.00	0.13	0.00	0.07
8	2013-11-27_sanspoint.txt	0.00	0.18	0.05	0.00	0.09	0.07	0.00	0.14	0.00	0.06
9	2013-11-30_welcometosherwood.txt	0.00	0.00	0.00	0.00	0.14	0.02	0.00	0.15	0.00	0.27
10	2013-12-04_msbookish.txt	0.00	0.26	0.00	0.00	0.04	0.19	0.00	0.18	0.00	0.01
11	2013-12-29_bump.txt	0.03	0.00	0.00	0.00	0.14	0.04	0.02	0.26	0.02	0.14
12	2013-12-31_eddyhope.txt	0.02	0.13	0.01	0.00	0.04	0.38	0.01	0.14	0.00	0.00
13	2014-01-03_apronsnpearls.txt	0.00	0.00	0.03	0.02	0.00	0.24	0.06	0.10	0.03	0.00
14	2014-01-26_clarifilo.txt	0.12	0.01	0.12	0.01	0.06	0.12	0.00	0.10	0.02	0.00
15	2014-02-02_tamingdata.txt	0.00	0.00	0.08	0.01	0.14	0.06	0.07	0.13	0.01	0.16
16	2014-02-08_apenchantforpaper.txt	0.00	0.02	0.01	0.00	0.05	0.12	0.04	0.12	0.00	0.00
17	2014-03-26_lifeinlimbo.txt	0.00	0.00	0.03	0.01	0.10	0.08	0.04	0.26	0.01	0.02
18	2014-03-27_ughiloveit.txt	0.00	0.00	0.00	0.03	0.11	0.13	0.04	0.26	0.00	0.01
19	2014-04-08_prairiehometherapy.txt	0.00	0.12	0.01	0.00	0.08	0.15	0.00	0.18	0.01	0.00
20	2014-04-28_laddventure.txt	0.00	0.00	0.00	0.02	0.02	0.22	0.01	0.20	0.05	0.01
21	2014-05-07_riotandfrolic.txt	0.00	0.00	0.01	0.00	0.00	0.16	0.04	0.09	0.06	0.02
22	2014-05-22_kyleconarro.txt	0.00	0.00	0.00	0.00	0.20	0.00	0.02	0.18	0.00	0.11
23	2014-05-3_stonesoupforfive.txt	0.01	0.00	0.00	0.00	0.00	0.05	0.01	0.18	0.00	0.00
24	2014-06-10_mytwomums.txt	0.04	0.24	0.05	0.00	0.00	0.01	0.15	0.19	0.05	0.00
25	2014-06-11_classicallyhomeschooling.txt	0.08	0.01	0.14	0.01	0.02	0.28	0.00	0.13	0.02	0.00
26	2014-06-13_douglane.txt	0.00	0.00	0.01	0.07	0.10	0.06	0.00	0.12	0.01	0.09
27	2014-06-29_zpalexander.txt	0.01	0.00	0.02	0.01	0.09	0.11	0.03	0.20	0.00	0.12
28	2014-07-15_andsewwecraft.txt	0.01	0.00	0.02	0.06	0.01	0.29	0.03	0.15	0.01	0.00
29	2014-09-02_krissiebently.txt	0.00	0.03	0.00	0.10	0.00	0.08	0.01	0.17	0.02	0.01
30	2014-09-21_angelabooth.txt	0.00	0.01	0.01	0.02	0.10	0.04	0.01	0.25	0.01	0.31
31	2014-10-03_musingsofamuddledmum.txt	0.03	0.00	0.02	0.00	0.11	0.13	0.00	0.20	0.05	0.00
32	2014-10-27_onedollarcottage.txt	0.22	0.01	0.04	0.13	0.00	0.10	0.00	0.13	0.00	0.01
33	2014-10-29_ninawithfreckles.txt	0.00	0.04	0.23	0.03	0.08	0.16	0.08	0.10	0.00	0.03
34	2014-12-16_lemonadeparade.txt	0.00	0.00	0.04	0.01	0.00	0.17	0.16	0.16	0.00	0.00
35	2014-12-27_libertyhillhouse.txt	0.05	0.00	0.01	0.05	0.04	0.26	0.00	0.14	0.02	0.08
36	2014-4-23_risingshining.txt	0.00	0.02	0.00	0.04	0.04	0.26	0.00	0.28	0.00	0.02
37	2015-01-06_misszoot.txt	0.02	0.00	0.00	0.04	0.03	0.37	0.01	0.12	0.00	0.05

38	2015-01-09_jasonmcdermott.txt	0.00	0.01	0.03	0.00	0.18	0.10	0.00	0.15	0.00	0.03
39	2015-01-13_kimwerker.txt	0.01	0.01	0.05	0.01	0.01	0.10	0.00	0.25	0.13	0.00
40	2015-02-15_inspirationeverywhere.txt	0.01	0.01	0.06	0.00	0.00	0.24	0.00	0.27	0.04	0.02
41	2015-03-19_abbythelibrarian.txt	0.01	0.00	0.00	0.02	0.09	0.15	0.01	0.20	0.00	0.00
42	2015-03-28_spencerdub.txt	0.01	0.01	0.04	0.04	0.06	0.15	0.01	0.10	0.01	0.02
43	2015-05-31_decadethirty.txt	0.00	0.06	0.14	0.02	0.02	0.05	0.06	0.15	0.04	0.00
44	2015-06-08_musicalpoem.txt	0.04	0.00	0.00	0.00	0.04	0.08	0.11	0.18	0.00	0.03
45	2015-06-25_livingbetween.txt	0.00	0.00	0.12	0.06	0.13	0.08	0.00	0.20	0.00	0.02
46	2015-07-31_misspond.txt	0.00	0.05	0.01	0.01	0.10	0.10	0.00	0.32	0.00	0.01
47	2015-08-04_plantbasedbride.txt	0.03	0.00	0.01	0.03	0.19	0.14	0.01	0.18	0.02	0.02
48	2015-08-14_homelearner.txt	0.08	0.00	0.01	0.00	0.09	0.23	0.04	0.21	0.03	0.01
49	2015-08-21_kimberliekohler.txt	0.01	0.07	0.05	0.00	0.01	0.12	0.00	0.32	0.00	0.01
50	2015-08-21_sortedandstyled.txt	0.00	0.01	0.09	0.00	0.00	0.04	0.01	0.26	0.01	0.11
51	2015-09-16_yslee.txt	0.01	0.15	0.00	0.00	0.03	0.11	0.00	0.20	0.08	0.00
52	2015-10-08_nyfoodiefamily.txt	0.12	0.00	0.00	0.00	0.08	0.12	0.03	0.19	0.01	0.00
53	2015-10-27_coffeeaddicted.txt	0.00	0.00	0.05	0.01	0.09	0.12	0.00	0.27	0.03	0.00
54	2015-11-03_decaffeinated.txt	0.02	0.00	0.08	0.02	0.00	0.12	0.00	0.15	0.00	0.00
55	2015-11-13_noxstudies.txt	0.00	0.01	0.10	0.00	0.01	0.10	0.02	0.12	0.06	0.00
56	2015-12-02_kristinavanhoose.txt	0.02	0.04	0.02	0.00	0.00	0.10	0.06	0.11	0.06	0.00
57	2015-12-13_perfectioninbooks.txt	0.00	0.03	0.01	0.00	0.00	0.08	0.00	0.36	0.17	0.00
58	2015-12-18_hopedreamjournal.txt	0.01	0.11	0.01	0.00	0.04	0.11	0.05	0.23	0.10	0.00
59	2015-12-18_passionthemedlife.txt	0.16	0.00	0.01	0.00	0.04	0.07	0.06	0.14	0.04	0.00
60	2015-12-29_plaidfuzz.txt	0.07	0.02	0.00	0.05	0.00	0.11	0.00	0.18	0.09	0.02
61	2015-12-29_rockalily.txt	0.00	0.15	0.09	0.01	0.02	0.09	0.00	0.30	0.01	0.01
62	2016-01-02_juliedkohl.txt	0.01	0.00	0.00	0.12	0.03	0.01	0.07	0.22	0.15	0.00
63	2016-01-02_not-your-average.txt	0.08	0.00	0.00	0.00	0.02	0.09	0.09	0.22	0.08	0.01
64	2016-01-11_lazygenius.txt	0.04	0.00	0.00	0.01	0.05	0.15	0.02	0.15	0.01	0.03
65	2016-01-19_cerriesmooney.txt	0.02	0.03	0.00	0.03	0.03	0.14	0.03	0.17	0.04	0.00
66	2016-01-21_tinyray.txt	0.01	0.00	0.00	0.00	0.09	0.09	0.04	0.10	0.03	0.02
67	2016-02-01_zealousmom.txt	0.03	0.00	0.01	0.00	0.00	0.04	0.08	0.25	0.12	0.00
68	2016-02-09_artofsimple.txt	0.10	0.00	0.01	0.00	0.01	0.17	0.06	0.11	0.00	0.02
69	2016-03-22_karalayne.txt	0.05	0.03	0.02	0.02	0.06	0.11	0.02	0.19	0.01	0.04
70	2016-04-05_rhiannaolivia.txt	0.03	0.19	0.02	0.04	0.05	0.10	0.00	0.24	0.03	0.01
71	2016-04-05_tamingtwins.txt	0.03	0.14	0.00	0.00	0.00	0.04	0.01	0.30	0.04	0.01
72	2016-04-14_shesbernadette.txt	0.00	0.00	0.04	0.02	0.06	0.17	0.00	0.21	0.05	0.01
73	2016-05-29_sublimereflection.txt	0.00	0.00	0.03	0.04	0.00	0.10	0.00	0.21	0.12	0.00
74	2016-06-12_littlecoffeeox.txt	0.03	0.00	0.00	0.03	0.07	0.05	0.12	0.26	0.04	0.02
75	2016-06-20_hannahemilylane.txt	0.00	0.03	0.05	0.01	0.01	0.16	0.00	0.24	0.09	0.02
76	2016-06-20_lafayette.txt	0.01	0.00	0.30	0.00	0.00	0.02	0.05	0.14	0.00	0.15
77	2016-07-11_breeberry.txt	0.01	0.04	0.00	0.06	0.02	0.03	0.08	0.18	0.00	0.00
78	2016-08-05_organizedmom.txt	0.00	0.02	0.00	0.02	0.00	0.21	0.04	0.22	0.07	0.00

79	2016-08-11_kidscashandchaos.txt	0.09	0.00	0.00	0.01	0.03	0.06	0.01	0.28	0.13	0.00
80	2016-08-22_kitchenstewardship.txt	0.04	0.01	0.01	0.02	0.03	0.05	0.11	0.25	0.00	0.06
81	2016-09-19_bohoberry.txt	0.00	0.00	0.06	0.01	0.06	0.20	0.00	0.24	0.02	0.02
82	2016-10-10_bastianallgeier.txt	0.01	0.00	0.03	0.00	0.18	0.02	0.02	0.32	0.00	0.11
83	2016-10-22_hiphomeschooling.txt	0.25	0.01	0.03	0.00	0.00	0.17	0.00	0.17	0.04	0.00
84	2016-12-16_pageflutter.txt	0.11	0.00	0.01	0.04	0.02	0.12	0.01	0.13	0.15	0.02
85	2017-01-04_intentionalbygrace.txt	0.13	0.00	0.00	0.01	0.00	0.04	0.01	0.22	0.01	0.01
86	2017-01-09_sarahstarrs.txt	0.06	0.00	0.02	0.00	0.01	0.06	0.03	0.15	0.05	0.04
87	2017-01-11_littlegirldesigns.txt	0.00	0.01	0.04	0.08	0.02	0.12	0.02	0.14	0.25	0.00
88	2017-01-19_creativepink.txt	0.00	0.00	0.00	0.02	0.01	0.07	0.01	0.20	0.26	0.02
89	2017-01-22_lifeismessy.txt	0.01	0.00	0.01	0.01	0.00	0.19	0.00	0.14	0.23	0.22
90	2017-02-07_mylifeinabullet.txt	0.00	0.00	0.02	0.61	0.00	0.08	0.03	0.07	0.00	0.03
91	2017-02-08_timmaurer.txt	0.00	0.00	0.04	0.00	0.18	0.09	0.03	0.07	0.00	0.02
92	2017-02-13_seasaltandstitches.txt	0.01	0.05	0.00	0.01	0.03	0.09	0.26	0.14	0.00	0.00
93	2017-02-14_marketyourcreativity.txt	0.00	0.01	0.03	0.05	0.03	0.09	0.07	0.15	0.21	0.00
94	2017-02-23_bellacoco.txt	0.00	0.16	0.00	0.00	0.10	0.15	0.01	0.26	0.06	0.00
95	2017-03-08_shutterbean.txt	0.02	0.02	0.01	0.05	0.00	0.11	0.00	0.16	0.02	0.00
96	2017-03-15_twentysomethingmeltdown.txt	0.00	0.12	0.00	0.00	0.01	0.11	0.02	0.10	0.19	0.00
97	2017-04-27_christina77star.txt	0.00	0.00	0.00	0.02	0.01	0.15	0.02	0.20	0.10	0.01
98	2017-04-27_modernmrsdarcy.txt	0.00	0.01	0.00	0.01	0.00	0.07	0.05	0.22	0.02	0.02
99	2017-05-27_productiveandpretty.txt	0.02	0.02	0.02	0.01	0.00	0.05	0.00	0.19	0.09	0.00
100	2017-06-07_wholeheartedlyhealthy.txt	0.02	0.08	0.01	0.01	0.00	0.06	0.00	0.21	0.03	0.00
101	2017-06-23_balzer.txt	0.00	0.01	0.21	0.00	0.06	0.11	0.00	0.20	0.08	0.00
102	2017-07-11_fluentlanguage.txt	0.01	0.00	0.01	0.01	0.07	0.04	0.07	0.25	0.07	0.00
103	2017-07-17_thebadass.txt	0.00	0.01	0.01	0.01	0.00	0.06	0.01	0.26	0.33	0.02
104	2017-09-01_thinkingcloset.txt	0.08	0.02	0.01	0.00	0.02	0.06	0.04	0.15	0.09	0.01
105	2017-09-11_prettyprintsandpaper.txt	0.09	0.07	0.17	0.00	0.03	0.01	0.07	0.13	0.13	0.00

Table 7 Topic Key: 20-Topic Model with an Asymmetrical Distribution of Topics

Topic #	Dirichlet Parameter (Weight)	Tokens Assigned to Topic
0	0.78843	planner spread planning weekly week color love wanted page decided plan layout year spreads layouts picture leuchtturm planners january calendars
1	0.03942	discs paper covers size language happy puncher dividers planner cut supplies collections punch options laminate cardstock gsm discbound insert made
2	0.48497	bullet_journaling post started start pens favorite instagram links journals reading digital learning year school affiliate click supplies made email quotes
3	0.12723	tape washi stuff kids to-do spot doodling table girl places husband family dinner put lunch forget tab learn artistic immediately
4	0.23817	tracker goals blog year habit business review tracking board set pinterest trackers blogging filling guide money stats group goal included
5	0.11604	planning homeschool planner working running type july plum blogging posts condren erin tomorrow school kids elastic customize band totally traditional
6	0.12956	assignments overview november semester project due pictures class source comments projects room classes traditional university ruled questions day including contact
7	0.10999	lists productivity bullets apps app calendex long-term marked finally agenda improve omnifocus media collection denote day-to-day eventually todo methods event
8	0.10343	tasks task step actions process method review digital time weekly management focus gtd waiting productivity personal priorities master section appointments
9	0.177	system task bullet_journaling information bullet item concept items event contents circle systems written unique organizing index text digital logging worth
10	0.12342	journal photos february purse days star january contents master cards ongoing finished cross general ran pencils packing kinda march household
11	0.05294	notebook bullets bullet fountain entry task show-through recommend entries topic ryder rapid-logging bleed-through signifiers pocket friendly diy awesome sketches leuchtturm
12	0.04842	place people person bits soul segments bobs mini-van describe diary/planner hell honestly bunch falls heart youtube lifestyle preference afford studies
13	0.10686	notes evernote record ryder note-taking notebooks handwriting topic productivity typing projects podcast analog journals expect manage managing half thoughts effective
14	0.13466	bujo pens pen love washi leuchtturm bullet_journaling tape thing setup personally stamps ink plain tracker filofax size ryder's basics favourite
15	0.14481	collections future_log index collection log daily_log monthly_log pen daily_logs migration migrate handwriting analog light reason begin goal series official leuchtturm
16	0.05406	month log video brush ruler tombow favorite fun mood fill theme icon gratitude chart spreads camper dual eat drawing monday
17	0.02721	brain entries signifiers lazy genius visual tag glance relevant brains potato trick signifier purpose i.e entry natural flipping black simply
18	3.35062	bullet_journal page pages list notebook day things system time make month journal work daily write monthly tasks calendar find paper
19	0.06212	diary bullet_journaling sewing found moon stationery cycle area core map diaries elements chain gratitude colette fabric printables vlog exercise reflection

Table 8 Topic Composition: 20-Topic Model, Asymmetrical Distribution (Topics 0-9)

Doc #	Document Filename	Probability of Topic Appearing in Document (for topics 0-9)									
		0	1	2	3	4	5	6	7	8	9
0	2013-08-21_attorneymarketing.txt	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00
1	2013-09-08_plannerisms.txt	0.37	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
2	2013-09-18_tomtunguz.txt	0.01	0.00	0.06	0.00	0.04	0.15	0.01	0.00	0.00	0.00
3	2013-09-24_tomhazledine.txt	0.01	0.00	0.02	0.00	0.02	0.00	0.01	0.35	0.00	0.12
4	2013-09-29_thinkingversusdoing.txt	0.29	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.18	0.00
5	2013-10-01_tobybaxley.txt	0.04	0.03	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.03
6	2013-10-17_accordingtoandrea.txt	0.13	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.21
7	2013-11-25_nosmallactors.txt	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.07	0.09
8	2013-11-27_sanspoint.txt	0.01	0.00	0.01	0.00	0.00	0.00	0.08	0.08	0.00	0.04
9	2013-11-30_welcometosherswood.txt	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.03	0.01	0.35
10	2013-12-04_msbookish.txt	0.10	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01
11	2013-12-29_bump.txt	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.12	0.00
12	2013-12-31_eddyhope.txt	0.14	0.00	0.00	0.00	0.00	0.05	0.01	0.12	0.00	0.00
13	2014-01-03_apronsnp pearls.txt	0.23	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.01
14	2014-01-26_clarifilo.txt	0.19	0.00	0.00	0.27	0.02	0.00	0.08	0.00	0.01	0.00
15	2014-02-02_tamingdata.txt	0.03	0.00	0.01	0.00	0.02	0.00	0.01	0.03	0.41	0.00
16	2014-02-08_apenchantforpaper.txt	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
17	2014-03-26_lifeinlimbo.txt	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.04	0.05	0.08
18	2014-03-27_ughiloveit.txt	0.10	0.01	0.07	0.00	0.05	0.00	0.00	0.06	0.00	0.03
19	2014-04-08_prairiehometherapy.txt	0.09	0.00	0.03	0.00	0.01	0.00	0.00	0.19	0.00	0.04
20	2014-04-28_ladventure.txt	0.01	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	2014-05-07_riotandfrolic.txt	0.19	0.00	0.05	0.01	0.09	0.00	0.04	0.16	0.00	0.00
22	2014-05-22_kyleconarro.txt	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.08	0.20
23	2014-05-3_stonesoupforfive.txt	0.10	0.00	0.02	0.15	0.01	0.00	0.01	0.00	0.00	0.00
24	2014-06-10_mytwomums.txt	0.18	0.00	0.04	0.00	0.00	0.04	0.08	0.01	0.02	0.00
25	2014-06-11_classicallyhomeschooling.txt	0.09	0.00	0.01	0.01	0.00	0.16	0.02	0.00	0.00	0.00
26	2014-06-13_douglane.txt	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.30	0.12
27	2014-06-29_zpalexander.txt	0.03	0.00	0.01	0.00	0.00	0.02	0.03	0.17	0.00	0.14
28	2014-07-15_andsewwecraft.txt	0.06	0.00	0.01	0.05	0.00	0.00	0.01	0.00	0.03	0.01
29	2014-09-02_krissiebently.txt	0.19	0.00	0.11	0.00	0.00	0.21	0.00	0.00	0.00	0.00
30	2014-09-21_angelabooth.txt	0.04	0.00	0.09	0.00	0.00	0.00	0.00	0.32	0.00	0.00
31	2014-10-03_musingsofamuddledmum.txt	0.17	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.09	0.00
32	2014-10-27_onedollarcottage.txt	0.09	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
33	2014-10-29_ninawithfreckles.txt	0.07	0.01	0.00	0.05	0.02	0.00	0.27	0.00	0.07	0.04
34	2014-12-16_lemonadeparade.txt	0.17	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.12	0.00
35	2014-12-27_libertyhillhouse.txt	0.06	0.00	0.04	0.06	0.00	0.09	0.00	0.00	0.01	0.01
36	2014-4-23_risingshining.txt	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.00

37	2015-01-06_misszoot.txt	0.04	0.00	0.08	0.21	0.00	0.00	0.01	0.01	0.01	0.00
38	2015-01-09_jasonmcdermott.txt	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.23
39	2015-01-13_kimwerker.txt	0.07	0.00	0.08	0.09	0.04	0.00	0.00	0.15	0.00	0.00
40	2015-02-15_inspirationeverywhere.txt	0.14	0.00	0.10	0.02	0.00	0.00	0.00	0.00	0.01	0.00
41	2015-03-19_abbythelibrarian.txt	0.10	0.00	0.14	0.06	0.00	0.00	0.00	0.06	0.00	0.00
42	2015-03-28_spencerdub.txt	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.31
43	2015-05-31_decadethirty.txt	0.28	0.00	0.02	0.00	0.01	0.00	0.13	0.00	0.07	0.06
44	2015-06-08_musicalpoem.txt	0.09	0.00	0.03	0.00	0.00	0.15	0.00	0.00	0.00	0.12
45	2015-06-25_livingbetween.txt	0.00	0.00	0.09	0.00	0.00	0.01	0.09	0.08	0.00	0.13
46	2015-07-31_misspond.txt	0.01	0.00	0.02	0.14	0.07	0.00	0.01	0.00	0.00	0.00
47	2015-08-04_plantbasedbride.txt	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.12
48	2015-08-14_homelearner.txt	0.06	0.00	0.16	0.00	0.00	0.04	0.01	0.00	0.00	0.16
49	2015-08-21_kimberliekohler.txt	0.06	0.00	0.04	0.04	0.00	0.00	0.01	0.00	0.00	0.00
50	2015-08-21_sortedandstyled.txt	0.07	0.00	0.12	0.00	0.10	0.00	0.02	0.04	0.00	0.00
51	2015-09-16_yslee.txt	0.06	0.00	0.00	0.04	0.10	0.25	0.00	0.00	0.00	0.00
52	2015-10-08_nyfoodiefamily.txt	0.11	0.00	0.06	0.26	0.04	0.00	0.00	0.00	0.00	0.03
53	2015-10-27_coffeeaddicted.txt	0.13	0.00	0.04	0.00	0.00	0.00	0.08	0.02	0.01	0.00
54	2015-11-03_decaffeinated.txt	0.08	0.00	0.06	0.00	0.01	0.00	0.39	0.00	0.00	0.00
55	2015-11-13_noxstudies.txt	0.27	0.00	0.00	0.11	0.05	0.00	0.05	0.00	0.00	0.00
56	2015-12-02_kristinavanhoose.txt	0.33	0.00	0.01	0.00	0.04	0.00	0.02	0.00	0.00	0.00
57	2015-12-13_perfectioninbooks.txt	0.23	0.00	0.20	0.00	0.09	0.00	0.00	0.00	0.00	0.00
58	2015-12-18_hopedreamjournal.txt	0.36	0.00	0.09	0.00	0.03	0.00	0.04	0.00	0.01	0.00
59	2015-12-18_passionthemedlife.txt	0.22	0.00	0.02	0.03	0.06	0.00	0.00	0.00	0.00	0.00
60	2015-12-29_plaidfuzz.txt	0.14	0.00	0.22	0.05	0.05	0.01	0.00	0.02	0.00	0.01
61	2015-12-29_rockalily.txt	0.06	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	2016-01-02_juliedkohl.txt	0.24	0.08	0.24	0.00	0.00	0.03	0.00	0.00	0.00	0.00
63	2016-01-02_not-your-average.txt	0.10	0.00	0.08	0.25	0.06	0.00	0.00	0.00	0.00	0.00
64	2016-01-11_lazygenius.txt	0.05	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.01	0.00
65	2016-01-19_cerriesmooney.txt	0.10	0.00	0.02	0.00	0.01	0.00	0.00	0.01	0.00	0.00
66	2016-01-21_tinyray.txt	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00
67	2016-02-01_zealousmom.txt	0.01	0.00	0.09	0.00	0.17	0.01	0.01	0.00	0.00	0.06
68	2016-02-09_artofsimple.txt	0.01	0.00	0.07	0.12	0.00	0.06	0.00	0.00	0.00	0.02
69	2016-03-22_karalayne.txt	0.03	0.00	0.04	0.17	0.00	0.08	0.00	0.00	0.00	0.00
70	2016-04-05_rhiannaolivia.txt	0.08	0.00	0.02	0.00	0.05	0.00	0.01	0.00	0.00	0.00
71	2016-04-05_tamingtwins.txt	0.15	0.00	0.08	0.00	0.00	0.00	0.00	0.11	0.00	0.00
72	2016-04-14_shesbernadette.txt	0.20	0.00	0.05	0.00	0.00	0.03	0.00	0.01	0.09	0.01
73	2016-05-29_sublimereflection.txt	0.11	0.00	0.20	0.01	0.07	0.00	0.00	0.00	0.00	0.00
74	2016-06-12_littlecoffeeox.txt	0.05	0.00	0.21	0.00	0.00	0.00	0.00	0.02	0.00	0.00
75	2016-06-20_hannahemilylane.txt	0.15	0.00	0.06	0.00	0.02	0.05	0.05	0.01	0.00	0.00
76	2016-06-20_lafayette.txt	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.37	0.03
77	2016-07-11_breeeberry.txt	0.12	0.03	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00

78	2016-08-05_organizedmom.txt	0.32	0.02	0.02	0.00	0.12	0.01	0.00	0.00	0.00	0.00
79	2016-08-11_kidscashandchaos.txt	0.13	0.00	0.07	0.03	0.13	0.00	0.00	0.00	0.00	0.00
80	2016-08-22_kitchenstewardship.txt	0.04	0.00	0.09	0.00	0.00	0.01	0.00	0.00	0.00	0.07
81	2016-09-19_bohoberry.txt	0.08	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.02
82	2016-10-10_bastianallgeier.txt	0.05	0.00	0.03	0.00	0.00	0.00	0.00	0.18	0.00	0.06
83	2016-10-22_hiphomeschooling.txt	0.08	0.00	0.12	0.00	0.04	0.26	0.00	0.00	0.00	0.00
84	2016-12-16_pageflutter.txt	0.12	0.00	0.14	0.00	0.09	0.00	0.01	0.00	0.02	0.00
85	2017-01-04_intentionalbygrace.txt	0.09	0.01	0.08	0.03	0.00	0.24	0.00	0.00	0.00	0.00
86	2017-01-09_sarahstarrs.txt	0.08	0.00	0.04	0.09	0.05	0.01	0.00	0.01	0.00	0.00
87	2017-01-11_littlegirldesigns.txt	0.05	0.00	0.10	0.00	0.30	0.00	0.00	0.00	0.00	0.00
88	2017-01-19_creativepink.txt	0.24	0.00	0.07	0.00	0.14	0.01	0.00	0.00	0.00	0.00
89	2017-01-22_lifeismessy.txt	0.16	0.00	0.34	0.00	0.08	0.00	0.06	0.02	0.00	0.00
90	2017-02-07_mylifeinabullet.txt	0.05	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	2017-02-08_timmermaurer.txt	0.05	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.38	0.06
92	2017-02-13_seasaltandstitches.txt	0.27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
93	2017-02-14_marketyourcreativity.txt	0.10	0.00	0.28	0.00	0.13	0.00	0.00	0.00	0.00	0.01
94	2017-02-23_bellacoco.txt	0.16	0.00	0.06	0.00	0.08	0.00	0.00	0.00	0.00	0.00
95	2017-03-08_shutterbean.txt	0.12	0.00	0.08	0.04	0.00	0.01	0.00	0.00	0.00	0.00
96	2017-03-15_twentysomethingmeltdown.txt	0.19	0.00	0.01	0.00	0.14	0.00	0.00	0.00	0.00	0.00
97	2017-04-27_christina77star.txt	0.38	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.01	0.00
98	2017-04-27_modernmrsdarcy.txt	0.06	0.00	0.30	0.02	0.00	0.00	0.00	0.04	0.00	0.00
99	2017-05-27_productiveandpretty.txt	0.20	0.02	0.14	0.00	0.01	0.01	0.27	0.01	0.00	0.00
100	2017-06-07_wholeheartedlyhealthy.txt	0.12	0.00	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.00
101	2017-06-23_balzer.txt	0.08	0.00	0.08	0.00	0.07	0.01	0.21	0.01	0.00	0.00
102	2017-07-11_fluentlanguage.txt	0.04	0.27	0.19	0.00	0.08	0.00	0.00	0.00	0.00	0.05
103	2017-07-17_thebadass.txt	0.19	0.00	0.09	0.00	0.29	0.00	0.01	0.01	0.00	0.00
104	2017-09-01_thinkingcloset.txt	0.12	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.01	0.00
105	2017-09-11_prettyprintsandpaper.txt	0.17	0.00	0.15	0.06	0.00	0.01	0.21	0.00	0.00	0.01

Table 9 Topic Composition: 20-Topic Model, Asymmetrical Distribution (Topics 10-19)

Doc #	Document Filename	Probability of Topic Appearing in Document (for topics 0-9)									
		0	1	2	3	4	5	6	7	8	9
0	2013-08-21_attorneymarketing.txt	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00
1	2013-09-08_plannerisms.txt	0.37	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
2	2013-09-18_tomtunguz.txt	0.01	0.00	0.06	0.00	0.04	0.15	0.01	0.00	0.00	0.00
3	2013-09-24_tomhazledine.txt	0.01	0.00	0.02	0.00	0.02	0.00	0.01	0.35	0.00	0.12
4	2013-09-29_thinkingversusdoing.txt	0.29	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.18	0.00
5	2013-10-01_tobybaxley.txt	0.04	0.03	0.22	0.03	0.00	0.00	0.00	0.00	0.00	0.03
6	2013-10-17_accordingtoandrea.txt	0.13	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.21
7	2013-11-25_nosmallactors.txt	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.07	0.09
8	2013-11-27_sanspoint.txt	0.01	0.00	0.01	0.00	0.00	0.00	0.08	0.08	0.00	0.04
9	2013-11-30_welcometoshewood.txt	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.03	0.01	0.35
10	2013-12-04_msbookish.txt	0.10	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01
11	2013-12-29_bump.txt	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.12	0.00
12	2013-12-31_eddyhope.txt	0.14	0.00	0.00	0.00	0.00	0.05	0.01	0.12	0.00	0.00
13	2014-01-03_apronsnppearls.txt	0.23	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.01
14	2014-01-26_clarifilo.txt	0.19	0.00	0.00	0.27	0.02	0.00	0.08	0.00	0.01	0.00
15	2014-02-02_tamingdata.txt	0.03	0.00	0.01	0.00	0.02	0.00	0.01	0.03	0.41	0.00
16	2014-02-08_apenchantforpaper.txt	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
17	2014-03-26_lifeinlimbo.txt	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.04	0.05	0.08
18	2014-03-27_ughiloveit.txt	0.10	0.01	0.07	0.00	0.05	0.00	0.00	0.06	0.00	0.03
19	2014-04-08_prairiehometherapy.txt	0.09	0.00	0.03	0.00	0.01	0.00	0.00	0.19	0.00	0.04
20	2014-04-28_ladventure.txt	0.01	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	2014-05-07_riotandfrolic.txt	0.19	0.00	0.05	0.01	0.09	0.00	0.04	0.16	0.00	0.00
22	2014-05-22_kyleconarro.txt	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.08	0.20
23	2014-05-3_stonesoupforfive.txt	0.10	0.00	0.02	0.15	0.01	0.00	0.01	0.00	0.00	0.00
24	2014-06-10_mytwomums.txt	0.18	0.00	0.04	0.00	0.00	0.04	0.08	0.01	0.02	0.00
25	2014-06-11_classicallyhomeschooling.txt	0.09	0.00	0.01	0.01	0.00	0.16	0.02	0.00	0.00	0.00
26	2014-06-13_douglane.txt	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.30	0.12
27	2014-06-29_zpalexander.txt	0.03	0.00	0.01	0.00	0.00	0.02	0.03	0.17	0.00	0.14
28	2014-07-15_andsewwecraft.txt	0.06	0.00	0.01	0.05	0.00	0.00	0.01	0.00	0.03	0.01
29	2014-09-02_krissiebently.txt	0.19	0.00	0.11	0.00	0.00	0.21	0.00	0.00	0.00	0.00
30	2014-09-21_angelaboath.txt	0.04	0.00	0.09	0.00	0.00	0.00	0.00	0.32	0.00	0.00
31	2014-10-03_musingsofamuddledmum.txt	0.17	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.09	0.00
32	2014-10-27_onedollarcottage.txt	0.09	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
33	2014-10-29_ninawithfreckles.txt	0.07	0.01	0.00	0.05	0.02	0.00	0.27	0.00	0.07	0.04
34	2014-12-16_lemonadeparade.txt	0.17	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.12	0.00
35	2014-12-27_libertyhillhouse.txt	0.06	0.00	0.04	0.06	0.00	0.09	0.00	0.00	0.01	0.01
36	2014-4-23_risingshining.txt	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.00

37	2015-01-06_misszoot.txt	0.04	0.00	0.08	0.21	0.00	0.00	0.01	0.01	0.01	0.00
38	2015-01-09_jasonmcdermott.txt	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.23
39	2015-01-13_kimwerker.txt	0.07	0.00	0.08	0.09	0.04	0.00	0.00	0.15	0.00	0.00
40	2015-02-15_inspirationeverywhere.txt	0.14	0.00	0.10	0.02	0.00	0.00	0.00	0.00	0.01	0.00
41	2015-03-19_abbythelibrarian.txt	0.10	0.00	0.14	0.06	0.00	0.00	0.00	0.06	0.00	0.00
42	2015-03-28_spencerdub.txt	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.31
43	2015-05-31_decadethirty.txt	0.28	0.00	0.02	0.00	0.01	0.00	0.13	0.00	0.07	0.06
44	2015-06-08_musicalpoem.txt	0.09	0.00	0.03	0.00	0.00	0.15	0.00	0.00	0.00	0.12
45	2015-06-25_livingbetween.txt	0.00	0.00	0.09	0.00	0.00	0.01	0.09	0.08	0.00	0.13
46	2015-07-31_misspond.txt	0.01	0.00	0.02	0.14	0.07	0.00	0.01	0.00	0.00	0.00
47	2015-08-04_plantbasedbride.txt	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.12
48	2015-08-14_homelearner.txt	0.06	0.00	0.16	0.00	0.00	0.04	0.01	0.00	0.00	0.16
49	2015-08-21_kimberliekohler.txt	0.06	0.00	0.04	0.04	0.00	0.00	0.01	0.00	0.00	0.00
50	2015-08-21_sortedandstyled.txt	0.07	0.00	0.12	0.00	0.10	0.00	0.02	0.04	0.00	0.00
51	2015-09-16_yslee.txt	0.06	0.00	0.00	0.04	0.10	0.25	0.00	0.00	0.00	0.00
52	2015-10-08_nyfoodiefamily.txt	0.11	0.00	0.06	0.26	0.04	0.00	0.00	0.00	0.00	0.03
53	2015-10-27_coffeeaddicted.txt	0.13	0.00	0.04	0.00	0.00	0.00	0.08	0.02	0.01	0.00
54	2015-11-03_decaffeinated.txt	0.08	0.00	0.06	0.00	0.01	0.00	0.39	0.00	0.00	0.00
55	2015-11-13_noxstudies.txt	0.27	0.00	0.00	0.11	0.05	0.00	0.05	0.00	0.00	0.00
56	2015-12-02_kristinavanhoose.txt	0.33	0.00	0.01	0.00	0.04	0.00	0.02	0.00	0.00	0.00
57	2015-12-13_perfectioninbooks.txt	0.23	0.00	0.20	0.00	0.09	0.00	0.00	0.00	0.00	0.00
58	2015-12-18_hopedreamjournal.txt	0.36	0.00	0.09	0.00	0.03	0.00	0.04	0.00	0.01	0.00
59	2015-12-18_passionthemedlife.txt	0.22	0.00	0.02	0.03	0.06	0.00	0.00	0.00	0.00	0.00
60	2015-12-29_plaidfuzz.txt	0.14	0.00	0.22	0.05	0.05	0.01	0.00	0.02	0.00	0.01
61	2015-12-29_rockalily.txt	0.06	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	2016-01-02_juliedkohl.txt	0.24	0.08	0.24	0.00	0.00	0.03	0.00	0.00	0.00	0.00
63	2016-01-02_not-your-average.txt	0.10	0.00	0.08	0.25	0.06	0.00	0.00	0.00	0.00	0.00
64	2016-01-11_lazygenius.txt	0.05	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.01	0.00
65	2016-01-19_cerriesmooney.txt	0.10	0.00	0.02	0.00	0.01	0.00	0.00	0.01	0.00	0.00
66	2016-01-21_tinyray.txt	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00
67	2016-02-01_zealousmom.txt	0.01	0.00	0.09	0.00	0.17	0.01	0.01	0.00	0.00	0.06
68	2016-02-09_artofsimple.txt	0.01	0.00	0.07	0.12	0.00	0.06	0.00	0.00	0.00	0.02
69	2016-03-22_karalayne.txt	0.03	0.00	0.04	0.17	0.00	0.08	0.00	0.00	0.00	0.00
70	2016-04-05_rhiannaolivia.txt	0.08	0.00	0.02	0.00	0.05	0.00	0.01	0.00	0.00	0.00
71	2016-04-05_tamingtwins.txt	0.15	0.00	0.08	0.00	0.00	0.00	0.00	0.11	0.00	0.00
72	2016-04-14_shesbernadette.txt	0.20	0.00	0.05	0.00	0.00	0.03	0.00	0.01	0.09	0.01
73	2016-05-29_sublimereflection.txt	0.11	0.00	0.20	0.01	0.07	0.00	0.00	0.00	0.00	0.00
74	2016-06-12_littlecoffeeox.txt	0.05	0.00	0.21	0.00	0.00	0.00	0.00	0.02	0.00	0.00
75	2016-06-20_hannahemilylane.txt	0.15	0.00	0.06	0.00	0.02	0.05	0.05	0.01	0.00	0.00
76	2016-06-20_lafayette.txt	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.37	0.03
77	2016-07-11_breeberry.txt	0.12	0.03	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00

78	2016-08-05_organizedmom.txt	0.32	0.02	0.02	0.00	0.12	0.01	0.00	0.00	0.00	0.00
79	2016-08-11_kidscashandchaos.txt	0.13	0.00	0.07	0.03	0.13	0.00	0.00	0.00	0.00	0.00
80	2016-08-22_kitchenstewardship.txt	0.04	0.00	0.09	0.00	0.00	0.01	0.00	0.00	0.00	0.07
81	2016-09-19_bohoberry.txt	0.08	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.02
82	2016-10-10_bastianallgeier.txt	0.05	0.00	0.03	0.00	0.00	0.00	0.00	0.18	0.00	0.06
83	2016-10-22_hiphomeschooling.txt	0.08	0.00	0.12	0.00	0.04	0.26	0.00	0.00	0.00	0.00
84	2016-12-16_pageflutter.txt	0.12	0.00	0.14	0.00	0.09	0.00	0.01	0.00	0.02	0.00
85	2017-01-04_intentionalbygrace.txt	0.09	0.01	0.08	0.03	0.00	0.24	0.00	0.00	0.00	0.00
86	2017-01-09_sarahstarrs.txt	0.08	0.00	0.04	0.09	0.05	0.01	0.00	0.01	0.00	0.00
87	2017-01-11_littlegirlsdesigns.txt	0.05	0.00	0.10	0.00	0.30	0.00	0.00	0.00	0.00	0.00
88	2017-01-19_creativepink.txt	0.24	0.00	0.07	0.00	0.14	0.01	0.00	0.00	0.00	0.00
89	2017-01-22_lifeismessy.txt	0.16	0.00	0.34	0.00	0.08	0.00	0.06	0.02	0.00	0.00
90	2017-02-07_mylifeinabullet.txt	0.05	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	2017-02-08_timmaurer.txt	0.05	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.38	0.06
92	2017-02-13_seasaltandstitches.txt	0.27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
93	2017-02-14_marketyourcreativity.txt	0.10	0.00	0.28	0.00	0.13	0.00	0.00	0.00	0.00	0.01
94	2017-02-23_bellacoco.txt	0.16	0.00	0.06	0.00	0.08	0.00	0.00	0.00	0.00	0.00
95	2017-03-08_shutterbean.txt	0.12	0.00	0.08	0.04	0.00	0.01	0.00	0.00	0.00	0.00
96	2017-03-15_twentysomethingmeltdown.txt	0.19	0.00	0.01	0.00	0.14	0.00	0.00	0.00	0.00	0.00
97	2017-04-27_christina77star.txt	0.38	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.01	0.00
98	2017-04-27_modernmrsdarcy.txt	0.06	0.00	0.30	0.02	0.00	0.00	0.00	0.04	0.00	0.00
99	2017-05-27_productiveandpretty.txt	0.20	0.02	0.14	0.00	0.01	0.01	0.27	0.01	0.00	0.00
100	2017-06-07_wholeheartedlyhealthy.txt	0.12	0.00	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.00
101	2017-06-23_balzer.txt	0.08	0.00	0.08	0.00	0.07	0.01	0.21	0.01	0.00	0.00
102	2017-07-11_fluentlanguage.txt	0.04	0.27	0.19	0.00	0.08	0.00	0.00	0.00	0.00	0.05
103	2017-07-17_thebadass.txt	0.19	0.00	0.09	0.00	0.29	0.00	0.01	0.01	0.00	0.00
104	2017-09-01_thinkingcloset.txt	0.12	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.01	0.00
105	2017-09-11_prettyprintsandpaper.txt	0.17	0.00	0.15	0.06	0.00	0.01	0.21	0.00	0.00	0.01

Appendix B Semi-Structured Interview Protocol and Consent Form

B.1 Semi-Structured Interview Protocol

Participants will be read an informational script at the start of the interview, at which point they may ask questions or voice concerns. Recordings will be captured via OBS (if a Skype interview) or audio recording (if in-person).

Questions that will be consistent across all interviews:

1. Begin by telling me about your notebook practice. What would you say is the primary purpose of your system, and how does it accomplish that purpose for you?
2. Is there a specific moment you can identify as the moment you realized you needed or wanted to develop this system, or a moment that inspired you to try it out? Describe that moment for me.²⁴

Discussion will follow from these initial questions and will depend on specific answers. Since the individuals I'll be interviewing have a range of purposes for their notebook practices (e.g. health concerns, business-oriented productivity, pleasure/journaling, compulsive tracking, etc.) questions will follow those threads and will have to be specific according to the individual's purpose and practice. If the conversation is not as robust as I'd like, below are some potential follow up questions to inspire additional discussion:

Potential Follow Up Questions

General

- How long have you been using this system (not including minor customizations)?
- How often do you tweak or change your system?
- Are there additional purposes it serves? (e.g. is it a creative outlet?)
- What are some of the "rules" of your system? How do you keep information organized?

Materiality, supplies, and place/space

- What, for you, are the benefits of handwriting your system?
- Are you particular about the materials you use? Why do you use this particular notebook?
- Do you carry your notebook with you wherever you go?
- Do you have a preference in terms of the pens or pencils you use?
- Do you have a preferred place to use your notebook? Describe what the environment and place is like. What is it about this space that helps you work on your notebook practice?

²⁴This second question became basically obsolete, either because individuals naturally expressed the purpose of their system according to the origin story, or the question became a natural follow up to another time-based expression.

Research/Other Genres & Public Engagement

- Have you encountered any named productivity systems like the Bullet Journal or "Getting Things Done," and do those inform your practice at all? Why or why not?
- Were you inspired by someone else's practice or have you done any reading or other research to refine your practice?
- Have you shared your approach with others, in conversation or online, and what would you say is your motivation for sharing, or not? What are your preferred platforms for sharing? Instagram, Reddit, Facebook, in-person conversation?

Health/Self-Care

- What role, if any, does your system play in what is often called "self-care" or taking time to reflect on your own personal well-being?
- What motivates you to keep working at your system?
- How did you make your notebook practice a habit? Are you consistent with it, or does your use of it come and go?

Affective Orientation

- What would you say are the feelings you associate most with your system? Both with the emotional state that inspired you to generate the system and with the practice of keeping up with it?
- Do you find that you are more centered or feel that you are more in control of your life when you are diligently keeping up with your system?

Other/Companion Practices

- What other strategies do you use to keep track of life's information?
- Do you use mobile applications, digital calendars, email folders, etc?
- What is your home like? Would you say you are, in all aspects of your life, an "organized" person?
- Has your practice inspired you to refine or try out notebook-based practices for other aspects of your life?

Teleological Questions

- Do you feel as though your system accomplished the purpose/goals/objectives you set out to pursue through this practice?
- Do you feel that this process is always ongoing, always evolving, or are there any clear ends to the means?

B.2 Informed Consent Form

Informed Consent to Participate in Moriah L. Kirdy's Dissertation Research

Thank you for your willingness to participate in my ongoing research in notebook-based practices of personal information management and productivity. This document serves to inform you of the ways in which our discussions will be used in my work, your rights as a participant, and the details of your involvement.

This informed consent agreement has been reviewed by my dissertation advisor, as well as the University of Pittsburgh Institutional Review Board (IRB), an organization responsible for overseeing the ethics of research studies involving human subjects. If you have any questions or concerns, feel free to contact me in advance of signing this form or in advance of going on-the-record for our interview.

The purpose of this interview is for me to gain insight into your notebook-based system, practice, or routine, including but not limited to its purpose for you in your daily/regular life, how you came to design and refine your approach, and if or how others' practices influenced the development of your system. While some questions will be consistent across all interviews I conduct, our discussion will be informal in that either of us will be free to follow up with further questions, anecdotes, or other forms of elaboration.

The methods I will use to capture our discussion will include visual and/or audio recording of our interview (for review and transcription purposes) and note-taking during our discussion. Any imagery you elect to share of your notebook(s) in support of our discussion will be up to your own discretion and is optional. Images shared will be recorded or captured as supplemental documents to the interview recordings.

As a participant in this research, you understand that:

- Language from our transcribed interview and any images you share may be included in the dissertation and conference presentations or publications on this subject, including any observations I may make about your tone of voice, body language, or other indicators of how you feel about, relate to, and experience your notebook practice.
- In all published and unpublished writings related to my dissertation, you will be designated by your first name or a first-name pseudonym according to your preference. When necessary, I will exclude, blur, or redact any information that may personally identify you or anyone else to potential readers.
- I aim to protect the confidentiality of our interview. I will be the sole listener and transcriber of our interview(s). Audio and visual recordings are for my own purposes and will not be excerpted or shared in any way. You have the right at any time to inform me of information you would prefer to keep off-the-record, including any information revealed in images of your notebook(s), which I will blur or redact.

- Our discussion will take place over Skype or in-person interviews. While the first interview will serve as the primary information-gathering event, I may contact you to clarify or follow up on information from our discussion.

Please contact me at moriah.kirdy@gmail.com or at (603)785-7969 if you have any questions or concerns, or if you would like to follow up with additional information that occurred to you after our interview.

By signing below, I acknowledge that I have read and understand the above information, and I consent to participate in Moriah Kirdy's dissertation research.

Name (print) _____

☐ *I prefer to be referred to by a pseudonym rather than by my first name.*

I prefer the following pronouns:

☐ *he/him* ☐ *she/her* ☐ *they/them* ☐ *Other:* _____

Phone Number _____

Email address _____

Skype Name (for interviews that will occur long-distance) _____

Signature _____ Date _____

Works Cited

- “About Us: History of the Brand | Moleskine.” Accessed July 25, 2019.
<https://us.moleskine.com/company>.
- “Dear Data.” Dear Data. Accessed July 25, 2019. <http://www.dear-data.com>.
- “R/Books - How And Why To Keep A ‘Commonplace Book.’” reddit. Accessed July 25, 2019.
https://www.reddit.com/r/books/comments/119spi/how_and_why_to_keep_a_commonplace_book/.
- “The Quantified Self: Self Knowledge Through Numbers.” Quantified Self. Accessed July 25, 2019. <https://quantifiedself.com/>.
- “Why the Humble Notebook Is Flourishing in the iPhone Era,” *The New Republic*, Accessed July 25, 2019. <https://newrepublic.com/article/134486/humble-notebook-flourishing-iphone-era>.
- “Αὐτόματος - Ancient Greek - English Dictionary (LSJ).” Accessed July 25, 2019.
- Agre, Philip E. “Institutional Circuitry: Thinking about the Forms and Uses of Information.” *Information Technology and Libraries*, vol. 14, no. 4, Dec. 1995, pp. 225-. Academic OneFile.
- Ahmed, Sara. *The Promise of Happiness*. Duke University Press, 2010.
- Ajana, Btihaj, ed. *Self-Tracking: Empirical and Philosophical Investigations*. Palgrave Macmillan, Secaucus, 2017.
- Ajana, Btihaj. *Metric Culture: Ontologies of Self-Tracking Practices*. Emerald Publishing Limited, 2018.

- Alexis, Cydney. "The Material Culture of Writing: Objects, Habitats, and Identities in Practice." In *Rhetoric Through Everyday Things*. University of Alabama Press, 2016.
- Andrews, Chris C. "Constraint and Convention: The Formalism of the Oulipo." *Neophilologus*, vol. 87, no. 2, 2003, pp. 223–32, doi:10.1023/A:1022686129670.
- Aristotle. *The Basic Works of Aristotle*. Edited by Richard McKeon. The Modern Library: Random House, 2001.
- Atwill, Janet. *Rhetoric Reclaimed: Aristotle and the Liberal Arts Tradition*. Cornell University Press, 2009.
- Baddeley, Alan D., Michael D Kopelman, and Barbara A. Wilson. *The Handbook of Memory Disorders*. 2nd ed. Wiley, 2002.
- Baetens, Jan, and Jean-Jacques Poucel. "Introduction: The Challenge of Constraint." *Poetics Today* vol. 30, no. 4, Dec. 2009, pp. 611-34.
- Bartholomae, David. *Writing on the Margins: Essays on Composition and Teaching*. Bedford/St. Martin's, 2005.
- Bawarshi, Anis S. *Genre and the Invention of the Writer: Reconsidering the Place of Invention in Composition*. Utah State University Press, 2003.
- Benabou, Marcel. "Rule and Constraint." In *Oulipo: A Primer of Potential Literature*, edited by Warren Motte, pp. 40–47, 2007.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Duke University Press, 2010.
- Berkenkotter, Carol, and Thomas N. Huckin. "Rethinking Genre from a Sociocognitive Perspective." *Written Communication*, vol. 10, no. 4, Oct. 1993: pp. 475–509.
- Bitzer, Lloyd F. "The Rhetorical Situation." *Philosophy & Rhetoric*, vol. 25, 1968, pp. 1–14.

- Blair, Ann. *Too Much to Know: Managing Scholarly Information Before the Modern Age*. Yale University Press, 2011.
- Blei, David M. “Probabilistic Topic Models: Surveying a Suite of Algorithms That Offer a Solution to Managing Large Document Archives.” *Communications of the ACM* 55, no. 4, Apr. 2012.
- Blei, David M., Andrew Y. Ng, and Michael I. Jordan. “Latent Dirichlet Allocation.” *Journal of Machine Learning Research*, vol. 3, Jan. 2003, pp. 993–1022.
- Bogost, Ian. *Persuasive Games: The Expressive Power of Videogames*. MIT Press, 2010.
- Bolter, J. David, and Richard Grusin. *Remediation : Understanding New Media*. MIT Press, 1999.
- Bourdieu, Pierre. *Outline of a Theory of Practice*. Cambridge Studies in Social Anthropology, Cambridge University Press, 1977.
- Boyle, Casey. *Rhetoric as Posthuman Practice*. Ohio State University Press, 2018.
- Braum, Virginia, and Victoria Clarke. “Using Thematic Analysis in Psychology.” *Qualitative Research in Psychology*, vol. 3, no. 77, 2006, pp. 77–101.
- Brennan, Teresa. *Transmission of Affect*. Ithaca, Cornell University Press, 2004.
- Brock, Kevin. “One Hundred Thousand Billion Processes: Oulipian Computation and the Composition of Digital Cybertexts.” *Technoculture*, vol. 2, 2012, <https://tcjournal.org/vol2/brock>.
- Brooke, Collin Gifford. *Lingua Fracta: Toward a Rhetoric of New Media*. New Dimensions in Computers and Composition. Hampton Press, 2009.
- Brown Jr., James J. “The Machine That Therefore I Am.” *Philosophy and Rhetoric*, vol. 27, no. 4, 2014, pp. 494–514.
- Burnett, D. Graham, ed. *A Little Common Place Book*. Cabinet Books & Proteotypes, 2011.

- Burton, Matthew. "Topic Modeling for JDH." Accessed July 25, 2019. <http://mcburton.net/blog/joy-of-tm/>.
- Buxton, Elizabeth, "Planners That Will Make 2019 Your Most Organized Year EVER," *Refinery29*. Accessed July 25, 2019. <https://www.refinery29.com/en-us/best-planners>.
- Cameron, Julia. *The Artist's Way: A Spiritual Path to Higher Creativity*. J.P. Tarcher/Putnam, 2002.
- Carroll, Ryder. *The Bullet Journal Method: Track the Past, Order the Present, Design the Future*. Portfolio, 2018.
- Cicero, Marcus Tullius. "Topica." Translated by C.D. Yonge. Accessed July 25, 2019. <http://www.attalus.org/old/topica.html>.
- Cicero, Marcus Tullius. *De Inventione; De Optimo Genere Oratorum; Topica*. Harvard University Press, 1949.
- Deming, R. "Constraints as Opposed to What?: A Philosophical Approach to the Values of Constrained Writing." *Poetics Today*, vol. 30, no. 4, Dec. 2009, pp. 653–68.
- Erasmus, Desiderius. *Desiderius Erasmus of Rotterdam: On Copia of Words and Ideas*. Translated by Donald B. King, Marquette Univ Press, 1963.
- Devitt, Amy J. *Writing Genres*. Southern Illinois University Press, 2008.
- Drumm, Perrin. "I'm an Obsessive Calendar-Keeper, and These Under \$30 Planners Are the Best." *The Strategist*, July 16, 2018. <http://nymag.com/strategist/article/best-planners-reviewed-muji-stalogy-moleskine.html>.
- Duffy, Brooke Erin. *(Not) Getting Paid to Do What You Love: Gender, Social Media, and Aspirational Work*. Yale University Press, 2017.

- Dush, Lisa. "When Writing Becomes Content." *College Composition and Communication*, vol. 67, no. 2, Dec. 2015, pp. 173-196.
- Edbauer, Jenny. "Unframing Models of Public Distribution: From Rhetorical Situation to Rhetorical Ecologies." *Rhetoric Society Quarterly*, vol. 35, no. 4, Fall 2005, pp. 5-24.
- Enoch, Jessica, and Jean Bessette. "Meaningful Engagements: Feminist Historiography and the Digital Humanities." *College Composition and Communication*, vol. 64, no. 4, June 2013, pp. 634-60.
- Evans, Jonathan J., Barbara A. Wilson, Paul Needham, and Sue Brentnall. "Who Makes Good Use of Memory Aids? Results of a Survey of People with Acquired Brain Injury." *Journal of the International Neuropsychological Society*, vol. 9, no. 6, Sept. 2003, pp. 925-935.
- Gallagher, John R. "Writing for Algorithmic Audiences," *Computers and Composition*, vol. 45, Sept. 2017, pp. 25-35.
- Gibson, Caitlin. "A Journey through the Fancy Day Planners That Promise to Fix Our Broken, Millennial Lives." *Washington Post*, January 29, 2019, sec. Lifestyle. https://www.washingtonpost.com/lifestyle/a-journey-through-the-fancy-day-planners-that-promise-to-fix-our-broken-millennial-lives/2019/01/28/42c79960-1b5f-11e9-8813-cb9dec761e73_story.html.
- Giltrow, Janet. "Meta-Genre." *The Rhetoric and Ideology of Genre: Strategies for Stability and Change*, edited by Richard M. Coe et al., Hampton Press, 2001.
- Gitelman, Lisa. *Paper Knowledge: Toward a Media History of Documents*. Duke University Press, 2014.

- Goldstone, Andrew, and Ted Underwood. "The Quiet Transformations of Literary Studies: What Thirteen Thousand Scholars Could Tell Us." *New Literary History*, vol. 45, no. 3, Sept. 2014, pp. 359–84.
- Grave, Floyd, Karen A. Hart, Walter M. High Jr., Angelle M. Sander, and Margaret A. Struchen. *Rehabilitation for Traumatic Brain Injury*. Oxford University Press, Incorporated, 2005.
<http://ebookcentral.proquest.com/lib/pitt-ebooks/detail.action?docID=4703304>.
- Hart-Davidson, William, and Ryan Omizo. "Finding Genre Signals in Academic Writing." *Journal of Writing Research*, vol. 7, no. 3, 2016, pp. 485–509.
- Hart-Davidson, William, and Ryan Omizo. "Genre Signals in Textual Topologies." In *Topologies as Techniques for a Post-Critical Rhetoric*, pp. 99–123. Palgrave Macmillan, Cham, 2017.
- Hawhee, Debra. *Bodily Arts: Rhetoric and Athletics in Ancient Greece*. Austin: University of Texas Press, 2004.
- Hawhee, Debra. *Rhetoric in Tooth and Claw: Animals, Language, Sensation*, University of Chicago Press, 2016. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/pitt-ebooks/detail.action?docID=4727860>.
- Hawk, Byron. "Toward a Post-Techne-Or, Inventing Pedagogies for Professional Writing." *Technical Communication Quarterly*, vol. 13, no. 4, Oct. 2004, pp. 371–92.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. University of Chicago Press, 1999.
- Hayles, N. Katherine. *How We Think: Digital Media and Contemporary Technogenesis*. University of Chicago Press, 2012.

- Hersen, Michel, Johan Rosqvist, Alan Gross, and Ronald Drabman. *Encyclopedia of Behavior Modification and Cognitive Behavior Therapy*. 3 vols. Thousand Oaks, California, 2005. <https://doi.org/10.4135/9781412950534>.
- Holiday, Ryan. "Everyone Should Keep A Commonplace Book: Great Tips From People Who Do." *Thought Catalog*, August 30, 2013. <http://thoughtcatalog.com/ryan-holiday/2013/08/everyone-should-keep-a-commonplace-book-great-tips-from-people-who-do/>.
- Holiday, Ryan. "How And Why To Keep A 'Commonplace Book.'" *Thought Catalog*. Accessed November 28, 2015. <http://thoughtcatalog.com/ryan-holiday/2013/08/how-and-why-to-keep-a-commonplace-book/>.
- Hoover, David. "Prepare and Visualize Mallet Topics." *Text Analysis Tools in Visual Basic for Excel, Plus Some Python Tools*, 2018, <https://wp.nyu.edu/exceltextanalysis/visualize-mallet-topics/>.
- Jamieson, Kathleen M. Hall. "Generic Constraints and the Rhetorical Situation." *Philosophy & Rhetoric*, vol. 6, no. 3, Summer 1973, pp. 162–170. <http://www.jstor.org/stable/40236849>
- Jockers, Matthew. "The LDA Buffet: A Topic Modeling Fable" Accessed October 12, 2017. <http://www.matthewjockers.net/macroanalysisbook/lda/>.
- Jouet, Jacques. "With (and Without) Constraints." *SubStance*, vol. 30, no. 3, 2001, pp. 4-16.
- Kelly, Ashley Rose, and Kate Maddalena. "Networks, Genres, and Complex Wholes: Citizen Science and How We Act Together through Typified Text." *Canadian Journal of Communication* 41, no. 2 (2016): 287.
- Kinsley, Samuel. "Memory Programmes: The Industrial Retention of Collective Life." *Cultural Geographies*, vol. 22, no. 1, Jan. 2015, pp. 155–75.

- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford University Press, 2005.
- Locke, John. *The Works of John Locke: In Nine Volumes*. C. and J. Rivington, 1824.
- Longinus, and G. M. A. Grube. *On Great Writing: (On the Sublime)*. The Library of Liberal Arts, No. 79. Liberal Arts Press, 1957.
- Lupton, Deborah. *The Quantified Self: A Sociology of Self-Tracking*. Polity, 2016.
- Manning, Erin, and Brian Massumi. *Thought in the Act: Passages in the Ecology of Experience*. University of Minnesota Press, 2014.
- Matt D’Avella. *Ground Up 019 - The Bullet Journal w/ Ryder Carroll*. Accessed December 3, 2017. <https://www.youtube.com/watch?v=kU5PdQVyw6E>.
- McCarthy, Molly A. *The Accidental Diarist: A History of the Daily Planner in America*. University of Chicago Press, 2013.
- Miller, Carolyn R. “Genre as Social Action.” *Quarterly Journal of Speech*, vol. 70, 1984, pp. 151–67.
- Moss, Ann. *Printed Commonplace-Books and the Structuring of Renaissance Thought*. Oxford University Press, 1996.
- Neff, Gina. *Self-Tracking*. The MIT Press Essential Knowledge Series. MIT Press, 2016.
- Perloff, Marjorie. *Differentials: Poetry, Poetics, Pedagogy*. University of Alabama Press, 2004.
- Prior, Paul, Julie Hengst, Kevin Roozen, and Jody Shipka. “‘I’ll Be the Sun’: From Reported Speech to Semiotic Remediation Practices.” *Text and Talk*, vol. 26, 2006, pp. 733–66.
- Pyles, Loretta. *Healing Justice: Holistic Self-Care for Change Makers*. Oxford University Press, 2018.

- Queneau, Raymond. "Potential Literature." In *Oulipo: A Primer of Potential Literature*, edited by Warren Motte, pp. 51–64. Dalkey Archive Press, 2007.
- Quintilian, Lacus Curtius. "Institutio Oratoria." Accessed June 14, 2019. http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Quintilian/Institutio_Oratoria/2A*.html#4.
- Ramsay, Stephen. *Reading Machines: Toward an Algorithmic Criticism*. University of Illinois Press, 2011.
- Rickert, Thomas. *Ambient Rhetoric: The Attunements of Rhetorical Being*. University of Pittsburgh Press, 2013.
- Rivers, Nathaniel A., and Maarten Derksen. "Ecologies of Deception in Psychology and Rhetoric." *Quarterly Journal of Speech*, vol. 101, no. 4, Oct. 2015, pp. 633–54.
- Rubinelli, Sara. *Ars Topica: The Classical Technique of Constructing Arguments from Aristotle to Cicero*. Argumentation Library, v. 15. Dordrecht: Springer, 2009.
- Russell, David R. "Rethinking Genre in School and Society: An Activity Theory Analysis." *Written Communication*, vol. 14, no. 4, Oct. 1997, pp. 504–54.
- Schryer, Catherine, Allan McDougall, Glendon R. Tait, and Lorelei Lingard. "Creating Discursive Order at the End of Life: The Role of Genres in Palliative Care Settings." *Written Communication*, vol. 29, no. 2, Apr 2012, pp. 111–41.
- Shipka, Jody. *Toward a Composition Made Whole*. University of Pittsburgh Press, 2011.
- Spinuzzi, Clay, and Mark Zachry. "Genre Ecologies: An Open-System Approach to Understanding and Constructing Documentation." *ACM Journal of Computer Documentation*, vol. 24, no. 3, Aug. 2006, pp. 169–81.

- Stiegler, Bernard. *Technics and Time, 1: The Fault of Epimetheus*. Translated by Richard Beardsworth and George Collins. 1 edition. Stanford University Press, 1998.
- Underwood, Ted. "Topic Modeling Made Just Simple Enough." *The Stone and the Shell* (blog), April 7, 2012. <https://tedunderwood.com/2012/04/07/topic-modeling-made-just-simple-enough/>.
- Wardrip-Fruin, Noah. *Expressive Processing: Digital Fictions, Computer Games, and Software Studies*. MIT Press, 2009.
- Weingart, Scott. "Topic Modeling and Network Analysis." *the scottbot irregular* (blog), November 15, 2011. <http://www.scottbot.net/HIAL/?p=221>.
- Yeo, Richard. *Notebooks, English Virtuosi, and Early Modern Science*. University of Chicago Press, 2014.